

COMMONWEALTH OF PUERTO RICO/ OFFICE OF THE GOVERNOR

FINAL TITLE V OPERATING PERMIT  
AIR QUALITY AREA



<b>Permit Number:</b>	TV-1446-73-0397-0032
<b>Draft Issue Date:</b>	March 30, 1997
<b>Issuance Date:</b>	March 6, 2006
<b>Expiration Date</b>	March 6, 2011

In accordance with the provisions of Part VI of Regulation for the Control of Atmospheric Pollution for Puerto Rico Operating Permit Program,

**OWENS ILLINOIS OF PUERTO RICO  
VEGA ALTA, PUERTO RICO**

Hereinafter referred to as permitted or O-I Puerto Rico, is authorized to operate a stationary source of air pollutants consisting of emission units described in this permit. Until such time as this permit expires or is modified or revoked, the permitted is allowed to discharge air pollutants from those processes and activities directly related to or associated with air pollutants source(s) in accordance with the requirements, limitations, and conditions of this permit.

All conditions in this permit are federally enforceable and state enforceable unless otherwise specified. Requirements, which are only state enforceable, are identified in the permit. A copy of this permit shall be kept on-site at the above named facility.

## Table of Contents

Section I -	General Information	
	A- Facility Information.....	3
	B- Process Description.....	3
Section II -	Description of Emission Units.....	4
Section III -	Generals Conditions of Permit .....	6
Section IV	Potential Emissions.....	21
Section V -	Permit Conditions.....	21
Section VI -	Insignificant Activities.....	42
Section VII -	Permit Shield.....	44
	A- Sources for Which there are no New Applicable Requirements....	40
	B- No Applicability Fundaments.....	44
Section VIII	Permits Approval.....	45
Appendix.....		46
Appendix I.....		48
Appendix II.....		50

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 2**

**Section I. General Information**

**A- Facility Information**

Company Name: **Owens - Illinois of Puerto Rico**

Mailing Address: **P.O. Box 387**

City: **Vega Alta** State: **P.R.** Zip: **00692**

Plant Name: **Owens Illinois of Puerto Rico**

Plant Location: **Sabana Hoyos Ward of Vega Alta, State Road No. 690, KM. 1.1**

Plant Mailing Address: **P. O. Box 387 Vega Alta, Puerto Rico 00692**

Responsible Official: **Sergio Galindo** Phone: **(787) 883-5800**

Facility Contact Person: **Amado Cordero** Phone: **(787) 883-5000**  
Fax: **(787) 883-1177**

SIC Codes: **1446**

Owens Illinois of Puerto Rico ("O-I Puerto Rico") operates a glass container manufacturing operation in the Municipality of Vega Alta, Puerto Rico. The facility primarily engages in the manufacture of glass containers and other glass products for commercial packing and bottling. O-I Puerto Rico operates continuously twenty-four (24) hours a day, seven (7) days per week, in three (3) shifts.

**B- Process Description**

O-I Puerto Rico's normal operating scenario involves the processing of sand, and the handling of soda ash, limestone, miscellaneous additives and recycle glass. These materials are use in the manufacture of glass containers and related products.

The sand is received by trucks in the Sand Plant and then conveyed, screened, and classified. The wet sand is then stacked and stored in storage piles until conveyed to a dryer for ultimate storage in silos. Dry sand is conveyed to the Batch Plant. A magnetic separator removes metallic impurities

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 3**

prior to storage. Mixing with other raw materials, such as soda ash, salt cake, limestone, and other miscellaneous additives takes place thereafter. The mixture is then combined with stored recycled glass in furnace charging silos prior to being fed to O-I Puerto Rico's glass processing furnaces and refiners. The bottles are manufactured in the glass plant.

Scenery Number	Name of scenery and id the number of the emission unit	Description
EOA1	EUHE 02 (Furnace A) y EUHE 03 (furnace B)	The alternate operating scenery for the furnaces consists in the simultaneous operation or independently.

Owens is classified as major stationary source because it has the potential to emit more than 100 ton of nitrogen oxide, carbon dioxide and particulate. The facility is subject to applicable regulations of the Air Quality, for Nitrogen (NOx), sulfur dioxide (SO2), particulate (PM10) and volatile organic compounds (VOC) at year.

**Section II. Description of Emission Units**

Emission sources and their respective emission control equipment regulated by this permit consist of the following:

Emission Unit Id	Description	Control Device ID No.
FUSP 01	Sand Conveying and Handling	None
EUSP 02	Sand Drying	CDSP 01- Cyclone Scrubber with an efficiency of 95% to remove particulate and efficiency of 55% for sulfur dioxide.
EUSP 03	Dry Sand Storage	CDSP 02- Ventury scrubber fixed throat with an efficiency of 95% to remove particulate.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 4**

Emission Unit Id	Description	Control Device ID No.
EUBP 01	Magnetic Separator	CDBP 01- Filter Baghouse with an efficiency of 95% to remove particulate
EUBP 02	Raw Material Conveying and Handling	CDBP 02- Filter Baghouse with an efficiency of 95% to remove particulate.
EUBP 03	Raw Material Storage	CDBP 03 (A - F)- Filter Baghouse with an efficiency of 95% to remove particulate.
EUBP 04	Cullet Conveying and Handling	CDBP04- Filter Baghouse with an efficiency of 95% to remove particulate..
EUBP 05	Cullet Storage	CDBP 04- Filter Baghouse with an efficiency of 95% to remove particulate.
EUBP 06	Raw Material/ Cullet Weighing and Mixing	CDBP 04- Filter Baghouse with an efficiency of 95% to remove particulate
EUHE 01	Furnace Charging	CDHE 01 A and B- Filter Baghouse with an efficiency of 95% to remove particulate
EUHE 02	Furnace A	

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 5**

Emission Unit Id	Description	Control Device ID No.
EUHE 03	Furnace B	Electrostatic Precipitator and SO2 Scrubber
EUHE 04	Glass Processing- A Line	None
EUHE 05	Glass Processing- B Line	None
EUHE 06	Hot End Surface Treatment	CDHE 02- Filter Baghouse with an efficiency of 95% to remove particulate
EUHE 07-11	Forming Machine	None
FUMI 01	Paved and Unpaved Roads	CDMI 01-Sprinkler System

**Section III General Permit Conditions**

1. **Sanctions and Penalties:** The permitted is obligated to comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Any violation of the terms of this permit will be subject to administrative, civil or criminal penalties as established in the Puerto Rico Environmental Public Policy Act, Article 16 (Act Number 416, September 22, 2004).
2. **Right of Entry:** As specified under Rules 103 and 603(c)(2) of the RCAP, the permitted shall allow the Board or an authorized representative, upon presentation of credentials and other documents as may be required by law, to perform the following activities:
  - a) Enter upon the permitted premises where an emission source is located or where emissions related activities are conducted, or where records must be kept under the conditions of this permit, under the RCAP, or under the Clean Air Act;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit, under the RCAP, or under the Clean Air Act;
  - c) Inspect and examine any facility, equipment (including monitoring and air pollution

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 6**

- control equipment), practices or operations (including QA/QC methods) regulated or required under this permit; as well as sampling emissions of air quality and fuels; and
- d) As authorized by the Clean Air Act and the RCAP, to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.
3. **Sworn Statement:** All reports required pursuant Rule 103(D) of the RCAP (i.e., semiannual monitoring reports and annual compliance certification) shall be submitted together with a sworn statement or affidavit by the Responsible Official or a duly authorized representative. Such sworn statement shall attest to the truth, correctness and completeness of such records and reports.
4. **Data Availability:** As specified under Rule 104 of the RCAP, all emission data obtained by or submitted to the Board, including data reported pursuant to Rule 103 of the RCAP, as well as that obtained in any other way, shall be available for public inspection and may also be made available to the public in any additional manner that the Board may deem appropriate.
5. **Emergency Plan:** As specified under Rule 107 of the RCAP, the permitted shall have available an Emergency Plan which must be consistent with adequate safety practices, and provides for the reduction or retention of the emissions from the Plant during periods classified by the Board as air pollution alerts, warnings or emergencies. These plans shall identify the emission sources, include the reduction to be accomplished for each source, and the means by which such reduction will be accomplished. These plans will be available for any representative of the Board at any time.
6. **Control Equipment:** The permitted shall comply with Rule 108 of the RCAP, as follows:
- (A) All air pollution control equipment or control measures shall provide for continuous compliance with applicable rules and regulations. Such equipment or measures shall be installed, maintained, and operated according to those conditions imposed by the Board, within the specified operating limitations of the manufacturer.
- (B) The collected material from air pollution control equipment shall be disposed in accordance with applicable rules and regulations. The removal, manipulation, transportation, storage, treatment or disposal will be done in such or manner that shall not to produce environmental degradation, and in accordance with applicable rules and regulations.
- (C) The Board may require, when deemed appropriate to safeguard the health and welfare of

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 7**

human beings, the installation and maintenance of additional, complete and separate air pollution control equipment of a capacity equal to the capacity of the primary control equipment. Furthermore, the Board may require that such additional air pollution control equipment be operated continuously and conjunctionally with the primary air pollution control equipment.

