

State of California  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

ORDER NO. R4-2004-0171  
NPDES PERMIT NO. CA0056464

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
AND  
WASTE DISCHARGE REQUIREMENTS  
FOR  
OWENS-ILLINOIS, INC.  
(OWENS-BROCKWAY GLASS CONTAINER)

The California Regional Water Quality Board, Los Angeles Region (hereinafter Regional Board), finds:

**Background**

1. Owens-Illinois, Inc. (hereinafter Owens or Discharger) discharges process and non-process wastewater from its Owens-Brockway Glass Container (Facility) under waste discharge requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit contained in Order No. 97-017 (NPDES Permit No. CA0056464) adopted by the Regional Board on March 3, 1997. Order No. 97-017 expired on February 10, 2002.
2. Owens filed a report of waste discharge on October 23, 2001, and applied for renewal of its WDRs and NPDES permit for discharge of wastes to surface waters.

**Purpose of Order**

3. The purpose of this Order is to renew the WDRs for the Owens facility. This NPDES permit regulates the discharge of process and non-process wastewater via the City of Vernon storm drains, Discharge Serial Nos. 001 on the north side of Fruitland Avenue, thence to Los Angeles River, a water of the United States, above the Estuary. The point of discharge (Discharge Serial No. 001) is located at Latitude 33°52'30" North, Longitude 118°07'30" West.

**Facility Description**

4. Owens operates the Owens-Brockway Glass Container located at 2901 Fruitland Avenue, Vernon, California. Figure 1 depicts the Facility location map. Operations at the Facility include the manufacturing of glass containers from raw materials and recycled glass, primarily for the food and beverage industries. The Facility manufactures flint (clear), amber (brown) and emerald (green) bottles for Miller Brewing Company from both new materials – consisting primarily of silica sand and soda ash and recycled glass. While water is not a component of the product, it is used throughout the manufacturing process for supporting equipment and plant operations. Figure 2 depicts the wastewater schematic flow diagram.

September 14, 2004

## Description of Waste Discharges and Outfall

5. Owens proposes to discharge up to 515,300 gallons per day (gpd) of wastewater (i.e., process and non-process water) through Discharge Serial No. 001 to the storm drain in Fruitland Avenue thence to Los Angeles River, a water of the United States above the Estuary. All wastewater flows to a junction vault in the sidewalk and into the storm drain on the north side of Fruitland Avenue. The wastes discharged include the following:

- a) up to 500,000 gpd of furnace drain water;

Furnace drain water is discharged for a 2-day period whenever a drain is required. Furnace draining is infrequent and occurs every 5 to 10 years per furnace. There are two furnaces at the Facility, Furnace B and C. These furnaces are never drained concurrently. In the event of concurrent furnace draining, the Owens must notify the Regional Board and obtain approval prior to draining both furnaces.

- b) up to 5,300 gpd of fire protection system test water;

The fire protection system is tested approximately once per month and test water is de-chlorinated or otherwise treated, as required, prior to discharge.

- c) up to 10,000 gpd of oxygen plant (Plant No. 1) vacuum pump seal water; and

There are three oxygen plants in the Facility (Plant Nos. 1, 2, and 3), and only the wastewater from Plant No. 1 is discharged to the storm drain. Plant No. 2 has been permanently shut down, and Plant No. 3 generates oxygen without water usage.

Oxygen Plant No. 1 vacuum pumps and silencers are designed to operate using approximately 20,000 gpd of freshwater. To reduce the amount of water required in the process, vacuum pump seal water from Oxygen Plant No. 1 has been directed into a re-circulating system. Bleed water from the seal water re-circulation system is collected in the No.1 sump on the western side of the oxygen plant utility bridge. From the sump, the bleed water is pumped to the roof drainage downspout in the glass plant which flows to the front driveway strip drain and in the storm drain vault in the sidewalk on Fruitland Avenue. There is no treatment of the wastewater prior to discharge, other than adding water softener to the recirculating system.

Brine from the softener regeneration is collected in a separate sump No. 2 on the east side of the utility bridge, and pumped to the sanitary sewer.

- d) storm water runoff.

Storm water runoff is regulated under the NPDES General Permit for Storm Water Discharges Associated with Industrial Activity [State Water Resources Control Board (State Board) Order No. 97-03-DWQ, NPDES Permit No. CAS000001]. During rain event, a portion of the storm water runoff is collected in the equipment wash pad and is directed to the cullet water pump sump via rain diversion, then to pump sump, metered,

and is discharged to the sanitary sewer. In instances in which rainfall in the equipment wash pad area exceeds one inch, water is no longer pumped to the cullet water pump sump then to sanitary sewer, and instead it is directed to the storm drain. Figure 2 depict schematic flow diagram.

6. The existing Order No. 97-017 permitted Owens to discharge excess wastewater (i.e., cooling tower bleed-off water or reverse osmosis water) from the reclaimed water tank to the storm drain. The reclaimed water tank has been removed and these waste streams are discharged to the sanitary sewer system. In addition, Discharge Serial No. 002, as described in the existing Order No. 97-017 for discharges of wastewater from Plant No. 2 was not implemented and no discharge occurred from this discharge point. Furthermore, the ROWD does not contain any reference to a second discharge point (Discharge Serial No. 002). Therefore, this Order eliminates the discharge point Discharge Serial No. 002.

Because water for Plant No. 1 is recirculated within the immediate oxygen plant premises water recycling in the glass plant is no longer feasible.

7. Most of the plant process water is discharged to the sanitary sewer under a joint permit issued by the City of Vernon and the Los Angeles County Sanitation District, Permit No. 01029. The wastes discharge to the sanitary sewer consist of contact cooling water from glass shearing and glass cullet cooling operations.

### **Storm Water Management and Best Management Practices**

8. The objective of this Order is to protect the beneficial uses of receiving waters. To meet this objective, this Order requires Owens to update and implement a Storm Water Pollution Prevention Plan (SWPPP) consistent with the SWPPP requirements in the NPDES General Permit for Storm Water Discharges Associated with Industrial Activity [State Water Resources Control Board (State Board) Order No. 97-03-DWQ, NPDES Permit No. CAS000001]. The SWPPP will outline site-specific management practices for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into surface waters.
9. The SWPPP shall also specify Best Management Practices (BMPs) that will be implemented to reduce the discharge of pollutants in storm water and non-storm water to the maximum extent practicable. Further, the Discharger shall assure that storm water and non-storm discharges from the facility would neither cause, nor contribute to, the exceedance of water quality standards and objectives, nor create conditions of nuisance in the receiving water.

### **Applicable Plans, Policies, and Regulations**

10. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) as amended on January 27, 1997 by Regional Board Resolution No. 97-02. The Basin Plan (i) designates beneficial uses for surface and groundwaters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state anti-degradation policy (*Statement of Policy with Respect to Maintaining High*

*Quality Waters in California*, State Board Resolution No. 68-16, October 28, 1968), and (iii) describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The Regional Board prepared the 1994 update of the Basin Plan to be consistent with all previously adopted State and Regional Board plans and policies. This Order implements the plans, policies and provisions of the Regional Board's Basin Plan.

11. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Life*. The Ammonia Basin Plan amendment was approved by the State Board, the Office of Administrative Law, and United States Environmental Protection Agency (U.S. EPA) on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with U.S. EPA's 1999 ammonia criteria update.
12. The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. Inland surface waters consist of rivers, streams, lakes, reservoirs, and inland wetlands. Beneficial uses for a surface water can be designated, whether or not they have been attained on a water body, in order to implement either federal or state mandates and goals, such as fishable and swimmable for regional waters.
13. The receiving waters for the permitted discharge covered by this permit is Los Angeles River, above the Estuary. The beneficial uses listed in the Basin Plan for the Los Angeles River (H.U. 405.15) are:
  - Existing uses: industrial service supply, water contact recreation, non-contact water recreation and warm freshwater habitat.
  - Potential uses: municipal and domestic water supply, and wildlife habitat.
14. The State Water Resources Control Board (State Board) adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.
15. On May 18, 2000, the U.S. EPA promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR section 131.38]. In the CTR, U.S. EPA promulgated criteria that protect the general population at an incremental cancer risk level of one in a million ( $10^{-6}$ ), for all priority toxic pollutants regulated as carcinogens. The CTR also allows a schedule of compliance not to exceed 5 years from the date of permit issuance for a point source discharge if the

Discharger demonstrates that it is infeasible to promptly comply with effluent limitations derived from the CTR criteria.