- (D) All air pollution control equipment shall be operated at all times while the source being controlled is in operation.
- (E) In the case of a shutdown of air pollution control equipment for the necessary scheduled maintenance, the intent to shutdown such equipment shall be reported to the Board at least three days prior to the planned shutdown. Such prior notice shall include, but is not limited to the following:
- (1) Identification of the specific source to be taken out of service with its location and permit number.
  - (2) The expected length of time that the air pollution control equipment will be out of service.
  - (3) The nature and quantity of emissions of air pollutants likely to be permitted during the shutdown period.
  - (4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period.
  - (5) The reasons why it will be impossible or impractical to shutdown the operating source during the maintenance period.
- (F) The permittee shall to the extent possible, maintain and operate at all times, including periods of start-up, shutdown and malfunction, any affected source and the associated air pollution control equipment, in a manner consistent with the original manufacturers design specifications and in compliance with applicable rules and regulations and permit conditions.
- (G) The permittee shall maintain copies of all the monthly calibrations and inspections of the control equipment's such as baghouse and scrubbers. The permittee shall record in a logbook all the periods when the control equipment is in shutdown and the process continues its operation. All the records shall be available to the EQB personnel.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 8**

7. **Compliance Certification:** As specified under Rules 112(B) and 603(c)(5) of the RCAP, the permittee shall submit a compliance certification, including the annual emissions calculations for the previous year, on the first day of April of each year. The compliance certification shall be submitted to both the Board and the EPA<sup>1</sup>. It shall include, but is not limited to, the following information:
- a) Identification of the applicable requirement that is the basis of the certification;
  - b) the method used to determine the compliance status of the source;
  - c) the compliance status;
  - d) whether compliance is continuous or intermittent;
  - e) such other facts as the EQB may require; and
  - f) for purposes of (b) and (d) of this section, the Permittee shall identify the methods or other means used to determine the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. If necessary, the Permittee shall also identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information. For purposes of paragraph (c) of this section, the permittee shall identify each deviation and take it into account in the compliance certification.
8. **Regulation Compliance:** As specified under Rule 115 of the RCAP, any violation to the RCAP, or to any other applicable rule or regulation, shall be grounds for the Board to suspend, modify, or revoke any relevant permit, approval, variance or other authorization issued by the Board.
9. **Location Approval:** As specified under Rule 201 of the RCAP, nothing in this permit shall be interpreted as authorizing the location or construction of a major stationary source, or the

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<sup>1</sup> The certification to the EQB shall be mailed to: Manager, Air Quality Program, P.O. Box 11488, Santurce, PR 00910. The certification to the EPA shall be mailed to: Chief, Enforcement and Superfund Branch, CEDP, US EPA-Region II, Centro Europa Building, 1492 Ponce de Leon Ave., Santurce, PR 00909.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**

**Page 9**

modification of a major stationary source, or a major modification of a significant source, without obtaining first a location approval from the Board and without first demonstrating compliance with the National Ambient Air Quality Standards (NAAQS). This permit does not allow the construction of new minor sources without the required permit under Rule 203 of the RCAP.

10. **Open Burning:** As specified under Rule 402 of the RCAP, Owens shall not cause or permit the open burning of refuse in their premises except as established under Rule 402 (E) of the RCAP.

11. **Particulate Fugitive Emissions:** As established in Rule 404 of the RCAP, the permittee shall not cause or permit:

- a) any materials to be handled, transported, or stored in a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished, without taking reasonable precautions to prevent particulate matter from becoming airborne.
- b) the discharge of visible emissions of fugitive dust beyond the boundary line of the property on which the emissions originate.

12. **Objectionable Odors:** As specified under Rule 420 of the RCAP, the permittee shall not cause or permit emissions to the atmosphere of any matter which produces an *objectionable* odor that can be perceived in an area other than that designated for industrial purposes. The permittee shall demonstrate compliance with Rule 420 (A)(1) as follows: if malodors are detectable beyond the permittee property perimeter, and complaints are received, the permittee shall investigate and take measures to minimize and/or eliminate the malodors, if necessary. [This condition is enforceable only by the State].

13. **Permit Renewal Applications:** As established under Rule 602 (a)(1)(iv) of the RCAP, the permittee's applications for permit renewal shall be submitted at least 12 months prior to the date of permit expiration. A responsible official must certify all required applications consistent with paragraph (c)(3) of Rule 602.

14. **Permit Duration:** As specified under Rule 603 of the RCAP, the following terms will apply during the duration of this permit:

- a) **Expiration:** This authorization shall have a fixed term of 5 years. The expiration date will be automatically extended until the Board approves or denies a renewal application (Rule 605(c)(4)(ii) of the RCAP) but only in those cases where the permittee submits a

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 10**

complete renewal application at least 12 months before the expiration date. [Rules 603 (a)(2), 605 (c)(2), and 605(c)(4) of the RCAP]

- b) Permit Shield: As specified under Rule 605 (c)(4)(i) of the RCAP, the permit shield may be extended until the time the permit is renewed if a timely and complete renewal application is submitted.
- c) In case that this permit is subject to any challenge by third parties, the permit shall remain in effect until the time it is revoked by a court of law with jurisdiction in the matter.

**15. Recordkeeping Requirement:** As established under Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all required monitoring data and support information for a period of 5 years from the date of the monitoring sample, measurement, report, or application.

**16. Reporting Requirement:** As established under Rule 603(a)(5)(i) of the RCAP, the permittee shall submit reports of all required monitoring every 6 months, or more frequently if required by the Board or any other underlying applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as established under Rule 602(c)(3) of the RCAP.

**17. Deviations Reporting due to Emergencies:** As specified under Rule 603(a)(5)(ii)(a) of the RCAP, any deviation resulting from an upset (such as sudden malfunction or break-down) or emergency conditions, as defined in Rule 603(e) of the RCAP, must be reported within the next 2 working days. Such notification may be used to assert an affirmative defense upon an enforcement action against the permittee. If the permittee raises the emergency defense upon an enforcement action, the permittee shall demonstrate that such deviation happens due to an emergency and that the Board was adequately notified. If such emergency deviation last for more than 24 hours, the affected units may be operated until the end of the cycle or 48 hours, what occurs first. The Board may only extend the operation of an emission source in excess of 48 hours, if the source demonstrates to the Board's satisfaction that the National Air Quality Standards have not been exceeded and that there is no risk to the public health.

**18. Deviation Reporting (Hazardous Air Pollutants):** The source shall shut down its operations immediately or shall act as specified in its Emergency Response Plan (established in Rule 107 (C) of the RCAP), when such Plan has demonstrated that there is no significant impact at the fence line. [This condition is enforceable only by the State]. Pursuant to Rule 603 (a)(5)(ii)(b), a notification will be required if a deviation occurs that results in the release of emissions of hazardous air pollutants for more than an hour in excess of the applicable limit. The permittee

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**

**Page 11**

shall notify the Board within 24 hours of the deviation. For the discharge of any regulated air pollutant that continues for more than 2 hours in excess of the applicable limit, the Permittee shall notify the Board within 24 hours of the deviation. The Permittee shall also submit to the Board, within seven (7) days of the deviation, a detailed written report which includes probable causes, time and duration of the deviation, remedial action taken, and steps which are being taken to prevent a reoccurrence.

19. **Severability Clause:** As established under Rule 603(a)(6) of the RCAP, the clauses in this permit are severable. In the event of a successful challenge to any portion of the permit in an administrative or judicial forum, or in the event any of its clauses is held to be invalid, all other portions of the permit shall remain valid and effective, including those related to emission limits, terms and conditions, be they specific or general, as well as monitoring, record keeping and reporting requirements.
20. **Permit Noncompliance:** As established under Rule 603(a)(7)(i) of the RCAP, the permittee must comply with all conditions of this permit. Permit noncompliance constitutes a violation of the RCAP and will be grounds for taking the appropriate enforcement action, impose sanctions, revoke, terminate, modify, and/or reissue the permit, or to deny a permit renewal application.
21. **Defense not Allowed:** As specified under Rule 603(a)(7)(ii) of the RCAP, it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
22. **Permit Modification and Revocation:** As specified under Rule 603(a)(7)(iii) of the RCAP, the permit may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
23. **Property Rights:** As specified under Rule 603(a)(7)(iv) of the RCAP, this permit does not convey any property rights of any sort, nor does it grant any exclusive privilege.
24. **Obligation to Furnish Information:** As specified under Rule 603(a)(7)(v) of the RCAP, the permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit.
25. **Changes in Operating Scenarios:** As specified under Rule 603(a)(10) of the RCAP, the

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 12**

permittee shall record in a logbook, contemporaneously with making a change from one operating scenario to another, the scenario under which it is operating. This logbook must be kept at the permittee facility at all times.

26. **Prohibition on Default Issuance:** As specified under Rule 605(d) of the RCAP, it shall never be considered that a permit has been issued by default as a result of the Board's failure to take final action on a permit application within 18 months as of the application completeness date. The Board's failure to issue a final permit within 18 months should be treated as a final action solely for the purpose of obtaining judicial review in a state court.
27. **Administrative Permit Amendments and Permit Modifications:** As specified under Rule 606 of the RCAP, the permit shall not be amended nor modified unless the permittee complies with the requirements for administrative permit amendments and permit modifications as described in the RCAP.
28. **Permit Reopening:** As specified under Rule 608(a)(1), this permit shall be reopened and revised under the following circumstances:
- a) Whenever additional applicable requirements under any law or regulation become applicable to the permittee, when the remaining permit term is of 3 or more years. Such reopening shall be completed 18 months after promulgation of said applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to Rule 605(c)(4)(i) or Rule 605(c)(4)(ii) of the RCAP.
  - b) Whenever the Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
  - c) Whenever the Board or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
29. **Changes in Name and/or Ownership:** This permit is issued to Owens . In the event that the company and/or installation changes its name or is transferred to a different owner, the new responsible official must submit a sworn statement in which he/she accepts and promises to comply with all conditions of this permit.
30. **Renovation/Demolition Work:** Owens shall comply with the provisions set forth in 40 CFR

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 13**

61.145 and 61.150, and Rule 422 of the RCAP when conducting any renovation or demolition activities at the facility.

31. **Risk Management Plan:** If during the effectiveness of this permit, the permittee is subject to the 40 CFR part 68, he/she shall submit a Risk Management Plan according with the compliance schedule in the 40 CFR part 68.10. As part of the annual compliance certification required under 40 CFR part 70, the permittee shall submit a compliance certification with the requirements of Part 68, including the recordkeeping and the Risk Management Plan. The permittee shall comply with the general duty requirements of section 112(r)(1) of the Act as follows:

- a) Identify hazards which may result from accidental releases using appropriate hazard assessment techniques.
- b) Design, maintain, and operate a safe facility.
- c) Minimize the consequences of accidental releases if they occur.

32. **Requirements for Refrigerants (Climatologic and Stratospheric Ozone Protection):**

- a) In the event that the permittee has equipment or appliances, including air conditioning units, which use Class I or II refrigerants as defined in 40 CFR 82, Subpart A, Appendices A and B, he/she shall take the necessary measures to ensure that all maintenance, service or repair services performed are done so according to the practices, certification and personnel requirements, disposition requirements, and recycling and/or recovery equipment certification requirements specified under 40 CFR 82, Subpart F. Owners/ operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- b) **Service on Motor Vehicles:** If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term motor vehicle as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.

**33. Labeling of Products Using Ozone-Depleting Substances:** The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subparte E.

- a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
- b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
- c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
- d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

**34. Emergency Generators:**

- a) The operation for each emergency generator identified as insignificant activity is limited to 500 hours per year.
- b) The permittee shall keep an annual record of the hours of operation and fuel consumption for each generator. It shall be kept available at any time for inspection by EQB and EPA personnel.

**35. Compliance Clause:** Under no circumstances does compliance with this permit exempt the permittee from complying with all other applicable state or federal laws, regulations, permits, administrative orders or applicable court orders.

**36. Emissions Calculations:** The permittee shall submit, on the first day of April each year, the actual or permissible emissions calculations for the previous natural year. The emissions calculations shall be submitted on the forms prepared by the Board for this purpose and the responsible official must certify all the information submitted as true, correct and representative

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**

**Page 15**

of the permitted activity. The permittee must make the applicable payment for the emissions calculations for the previous year on or before June 30 of each year.

**37. Annual fee:** As specified under Rule 610 of the RCAP, the permittee must submit an annual payment based on the emissions calculations for each regulated pollutant. The payment will be based on their actual emissions at a rate of \$37.00 per ton, unless the Board decides otherwise as permitted under Rule 610(b)(2)(iv) of the RCAP. This payment for the previous year must be made on or before June 30 of each year.

**38. Reservation of Rights:** Except as expressly provided in this Title V permit:

- a) Nothing herein shall prevent EPA or the Board from taking administrative enforcement measures or seeking legal or equitable relief to enforce the terms of the Title V permit, including but not limited to the right to seek injunctive relief, and imposition of statutory penalties, fines and/or punitive damages.
- b) Nothing herein shall be construed to limit the rights of EPA or the Board to undertake any criminal enforcement activity against the permittee or any person.
- c) Nothing herein shall be construed to limit the authority of EPA or the Board to undertake any actions in response to conditions that present an imminent and substantial endangerment to public health or welfare, or the environment.
- d) Nothing herein shall be construed to limit the permittee rights to administrative hearing and judicial appeal of termination/ revocation/ disputes over modification/ denial actions in accordance with regulations and the Environmental Public Policy Act.

**39. Roof Surface Coating:** This is state-only requirement. The permittee shall not cause or permit the roof surface coating by applying hot tar or any other coating material containing organic compounds without previous notification to the Board. The use of used oil or hazardous waste for roof surface coatings is prohibited. Operation of the source may start seven days after the notification for operation unless this notification is deemed incomplete or the operation will be in conflict with any Rule or Regulation.

**40. New or Amended Regulations:** Whether a federal or state regulation is promulgated or amended and the facility is affected by it, the owner or operator shall comply with the requirements of the new or amended regulation.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 16**

**41. Reports:** Any requirement of information submittal to the Board shall be addressed to: Director Air Quality Area, P.O. Box 11488, Santurce, P.R.00910.

**42. Source Modifications without a permit revision:** According to Rule 607 of the RCAP, Owens may make:

(a) Source changes -

(1) Permitted sources may make Section 502(b)(10) changes without requiring a permit revision, if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions).

(i) For each such change, the facility must provide the Administrator and the Board with written notification in advance of the proposed changes, which shall be seven (7) days. The written notification shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The source, the Board, and EPA shall attach each such notice to their copy of the relevant permit.

(ii) The permit shield described in paragraph (d) of Rule 603 shall not apply to any change made pursuant to section (a)(1) of Rule 607.

(2) Permitted sources may trade increases and decreases in emissions in the permitted facility for the same pollutant, where the permit provides for such emissions trades without requiring a permit revision and based on the 7-day notice prescribed in section (a)(2) of Rule 607. This provision is available in those cases where the permit does not already provide for such emissions trading.

(i) Under paragraph (a)(2) of Rule 607, the written notification required shall include such information as may be required by the provision in the Puerto Rico State Implementation Plan

(PR-SIP) authorizing the emissions trade, including when the proposed change will occur, a description of each such change, any change in emissions, the permit requirements with which the source will comply using the emissions trading provisions of the PR-SIP, and the pollutants emitted subject to the emissions trade. The notice shall also refer to the provisions with which the source will comply in the PR-SIP and that provide for the emissions trade.

- (ii) The permit shield described in paragraph (d) of Rule 603 shall not extend to any change made under section (a)(2) of Rule 607. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the applicable implementation plan authorizing the emissions trade.
- (3) If a permit applicant requests it, the Board shall issue permits that contain terms and conditions (including all terms required under sections (a) and (c) of Rule 603 to determine compliance) allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally-enforceable emissions cap. Such a cap must be established in the permit independent of otherwise applicable requirements. The permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Board shall not be required to include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall also require compliance with all applicable requirements.
  - (i) Under section (a)(3) of Rule 607, the written notification required shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.
  - (ii) The permit shield described in paragraph (d) of Rule 603 may extend to terms and conditions that allow such increases and decreases in emissions.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 18**

(b) Off-Permit Changes. The Board may allow changes that are not addressed or prohibited by the permit and/or State Law.

(1) A permitted facility may make changes without obtaining a permit revision if such changes are not addressed or prohibited by the permit, other than those described in paragraph (c) of Rule 607.

(i) Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition.

(ii) Sources must provide contemporaneous written notice to the Board and EPA of each such change, except for changes that qualify as insignificant under paragraph (c)(1) of Rule 602. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply because of the change.

(iii) The change shall not qualify for the shield under paragraph (d) of Rule 603.

(iv) The permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

(c) A permitted facility cannot make changes without a permit revision if such changes are modifications under any provision of Title I of the Act.