16. On March 2, 2000, the State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP was effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through the National Toxics Rule (NTR), and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the U.S. EPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP was effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA through the CTR. The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring water quality-based effluent limits (WQBELs) and to calculate the effluent limitations. The CTR criteria for fresh water or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in the proposed Order to protect the beneficial uses of the Los Angeles River, above the Estuary.
17. Under 40 CFR section 122.44(d), *Water Quality Standards and State Requirements*, "[l]imitations must control all pollutants or pollutant parameters (either conventional, non-conventional, or toxic pollutants), which the Director [permitting authority] determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." Where numeric effluent limitations for a pollutant or pollutant parameter have not been established in the applicable state water quality control plan, 40 CFR section 122.44(d)(1)(vi) specifies that WQBELs may be set based on U.S. EPA criteria, and may be supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria, and to fully protect designated beneficial uses.
18. Effluent limitation guidelines requiring the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT), were promulgated by the U.S. EPA for some pollutants in this discharge. Effluent limitations for pollutants not subject to the U.S. EPA effluent limitation guidelines are based on one of the following: best professional judgment (BPJ) of BPT, BCT or BAT; current plant performance; or WQBELs. The WQBELs are based on the Basin Plan, other State plans and policies, or U.S. EPA water quality criteria which are taken from the CTR. These requirements, as they are met, will protect and maintain existing beneficial uses of the receiving water. The attached Fact Sheet for this Order includes specific bases for the effluent limitations.
19. In compliance with 40 CFR section 122.45(d), permit limitations shall be expressed, unless impracticable, as both average monthly effluent limitations (AMELs) and maximum daily effluent limitations (MDELs).
20. Water-quality based effluent limitations at Discharge Serial No. 001 will be applied to all discharges, including combined or individual waste streams, from Owens (e.g., furnace drain

water, oxygen plant vacuum pump seal water, fire protection system test water and storm water runoff).

21. State and Federal anti-backsliding and anti-degradation policies require Regional Board actions to protect the water quality of a water body and to ensure that the water body will not be further degraded. The anti-backsliding provisions are specified in section 402(o) and 303(d)(4) of the Clean Water Act (CWA) and 40 CFR section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.
22. Effluent limitations are established in accordance with Parts 301, 304, 306, and 307 of the CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of the Los Angeles River.
23. Permit conditions (effluent limits and other special conditions) in the existing waste discharge requirements that are applicable to this Order have been carried over.

#### **Watershed Management Approach and Total Maximum Daily Loads (TMDLs)**

24. The Regional Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Board's many diverse programs, particularly Total Maximum Daily Loads (TMDLs), to better assess cumulative impacts of pollutants from all point and non-point sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a water body and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a water body to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental and economic impacts within the watershed. The TMDLs will establish waste load allocation (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the water body.
25. The Los Angeles River receives discharges from highly industrial areas. The 2002 State Board's California 303(d) List (approved by the U.S. EPA in July 2003) classifies the Los Angeles River as impaired. The Facility discharges within Reach 2 of the Los Angeles River, which includes Carson to Figueroa Streets. The pollutants of concern for Reach 2 of the Los Angeles River include: ammonia, coliform, lead, nutrients, odors, oil and scum/foam.

#### **Effluent Limitations, Guidelines and Standards (ELGs)**

26. 40 CFR Part 426 establishes effluent limitations and requirements for the Glass Manufacturing point source category. The applicability discussion in the regulation indicates that the category applies to discharges resulting from the process by which raw materials are melted in a furnace and mechanically processed into glass containers. Therefore, the

ELGs are applicable to furnace draining activities excluding other waste streams produced at the Facility (e.g., oxygen plant vacuum pump seal water, fire protection system test water, and storm water runoff).