**43 - (a)** Owens may make changes under section 502(b)(10) of the Act without requiring a permit revision if such changes:

(1) are not modifications under any provision of Title I of the Act,

(2) do not exceed the allowable emissions under the permit,

(3) do not result in the emission of any pollutant not previously emitted,

(4) do not violate any applicable requirement or contravene federally enforceable terms and permit conditions such as monitoring (including test methods), recordkeeping, reporting and compliance certification requirements,

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 19**

- (5) are not changes under Title I of the Act to an emission limit, a work practice or a voluntary emission cap.
- (b) Rule 203 of the RCAP is required for any construction or modification of an emission source, except if it is exempted under Rule 206 of the RCAP. For purposes of part II of the RCAP, a modification is defined as any physical change in, change in the method of operation or a change in type of fuel used of an existing stationary source, that would result in a net increase in that stationary source's potential to emit any air pollutant (subject to any standard), or which results in the emission of any pollutant (subject to an standard) not previously emitted. A physical change shall not include routine maintenance, repair and the replacement of any equipment having the same capacity, equal efficiency or greater environmental benefit to be used for the same purpose.
- (c) The written notification addressed in condition 42(a)(1)(i) refers to changes covered under condition 42(a)(1). Changes not covered will be processed under the requirements of Rule 203 of the RCAP.
- (d) Any emission trading as provided in condition 42(a)(2) above will not be authorized if the facility does not provide the reference to the PR-SIP provisions authorizing such emissions trading.
- (e) If Owens requests so, the Board may allow the emission trading in the facility solely for the purpose of complying with a federally-enforceable emissions cap. The application shall be based in replicable procedures and shall include permit terms that ensure the emission trades are quantifiable, replicable and enforceable.
- (f) Off- permit changes will not be exempt from complying with the requirements and procedures of Rule 203 of the RCAP, if applicable.

**Section IV-Potential Emissions**

The emissions described on the following table represent the facility potential emissions at the moment of the permit application and will be used only for payment<sup>1</sup> purposes. According to

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1 Others Hazardous Air Pollutants Contaminants (HAP's): Benzene, Ethylbenzene, Formaldehyde, Naphtane, Toluene, Benzo (b,k)fluoranthane, Chrysene, Berilium, Cadmium, Chromiun VI, Cobalt, Lead, Managaneso, Nickel, Selenium, Phenol, Dichlorobenzene, Benzo (a) pyrene, Dibutylphthalate y Chromiun

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 20**

Resolution R-97-47-1, the emission calculations shall be based on Owens actual emissions, although calculations based on the facility permissible emissions will be accepted. If Owens decides to perform the calculations based on permissible emissions, Owens shall pay the same charge per ton as the facilities that decides to do the calculations based on actual emissions. Also, when Owens applies for a modification, administrative change or minor modification to its Title V permit, the source will pay only those charges related with any emission increase (if any) per tonnage, based on the change and not based on the total fees paid previously according to Rule 610(a) of the RCCAP.

<b>Pollutant</b>	<b>Potential Emission (tons /year)</b>
<b>PM<sub>10</sub></b>	<b>149</b>
<b>SO<sub>2</sub></b>	<b>777</b>
<b>NO<sub>x</sub></b>	<b>392</b>
<b>CO</b>	<b>31</b>
<b>COV</b>	<b>16</b>
<b>Xileno</b>	<b>1.13</b>
<b>Fosforo</b>	<b>3.00</b>
<b>Bis(2-ethylhexyphalate)</b>	<b>6.89</b>

**Section V- Permit Conditions**

The following table contains a summary of all applicable requirements, as well as the test methods, for all emission units are identified in Section II of this permit.

**A. EUHE 02 y EUHE 03 –Furnaces A and Furnace B– Melting Glass**

<b>Condition</b>	<b>Parameter</b>	<b>Value</b>	<b>Units</b>	<b>Test Method</b>	<b>Test Frequency</b>	<b>Recordkeeping Requirements</b>	<b>Reporting Frequency</b>
Visible Emissions Ruler 403 of RCCA	Opacity	20	Average Percent  6 minutes	Method 9	Once during the first year of the permit	Record of visible emissions	Sixty 60 days after each reading.
					Daily	Daily	Semiannually

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 21**

Condition	Parameter		Value	Units	Test Method	Test Frequency	Recordkeeping Requirements	Reporting Frequency
					Visible Inspections			
Emission limit for particulate matter	Particulate matter		0.3	Lbs/MMBtu	Method 5 or 17	During the first year of the permit	Test Final Report	No more than sixty (60) days after the performance test date
SO <sub>2</sub> emission limit(fuel consumption limit)	Sulfur Content	EUHE 02	1.4 (1,848,000 gallons per year) or 1.6 (1,706,609 gallons per year)	Percent by weight	Supplier fuel analysis	With every purchase	Sulfur percent daily records	Monthly
		EUHE 03	1.4 (1,856,703 gallons per year) or 1.6 (1,820,625 gallons per year)					
Fuel Consumption Limit (sulfur content limit)	Fuel Oil No. 6 and used oil	EUHE 02-	1,848,000 (1.4 percent) or 1,706,609 (1.6 percent)	gallons per year	Consumption	Monthly	Monthly	Semiannually
		EUHE 03	1,856,703 (1.4 percent) or 1,820,625 (1.6 percent)					

**1. Visible Emission Limit:**

- (A) The permittee shall not exceed the opacity limit of 20% defined in Section VI of this permit in a 6 minutes average. Nevertheless, and as specified under Rule 403(A) of

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 22**

the RCAP, the permittee may discharge into the atmosphere visible emissions of opacity of up to 60% for a period of no more than 4 minutes in any consecutive 30 minutes period.

- (B) The permittee shall be conducted once during the first years of the permit using method 9 and method 5 of 40 CFR, Part 60, Appendix A. The permittee shall hire an independent opacity reader. Certified in a school approved by EPA to perform one visible emission reading during the first year of the permit.
- (C) Owens Illinois shall perform visible emission test weekly in accordance with the requirements listed below:
  - i. During the operation of the units EUHE 02 and EUHE 03 Owens shall perform visible emissions observations of each unit EUHE 02 and EUHE 03 every week during the hours of the day with a minimal duration of six minutes whenever the emission unit is in operation. For such operations Owens will use as guidance the provisions of Method 9 of the 40 CFR Part 60 Appendix A. These inspections shall consist in observing each stack for a period of six minutes every week to identify if there are visible emissions that are not water vapor. The observer shall select a position of at least 15 feet, but not more than 0.25 miles of the source. The sun light shall not focus directly in the eyes of the observer. The person who performs the visible observations should be certified by a program endorsed by EPA or the EQB so that he /she had received the acceptable training by the EQB in order to identify if the units are potentially exceeding the opacity limits stated by Rule 403 of RCAP.
  - ii. When the certified observer establishes that exists the potential (that the average of the six minutes exceeds 20% opacity) that the opacity limit could be exceeded according to Rule 403 of the RCAP, Owens shall verify that the equipment causing the visible emissions is operating in accordance with the manufacturer's specification and Owens shall take corrective measures to eliminate any excess of opacity.
  - iii. If the corrective measures do not fix the opacity problem in 24 hours, the permittee shall perform a visible emissions reading using Method 9 established in the 40 CFR 60, Appendix A to determine compliance

with Rule 403 of the RCAP. The permittee shall hire an independent opacity reader certified by EQB to make these tests. The tests shall be done during the hours of the day (until the problem has been corrected).

- iv. Any deviation to the opacity limits established in Rule 403 of RCAP must be reported to the EQB within 24 hours.
- v. Owens shall prepare and maintain a record indicating the dates and the results of the weekly inspections performed available in the facility at all times to be reviewed by the EQB personnel.
- vi. The EQB reserves the right to perform or to require to perform an opacity evaluation under Method 9 at any time during the hours of the day in which the equipments are operating with the purpose of demonstrating compliance with opacity limits.
- vii. Owens shall submit to EQB a summary of the visible emissions observations reports every six months.
- viii. Owens shall ensure that the employees are appropriately trained in all the operations of the emission units and should document the training provided.
- ix. According to Rule 603(a)(4)(ii) of RCAP, Owens shall retain the records of all required monitoring data and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report, or application. This includes a record with the visible emissions observations, where the date and time of the observations performed are recorded.

## **2. Fuel Burning Equipment Limit**

- (A) In accordance with Rule 406 of the RCAP, Owens shall not cause or permit the emission, from any fuel burning equipment burning solid or liquid fuel, of particulate matter in excess of 0.30 pounds per million BTU (0.54 gm/10<sup>6</sup> gm-cal) of heat input.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 24**

- (B) The permittee shall submit reports of all required monitoring during the permit first year utilized the 5 method of 40 CFR, Part60, Appendix A
- (C) Owens shall submit to the Board at least thirty (30) days prior to the start of the test, a detailed test protocol. [Rule 106(C) of RCAP]
- (D) The permittee shall provide the Board at least 15 days of prior written notification of any test required by the Board, to afford the EQB the opportunity to have an observer present. [Rule 106(D) of RCAP]
- (E) Provide a copy of the emission test reports shall be submitted by the permittee to the Board within 60 days after the performance of the emission test. [Rule 106(E) of RCCA]

**3. SO<sub>2</sub> EMISSION LIMIT**

- (A) As specified under Rule 410 of the RCAP, the permittee shall not burn or allow the use of any fuel, in any fuel burning equipment, with a sulfur content that exceeds 2.5% by weight in the EUHE 02 and 2.0 percent for weight in the EUHE 03 unit.
- (B) To show compliance with the established limit, the facility must keep and maintain a monthly log of fuel consumption of fuel and the content of sulfur in fuel.
- (C) The inform have to include the following:
  - 1. The daily percent sulfur per unit.
  - 2. The quantity of fuels burning per unit.
  - 3. The percent monthly average of sulfur.
  - 4. To satisfy the daily percent record of sulfur in fuel the permittee shall obtain a certification of sulfur content in fuel from the supplier at every delivery.
- (D) The permittee shall submit, within the first 15 days of the month following the one being reported. [Ruler 106 (D) of RCAP]

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 25**

- (E) To show compliance with the establish limit, the facility keep one analysis of fuel and sulfur content with each fuels burned. In compliance with the approved method of EPA. [Ruler 106 (E) of RCAP]

**4. FUEL CONSUMPTION LIMIT:**

- (A) The maximum fuel consumption of the mixture of fuel oil No. 6 and used oil for EUHE 02 unit shall not exceed 1,848,000 gallons a year with a sulfur content by weight of 1.4 percent or 1,706,609 gallons a year with a sulfur content of 1.6 percent. [PFE-73-0589-0425-I-II-O]
- (B) The maximum fuel consumption of the mixture of fuel oil No. 6 and used oil for EUHE 03 unit shall not exceed 1,856,703 gallons a year with a sulfur content by weight of 1.4 percent or 1,820,625 gallons a year with a sulfur content of 1.6 percent. [PFE-73-0589-0425-I-II-O]
- (C) The permittee shall not exceed fuel consumption for any 12 consecutive months shall be calculated by adding the monthly compound consumption from the units during the preceding 11 month.
- (D) The permittee shall maintain in the facility a monthly detailed log book of the fuel consumption.

**5. EUHE 02 UNIT USE LIMIT**

- 1. Owens shall provide written notification to the EQB and the EPA of its intent to reactive such furnace 30 days prior to reactivation. [Consent Agreement CAA-02-2002-1252]
- 2. Owens will operate Furnace A in compliance with the applicable laws and regulations including the 20% opacity limit defined in Rule 403 of RCAP. [Consent Agreement CAA-02-2002-1252]

**6. Glass Unit Limit EUHE 03**

- 1. The maximum annual production in the Furnace B is 234 tons/day and 73,770 ton/years.[PFE-73-0589-0425-I-II-O]

**7. Glass Unit Limit EUHE 02**

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 26**

1. The maximum annual production in the Furnace A is 234 ton/day and 73,720 ton/year.[PFE-73-0589-0425-I-II-O]

**B. EUHE 06 –Hot End Surface Treatment (Glass Plant)**

Condition	Parameter	Value	Units	Test Method	Test Frequency	Recordkeeping Requirements	Reporting Frequency
Opacity Limit	Opacity	20	Average Percent 6 minutes	Method 9	Once during the first years of the permit	Record of visible emissions	Sixty 60 days after each reading.
Process Sources Limit	Particulate Matter	14.75	Lbs/hr	Method 5	During the first year of the permit	Test Final report	No more than 60 days after the performance test date

**1. Opacity Limit**

- (A) Owens shall not exceed the 20% opacity limit as defined in the table above under their normal and alternative operating scenarios. However, the facility may discharge visible emissions of opacity up to 60 percent for a period of no more than four (4) minutes in any consecutive thirty (30) minutes interval. [Rule 403 of RCAP].
- (B) Owens Illinois shall perform visible emission test weekly in accordance with the requirements listed below:
  - i. During the operation of the unit EUHE 06, Owens shall perform visible emissions observations of the unit EUHE 06 every week during the hours of the day with a minimal duration of six minutes whenever the emission unit is in operation. For such operations Owens will use as guidance the provisions of Method 9 of the 40 CFR Part 60 Appendix A. These inspections shall consist in observing each stack for a period of six minutes every week to identify if there are visible emissions that are not water vapor. The observer shall select a position of at least 15 feet, but not more than 0.25 miles of the source. The sunlight shall not focus directly in the eyes of the observer. The person who performs the visible observations should be certified by a program endorsed by the EPA

or the EQB so that he has /she received the acceptable training by EQB in order to identify if the unit is potentially exceeding the opacity limits stated by Rule 403 of RCAP.

- ii. When the certified observer establishes that exists the potential (that the average of the six minutes exceeds 20% opacity) that the opacity limit could be exceeded according to Rule 403 of the RCAP, Owens shall verify that the equipment causing the visible emissions is operating in accordance with the manufacturer's specification and Owens shall take corrective measures to eliminate any excess of opacity.
- iii. If the corrective measures do not fix the opacity problem in 24 hours, the permittee shall perform a visible emissions reading using Method 9 established in the 40 CFR 60, Appendix A to determine compliance with Rule 403 of the RCAP. The permittee shall hire an independent opacity reader certified by EQB to make these tests. The tests shall be done during the hours of the day (until the problem has been corrected).
- iv. Any deviation to the opacity limits established in Rule 403 of RCAP must be reported to the EQB within 24 hours.
- v. Owens shall prepare and maintain a record indicating the dates and the results of the weekly inspections performed available in the facility at all times to be reviewed by the EQB personnel.
- vi. The EQB reserves the right to perform or to require to perform an opacity evaluation under Method 9 at any time during the hours of the day in which the equipments are operating with the purpose of demonstrating compliance with opacity limits.
- vii. Owens shall submit to EQB a summary of the visible emissions observations reports every six months.
- viii. Owens shall ensure that the employees are appropriately trained in all the operations of the emission units and should document the training provided.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 28**

- ix. According to Rule 603(a)(4)(ii) of RCAP, Owens shall retain the records of all required monitoring data and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report, or application. This includes a record with the visible emissions observations, where the date and time of the observations performed are recorded.

**2. PROCESS SOURCES LIMIT:**

- a- The Permittee shall not cause or permit the emission of particulate matter in any one hour period from any source in excess of limit defined in the table above for the process weight rate allocated to the source. [Rule 407 of RCAP].  
14.75 lbs/hr-EUHE 06
- b. To show compliance with Rules 403 and 407 of RCAP, an annual performance test shall be conducted once during the permit term using Method 9 and Method 5 of 40 CFR, Part 60, Appendix A.
- c- Submit test protocol at least thirty (30) days prior to the start of the test. [Rule 106(C)of RCAP].
- d- Submit written notification 15 days prior of test to allow EQB to assign an observer. [Rule 106(D) of RCAP].
- e- Submit a final report within 60 days after the performance of the emission test. [Rule 106(E) of RCAP].

**C. EUSP 02-Sand Drying**

Condition	Parameter	Value	Units	Method of Compliance	Frequency of Method	Record Keeping Requirement	Reporting Frequency
Opacity Limit	Opacity	20	Average Percent 6	Method 9	Once during the first permit	With opacity readings	Sixty (60) days after

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 29**

Condition	Parameter	Value	Units	Method of Compliance	Frequency of Method	Record Keeping Requirement	Reporting Frequency
			minutes		term		the test
Sulfur Limit	Sulfur content	1.7	Percent by Weight	Fuel Supplier Certificate Analysis	Monthly	Sulfur Percent Records	Semi Annually
PM Emission Limit	PM	0.3	lbs/MM BTU	Method 5	Once during the permit term PM Emission		Semi Annually
Dry Sand Production Limit	Dry Sand Production	50	tons/hr tons/yr	Record	Daily and monthly	Daily and monthly dry sand productions	Semi annual

**I- Opacity Limit**

- (A) The facility shall not exceed the opacity limit defined in the table above under their normal and alternative operating scenarios. However, the facility may discharge visible emissions of opacity up to 60 percent for a period of no more than four (4) minutes in any consecutive thirty (30) minutes interval. [Rule 403 of RCAP].
- (B) Owens shall perform visible emission tests annually using Method 9 of the 40 CFR Part 60 Appendix A. The permittee shall hire an independent opacity reader certified by the EQB to make these tests. These readings shall be realized at intervals of 12 months.
- (C) Owens Illinois shall perform visible emission test weekly in accordance with the requirements listed below:
  - i. During the operation of the unit EUSP 02, Owens shall perform visible emissions observations of unit EUSP 02 every week during the hours of day with a minimal duration of six minutes whenever the emission unit is in operation. For such operations Owens will use as guidance the provisions of Method 9 of the 40 CFR Part 60 Appendix

- A. These inspections shall consist in observing each stack for a period of six minutes every week to identify if there are visible emissions that are not water vapor. The observer shall select a position of at least 15 feet, but not more than 0.25 miles of the source. The sun light shall not focus directly in the eyes of the observer. The person who performs the visible observations should be certified by a program endorsed by the EPA or the EQB so that he has /she received the acceptable training by EQB in order to identify if the unit is potentially exceeding the opacity limits stated by Rule 403 of RCAP.
- ii. When the certified observer establishes that exists the potential (that the average of the six minutes exceeds 20% opacity) that the opacity limit could be exceeded according to Rule 403 of the RCAP, Owens shall verify that the equipment causing the visible emissions is operating in accordance with the manufacturer's specification and Owens shall take corrective measures to eliminate any excess of opacity.
  - iii. If the corrective measures do not fix the opacity problem in 24 hours, the permittee shall perform a visible emissions reading using Method 9 established in the 40 CFR 60, Appendix A to determine compliance with Rule 403 of the RCAP. The permittee shall hire an independent opacity reader certified by EQB to make these tests. The tests shall be done during the hours of the day (until the problem has been corrected).
  - iv. Any deviation to the opacity limits established in Rule 403 of RCAP must be reported to the EQB within 24 hours.
  - v. Owens shall prepare and maintain a record indicating the dates and the results of the weekly inspections performed available in the facility at all times to be reviewed by the EQB personnel.
  - vi. The EQB reserves the right to perform or to require to perform an opacity evaluation under Method 9 at any time during the hours of the day in which the equipments are operating with the purpose of demonstrating compliance with opacity limits.

- vii. Owens shall submit to EQB a summary of the visible emissions observations reports every six months.
- viii. Owens shall ensure that the employees are appropriately trained in all the operations of the emission units and should document the training provided.
- vi. According to Rule 603(a)(4)(ii) of RCAP, Owens shall retain the records of all required monitoring data and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report, or application. This includes a record with the visible emissions observations, where the date and time of the observations performed are recorded.

## **2. NON PROCESS SOURCES**

- A. The Permittee shall not cause or permit the emission, of particulate matter in any one hour of 0.05 pounds per pound of uncontrolled emissions, equivalent to 95% control efficiency. [Rule 409 of RCAP].
- B. To demonstrate compliance with the previous condition, Owens shall control the emissions coming from the using a scrubber with control efficiency no less than 95 percent.
- C. To realize an annual performance test shall be conducted once during the first permit term using Method 9 and Method 5 of 40 CFR, Part 60, Appendix A.
- D- Submit test protocol at least thirty (30) days prior to the start of the test. [Rule106(C) of RCAP].
- E- Submit a written notification 15 days prior of test to allow EQB to assign an observer. [Rule 106(D) of RCAP].
- F- Submit a final report within 60 days after the performance of the emission test. [Rule 106(E) of RCAP].

## **3. SO<sub>2</sub> EMISSION LIMIT:**



**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 33**

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Opacity Limit	Opacity	20	Average Percent 6 minutes	Method 9	Once during the first permit term	With opacity readings	Sixty (60) days after the test
Non – Process Sources	PM	0.05 or 95	Lbs out/lbs in-hr %	Method 5	Once during the first permit term	PM Emission or control efficiency	Sixty (60) days after the test

**1.- Opacity Limit**

- (A) The facility shall not exceed the opacity limit defined in the table above under their normal and alternative operating scenarios. However, the facility may discharge visible emissions of opacity up to 60 percent for a period of no more than four (4) minutes in any consecutive thirty (30) minutes interval. [Rule 403 of RCAP].
- (B) Owens Illinois shall perform visible emission test weekly in accordance with the requirements listed below:
  - i. During the operation of the units (EUSP 03 and EUBP 01), Owens shall perform visible emissions observations of each unit(EUSP 03 and EUBP 01) every week during the hours of day with a minimal duration of six minutes whenever the emission unit is in operation. For such operations Owens will use as guidance the provisions of Method 9 of the 40 CFR Part 60 Appendix A. These inspections shall consist in observing each stack for a period of six minutes every week to identify if there are visible emissions that are not water vapor. The observer shall select a position of at least 15 feet, but not more than 0.25 miles of the source. The sun light shall not focus directly in the eyes of the observer. The person who performs the visible observations should be certified by a program endorsed by the EPA or the EQB so that he has /she received the acceptable training by EQB in order to identify if the unit are potentially exceeding the opacity limits stated by Rule 403 of RCAP.

- ii. When the certified observer establishes that exists the potential (that the average of the six minutes exceeds 20% opacity) that the opacity limit could be exceeded according to Rule 403 of the RCAP, Owens shall verify that the equipment causing the visible emissions is operating in accordance with the manufacturer's specification and Owens shall take corrective measures to eliminate any excess of opacity.
- iii. If the corrective measures do not fix the opacity problem in 24 hours, the permittee shall perform a visible emissions reading using Method 9 established in the 40 CFR 60, Appendix A to determine compliance with Rule 403 of the RCAP. The permittee shall hire an independent opacity reader certified by EQB to make these tests. The tests shall be done during the hours of the day (until the problem has been corrected).
- iv. Any deviation to the opacity limits established in Rule 403 of RCAP must be reported to the EQB within 24 hours.
- v. Owens shall prepare and maintain a record indicating the dates and the results of the weekly inspections performed available in the facility at all times to be reviewed by the EQB personnel.
- vi. The EQB reserves the right to perform or to require to perform an opacity evaluation under Method 9 at any time during the hours of the day in which the equipments are operating with the purpose of demonstrating compliance with opacity limits.
- vii. Owens shall submit to EQB a summary of the visible emissions observations reports every six months.
- viii. Owens shall ensure that the employees are appropriately trained in all the operations of the emission units and should document the training provided.
- ix. According to Rule 603(a)(4)(ii) of RCAP, Owens shall retain

the records of all required monitoring data and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report, or application. This includes a record with the visible emissions observations, where the date and time of the observations performed are recorded.

**2 NON PROCESS SOURCES**

- A. The Permittee shall not cause or permit the emission, of particulate matter in any one hour of 0.5 pounds per pound of uncontrolled emissions, equivalent to 95% control efficiency. [Rule 409 of RCAP].
- B. Owens shall show compliance with the previous condition maintaining the flow rate of water in the venturi scrubber in accordance with the manufacturer’s specifications and the mathematical calculation. Owens shall operate a flow meter in the control equipment and maintain it in accordance with the manufacturer’s specifications.

**E. EUBP 02, EUBP 03, EUBP 04, EUBP 05 and EUBP 06**

Condition	Parameter	Value	Units	Method of Compliance	Frequency of Method	Record Keeping Requirement	Reporting Frequency
Opacity Limit	Opacity	20	Average Percent 6 minutes	Inspection	Weekly	Record	Semi annual
Non – Process Sources	PM	0.05 or 95%	Lbs out/lbs in-hr % control efficiency	Inspection	Weekly	Record	Semi annual

**1. OPACITY LIMIT:**

- (A) The facility shall not exceed the opacity limit defined in the table above under their normal and alternative operating scenarios. However, the facility

may discharge visible emissions of an opacity up to 60 percent for a period of no more than four (4) minutes in any consecutive thirty (30) minutes interval. [Rule 403 of RCAP].

- (B) Owens Illinois shall perform visible emission test weekly in accordance with the requirements listed below:
- i. During the operation of the unit EUBP 02, EUBP 03, EUBP 04, EUBP 05 and EUBP 06, Owens shall perform visible emissions observations of each unit EUBP 02, EUBP 03, EUBP 04, EUBP 05 and EUBP 06 every week during the hours of the day with a minimal duration of six minutes whenever the emission unit is in operation. For such operations Owens will use as guidance the provisions of Method 9 of the 40 CFR Part 60 Appendix A. These inspections shall consist in observing each stack for a period of six minutes every week to identify if there are visible emissions that are not water vapor. The observer shall select a position of at least 15 feet, but not more than 0.25 miles of the source. The sunlight shall not focus directly in the eyes of the observer. The person who performs the visible observations should be certified by a program endorsed by the EPA or the EQB so that he has /she received the acceptable training by EQB in order to identify if the units are potentially exceeding the opacity limits stated by Rule 403 of RCAP.
  - ii. When the certified observer establishes that exists the potential (that the average of the six minutes exceeds 20% opacity) that the opacity limit could be exceeded according to Rule 403 of the RCAP, Owens shall verify that the equipment causing the visible emissions is operating in accordance with the manufacturer's specification and Owens shall take corrective measures to eliminate any excess of opacity.
  - iii. If the corrective measures do not fix the opacity problem in 24 hours, the permittee shall perform a visible emissions reading using Method 9 established in the 40 CFR 60, Appendix A to determine compliance with Rule 403 of the RCAP. The permittee shall hire an independent opacity reader certified by EQB to

make these tests. The tests shall be done during the hours of the day (until the problem has been corrected).

- iv. Any deviation to the opacity limits established in Rule 403 of RCAP must be reported to the EQB within 24 hours.
- v. Owens shall prepare and maintain a record indicating the dates and the results of the weekly inspections performed available in the facility at all times to be reviewed by the EQB personnel.
- vi. The EQB reserves the right to perform or to require to perform an opacity evaluation under Method 9 at any time during the hours of the day in which the equipments are operating with the purpose of demonstrating compliance with opacity limits.
- vii. Owens shall submit to EQB a summary of the visible emissions observations reports every six months.
- viii. Owens shall ensure that the employees are appropriately trained in all the operations of the emission units and should document the training provided.
- ix. According to Rule 603(a)(4)(ii) of RCAP, Owens shall retain the records of all required monitoring data and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report, or application. This includes a record with the visible emissions observations, where the date and time of the observations performed are recorded.

## **2 NON PROCESS SOURCES**

- A. The Permittee shall not cause or permit the emission, of particulate matter in any one hour of 0.5 pounds per pound of uncontrolled emissions, equivalent to 95% control efficiency. [Rule 409 of RCAP].
- B. To demonstrate compliance with control efficiency, Owens has to maintain in the facility the manufacture certification.
- C. Owens shall demonstrate compliance with the previous condition,

maintaining the pressure drop of the dust collector in accordance with the manufacturer’s specifications and mathematics calculations.

- D- The dust collector and the pressure drop should be as specified in the Appendix II of this permit.

**F. FSUP 01, FUMI 01**

Condition	Parameter	Value	Units	Method of Compliance	Frequency of Method	Record Keeping Requirement	Reporting Frequency
Fugitive Emission	PM	Fugitives	N/A	Inspections	Daily	With each opacity readings	Semiannually

**1. Fugitive Emission**

- a- As establish in Rule 404 of RCAP the reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Prohibits the discharge of visible emissions of fugitive dust beyond property line on which emissions originate, among others.
- b- The operator shall conduct visible emission inspections from all equipment emission points whenever visible emissions are observed and on a daily bases, unless the equipment did not operate during the entire period.
- c- The routine daily inspection shall be conducted while the equipment is in operation and during daylight hours. If visible emissions are detected the operator:
  - i. Verify and certify within 24 hours that the equipment and any associated equipment are operating according to design and under conditions where compliance was achieved in the past;
  - ii. Take corrective action(s) that eliminate visible emissions within 24 hours and document the emissions as possible deviations in accordance with specified record keeping requirements;

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 39**

- d- The operator shall keep materials in the process sufficiently moist to prevent of property fugitive dust emissions.
- e- The Permittee shall keep records in accordance with the following requirements:
  - i- Source identification, inspection date, and name of person(s) performing the inspection,
  - ii- Description of any corrective actions taken to abate visible emissions,
  - iii- Date and time visible emissions were noted and abated.
- f. The permittee shall report, a summary of inspections records every six (6) months.

**G. New Applicable Requirements**

- 1. As per Rule 108 of the RCAP, O-I Puerto Rico shall maintain copies of calibration reports and monthly inspections. O-I Puerto Rico shall maintain records of occurrences of control equipment shutdown if processes will continue to operate. Records shall be made available to EQB upon request.

- 2. Alternate Operating Scenario

Under the alternate operating scenario, Owens might be able to use the EUHE 02 as long as Owens provide a written notification to the Puerto Rico Environmental Quality Board (EQB) and the EPA within 30 days prior to the reactivation of unit EUHE 02. Also, Owens shall operate the EUHE 02 in compliance with the applicable laws and regulations including the 20% opacity limit as defined in Rule 403 of RCAP. (Consent Agreement CAA-02-2002-1252)

<b>Id. Number of emission</b>	<b>Maximum Production</b>
EUHE 02 and EUHE 03	486 ton/day and 147,490 tons/years.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**

**Page 40**

- a. The permittee shall not exceed the production limit indicated above. The charge in any period of 12 consecutive months is calculated adding the total monthly charge of the unit charge to the preceding 11 consecutive months.
- b. To evidence compliance with the Maximum Production Charge, Owens shall maintain daily and monthly records in the facility for each period of twelve (12) consecutive months in which they include the charge to each furnace.
- c. Owens shall maintain a record of the alternate operating scenario for each emission unit. The record shall include the following information:
  - i. Operation Scenery (Norma, EOA1)
  - ii. Emissions unit identification and description;
  - iii. Date and Hour to begin operation scenery.

**Section VI- Insignificant Activities**

The following list of insignificant activities was provided by the permittee for a better understanding of its operations and layout. Since there is no requirement to update this list, activities may have changed since this filing.

<b>Emission Unit ID</b>	<b>Description (Criteria for exemption)</b>
Storage of Humid Sand	Appendix B(2) of the RCAP
Two mix of Duracote	Minor 10,000 each one Appendix B, Section 3 ii (N) of the RCAP. Each tank have one capacity of 50 gal.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 41**

<b>Emission Unit ID</b>	<b>Description (Criteria for exemption)</b>
Oleatic Acid Application	Appendix B(2) of the RCAP
Solvent for the codification unit	Appendix B(2) of the RCAP
Cartoon Glue	Appendix B(2)of the RCAP
Wash piece	Appendix B(2)of the RCAP
Adapted Plasma with torch	Appendix B (3)(ii)(E) of RCAP
Four Saws metal / wood	Appendix B (3)(ii)(E)(H) of RCAP
Storage drying sand	Appendix B(2) of the RCAP
Soldering workshop with extractor	Appendix B (3)(ii)(E) of RCAP
Freon Treatment	Appendix B(2) of the RCAP
Sulfur Dioxide in the bottle	Appendix B(2) of the RCAP
Caustic Cleaning Tank	Appendix B (3)(ii)(N) of RCAP. Capacity of 20 gallons.
Burning Sand application	Appendix B (3)(viii) of RCAP
Electric Arcs workshop(3)	Appendix B (3)(ii)(E) of RCAP
Solid Substance Lubricate	Appendix B(2) of the RCAP
Lubricate substance clean	Appendix B(2) of the RCAP
Caustic Cleans Tank	Appendix B (3)(ii)(N) of RCAP. Capacity of 500 gallons
Cooling Tower	Appendix B (3)(VI)(xix)(xxxiii) of RCAP
Fire Pump	Appendix B(3)(vi),(xix)(xxxiii) of RCAP
Water Heater	Less of 10,000 gallons. Appendix B (3)(ii)(N) of RCAP
Bio-Sol Mix Tank	Less of 10,000 gallons. Appendix B (3)(ii)(N) of RCAP. Capacity 250 gallons.
Waste Oil Tank	Less of 10,000 gallons. Appendix B (3)(ii)(N) of RCAP. Capacity 500 gallons.
Diesel Tank	Less of 10,000 gallons. Appendix B (3)(xi) of RCAP. Capacity 2,500 gallons
Diesel Tank	Less of 10,000 gallons. Appendix B (3)(xi) of RCAP. Capacity 250 gallons

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 42**

<b>Emission Unit ID</b>	<b>Description (Criteria for exemption)</b>
Lube Oil Tank	Less of 10,000 gallons. Appendix B (3)(ii)(N) of RCAP. Capacity 6,000 gallons
Glue Tank	Less of 10,000 gallons. Appendix B (3)(ii)(N) of RCAP. Capacity 500 gallons
Basement Machine Oil	Less of 10,000 gallons. Appendix B (3)(ii)(N) of RCAP. Capacity 200 gallons
Fire System / Emergency Generator Tank	Less of 10,000 gallons. Appendix B (3)(ii)(N) (xix)of RCAP. Capacity 500 gallons
Mold Dope Tanks (2)	Less of 10,000 gallons. Appendix B (3)(ii)(N) (xix)of RCAP. Capacity 250 gallons
Fuel Oil Tank	Appendix B(2) of the RCAP
Emergency Diesel Generator	Operation 500 hours at years. Appendix B (3)(ii)(O) of RCAP

**Section VII. Permit Shield**

1. As established under Rule 603 (D) of the RCAP, compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance. This permit shield covers the alternate operating scenario defined and allowed in the permit.

**A. Non- applicable Requirement**

<b>Emission Unit ID.</b>	<b>Non-Applicable Requirement Citation</b>	<b>Non-Applicable Requirements</b>
EUSP 02	PFE-73-0894-	Permit requirement for 0.025 gr/scf extraction level. Emission unit will

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 43**

Emission Unit ID.	Non-Applicable Requirement Citation	Non-Applicable Requirements
	0956-I-O	comply with RCAP Rule 409.
EUSP 02	PFE-73-0894-0956-I-O	Permit requirement for 75% sulfur dioxide removal. Emission unit will comply with RCAP Rule 209.
Facility	EQB Regulation for the Control of Atmospheric Pollution - Rule 411	Prohibits hydrogen sulfide emissions, which would cause ground level concentrations equal to or greater than 0.1 ppm in any one (1) hour or 0.03 ppm in any 24-hour period. No hydrogen sulfide is emitted from the facility. Not part of EPA-approved SIP.
Facility	EQB Regulation for the Control of Atmospheric Pollution- Rule 418	Prohibits the emission of more than 6.8 kgs (15 pounds) per day of waste gas from any ethylene producing or consuming plant or other ethylene emission source unless the waste gas stream is properly burned at 704 degrees Celsius (1300 degrees Fahrenheit) for 0.3 seconds or greater in a direct flame afterburner or burned in a smokeless flare or an equally effective device approved by EQB. No waste gas is disposed at the facility. Not part of EPA-approved SIP.
EUHE 02 and 03	Standards of Performance for Glass Manufacturing Plants- 40 CFR Part 60, Subpart CC	Standards applicable to glass melting furnaces at an affected facility, which commenced construction or modification after June 15, 1979. Furnaces constructed in 1975, and changed in 1988 (Furnace A), and 1990 (Furnace B), with no resulting increase in emissions.
Fuel/Oil Tanks	Standards of Performance for Volatile Organic Liquid Storage Vessels- 40 CFR Part 60, Subpart Kb	Standards applicable to volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984. Subject tanks installed prior to July 23, 1984.
Facility	EQB Regulation for the Control of Atmospheric Pollution- Rules 406, 407, 409, 410, 412 and	Do not apply to insignificant activities exempted under RCAP Appendix B(3)(ii)(P).

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 44**

Emission Unit ID.	Non-Applicable Requirement Citation	Non-Applicable Requirements
	419	
EUHE 02 and 03	National Emission Standard for Inorganic Arsenic Emissions from Glass Manuf. Plants- 40 CFR Part 61, Subpart N	Standard applies to glass melting furnaces that use commercial arsenic as a raw material. Commercial arsenic is not used in this facility.
EUSP 02	PFE-73-0894-0956-I-O	Permit condition for total gases. will be eliminated to 20%. Emission unit will comply with RCAP Rule 403.

**Section VIII. Permit Approval**

By virtue of the powers bestowed to the environmental Quality Board by the Public Environmental Policy Act, Act No.416 of September 22, 2004, EQB approves this permit under such terms and conditions established under the Act.

In San Juan, Puerto Rico, **February 22, 2006.**

**ENVIRONMENTAL QUALITY BOARD**

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 45**

**/signed by Carlos W. López/**

Esq. Carlos W. López Freytes  
President

**/signed by Julio I. Rodríguez Colón/**

Julio I. Rodríguez Colón  
Alternate Member

# Appendixes

## Appendix I- Definitions and abbreviations

### Appendix 1-Definitions and abbreviations

#### I. Definitions:

1. Act- Federal Clean Air Act

2. Responsible Officer -	See definition of responsible officer as established in the Regulation for the Control of Atmospheric Pollution of the Environmental Quality Board (1995)
3. Regulation -	Regulation for the Control of Atmospheric Pollution for the

	Environmental Quality Board.
<b>4. Permittee -</b>	Person and/or entity to which the Puerto Rico Environmental Quality Board has emitted an Operating Permit for an Emission Source under Title V.
<b>5. Title V</b>	Title V of the Clean Air Act (42 U.S.C. 7661)

**II. Abbreviations**

- |                             |  |
|-----------------------------|--|
| <b>1. EPA -</b>             | Environmental Protection Agency  |
| <b>2. EQB -</b>             | Puerto Rico Environmental Quality Board  |
| <b>3. CFR -</b>             | Code of Federal Regulations  |
| <b>4. NAAQS -</b>           | National Ambient Air Quality Standards   |
| <b>5. PM<sub>10</sub> -</b> | Particulate Matter whose particulate diameter has a size of aerodynamic mass equal or less than ten microns. |
| <b>6. SO<sub>2</sub></b>    | Sulfur Dioxide   |
| <b>7. BTU</b>               | Britannic Thermal Unit   |
| <b>8. NO<sub>x</sub> -</b>  | Nitrogen Oxides  |
| <b>9. EOA</b>               | Alternate Operating Scenario   |
| <b>10. PSIA -</b>           | Pressure unit, pounds per square inch  |
| <b>11. RCAP -</b>           | Regulation for the Control of Atmospheric Pollution of the Environmental Quality Board.                      |

**Appendix II- Requisite according the Rule 108 of the RCCA**

Owens, shall install, maintain and operate every control equipment or measure for the control of contamination of air according to the imposed conditions by the EQB and within the operational limits specified by the manufacturer for which Owens shall comply with the following:

- a. Dust Collectors and Cyclone
  1. Owens shall the Dust Collectors and the Cyclone at least once a week to be assure that they are functioning correctly and to observe changes that can indicate the potential of malfunction, including the presence of tears, openings (except by the opening of the apparatus) and abrasions in the markets of filter and for deposits of dust in the clean side of the markets.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**  
**Page 49**

2. Owens shall install pressure drop meters on the dust collectors and the Cyclone to determine the operational efficiency of the unit of control, which shall be calibrated at least two times per year. The results of the calibration carried out shall be maintained available at the installation to be revised by our technical personnel when they request them. Owens shall maintain a daily registration of the readings of the meters. The pressure drop shall be maintained within the limits recommended by the manufacturer.
3. Owens shall inspect the clean side of the dust collector at least once a week to assure that it is functioning correctly and to observe changes that can indicate the potential of the malfunction. These signs include but without being limited to the following:
  - i- Deposits of dust in the clean side of the markets.
  - ii- Loose Brackets or in badly state.
  - iii- Changes in color in the interior of the coraza of the collector.
4. Owens shall verify daily the readings of the pressure drop meters during the operation of the dust collector.
5. Owens shall maintain a registration of the results of the inspections of visible emissions of the dust collector that will include the following information:
  - A. Hour and date of each inspection.
  - B. Presence or absence of visible emissions.
  - C. The condition in which the filters of fabric are found, including the presence of tears, openings and abrasions.
  - D. Dust deposits Presence in the clean side of the filters.
  - E. Brief description of the corrective actions taken, including date and hour.
  - F. Daily hours of operation of each air cleaning apparatus.
6. Owens shall retain the registrations of operation and of monitoring for five years in the installation and they will be available for revision by the technical personnel of the Board.

7. Owens shall remove the particulate material once a week to avoid the concentration of material in the interior of the swirl or whirlwind of the cyclone.
8. The Cyclone shall operate with a temperature over 1000 °C (1832 °F) utilizing refractory linings.

b. Scrubber

1. Owens shall inspect and provide adequate maintenance to the scrubber according to the recommendations of the manufacturer. To assure the appropriate operational conditions Owens shall verify the following:
  - a. Minimum Flow of the solution.
  - b. pH (initial concentration of the caustic solution and minimum concentration of the solution)
2. Owens shall submit within 60 days of effectiveness of this permit the operation parameters of the scrubbers CDSP01, CDSP02 and the oven B, the initial concentration of the solution, the minimum operational concentration and the minimum operational flow.
3. Owens shall install a flow meter in each scrubber to verify the operational parameters of the units. The flow meter installed should be certified by the manufacturer and should possess a precision inside  $\pm 10\%$  of the flow of design of the scrubber.
4. The flow should be maintained during the operation of the scrubber.
5. Owens shall register the flow of the scrubber once a shift during the operation of the same.
6. The flow meter of each unit shall be calibrated every 12 months and Owens shall maintain the registrations or documents of the calibrations available at every moment in the installation to be revised by the personnel of the Board.
7. The minimum level of pH of the liquid recirculated on the scrubber shall be maintained during the operation of the scrubber.

**PFE-TV-1446-73-0397-0032**  
**Final Title V Operating Permit**  
**Owens Illinois de Puerto Rico**  
**Vega Alta, Puerto Rico**

**Page 51**

8. Owens shall maintain a monthly registration of the maintenance offered to each control equipment. Said registration should be maintained in the installation in every moment to be revised by technical personnel of the Board.

C. Electrostatic Precipitator

1. Owens shall submit within 60 days of effectiveness of this permit, the operating parameters of the electrostatic precipitator. Also it shall include the manufacturer data.
2. The precipitator should be provided of a pressure fall meter to determine the operational efficiency of the unit of control, which should be calibrated at least two times al year. The results of the calibration carried out should be maintained available in the installation to be revised by our technical personnel when they request them. They should maintain a daily registration of the readings of the meters. The fall in pressure should be maintained inside the limits that recommend the manufacturer.
3. Owens shall maintain a monthly registration of the maintenance offered to each control equipment, registration should be maintained in the installation in every moment to be revised by technical personnel of the Board.
4. Owens shall inspect the Electrostatic Precipitator at least once a week to assure that it is functioning correctly and to observe changes that can indicate the potential of malfunctions.
5. The pressure drop meter of the unit shall be calibrated every 12 months and Owens shall maintain the registrations or documents of the calibrations at every moment at the installation to be revised by the personnel when required.