27. 40 CFR Part 426 establishes pollutant effluent limitations and standards for direct discharge point sources. The limitations contained in 40 CFR Part 426 represent the degree of effluent reduction attainable by the application of the best practicable control technology currently available. Production data is needed to determine mass-based effluent limitations for process wastewaters. The production data from 2001, 2002 and 2003 were used in developing mass-based effluent limitations. In the case of oil and grease, and total suspended solids (TSS), the mass-based effluent limitations are determined by multiplying the concentration listed in 40 CFR section 426.82 by the pounds per day of glass produced at Owens. 40 CFR section 426.82 also specifies a pH range between 6.0 – 9.0.
28. An Internal Outfall No. 01A shall be established in this Order to identify a sampling location for the processed wastewater. Outfall No. 01A shall be established for intermittent furnace drain water prior to combining with other waters in the facility (e.g., the strip drain in the driveway), and prior to discharging to Discharge Serial No. 001.
29. The existing Order No. 97-017 did not include effluent limitations derived from the ELGs. The Regional Board has determined that ELGs are applicable to Owens' furnace drain effluent since they are discharges resulting from glass manufacturing processes and therefore, the proposed Order established the ELG-based limits for oil and grease and TSS in the furnace drain discharge. These effluent limitations are applicable to the discharge of oil and grease and TSS from the Internal Outfall 01A and do not apply to final discharges from Discharge Serial No. 001. Further, compliance with the ELG-based effluent limitations will be determined at a point following the furnace draining process, prior to combination with other waste streams (i.e., oxygen plant vacuum pump seal water, fire protection system test water, and storm water runoff) in the strip drain in the driveway or in the junction vault in the sidewalk.

#### **Data Availability and Reasonable Potential Analysis**

30. 40 CFR section 122.44(d)(1)(ii) requires that each toxic pollutant be analyzed with respect to its reasonable potential when determining whether a discharge (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality objective. This is done by performing a reasonable potential analysis (RPA) for each pollutant. In performing the RPA, the permitting authority uses procedures that account for existing controls on point and non-point sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, and the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity). Because of effluent variability, there is always some degree of uncertainty in determining an effluent's impact on the receiving water. The U.S. EPA's *Technical Support Document for Water Quality-Based Toxics Control (TSD) of 1991* (U.S. EPA/505/2-90-001), addresses this issue by suggesting the use of a statistical approach. Further, the SIP provides the procedures for evaluating reasonable potential to exceed applicable water quality criteria and objectives. Sufficient effluent data are needed to perform the RPA.

31. Certain effluent limitations have been established based on the revised water quality criteria contained in the CTR and the requirements contained in Section 1.4 of the SIP. In accordance with Section 13267 of the California Water Code, the Regional Board, in a letter dated August 3, 2001, required the Discharger to conduct a monitoring program of the effluent and the receiving water for priority pollutants regulated in the CTR. The data collected from this requirement for the period from September 2001 through October 2002, and the monitoring data from July 1996 through April 2002 were used in the RPA. Based on the RPA, there is reasonable potential to exceed water quality criteria for copper, thallium, zinc, bis(2-ethylhexyl)phthalate, cyanide, and 2,3,7,8-TCDD TEQ (dioxin). Reasonable potential for thallium, cyanide, and 2,3,7,8-TCDD was triggered based on background receiving water concentrations. Thus, effluent limitations and effluent monitoring requirements for these pollutants have been established. Because of the Discharger's nature of operation, certain toxic pollutants (i.e., metals) that have effluent limitations in the previous permit are subject to effluent limitations. Existing permit limitations for conventional pollutants and nonconventional pollutants were also carried over from the previous permit.

#### **Compliance Schedules and Interim Limits**

32. Owens may not be able to achieve immediate compliance with the WQBELs for bis(2-ethylhexyl)phthalate and copper in Section I.B.4. of this Order. Data submitted in self-monitoring reports indicate that these constituents have been detected at concentrations greater than the new limits proposed in this Order. The Discharger may not be able to achieve immediate compliance with an effluent limitation based on CTR criterion for these constituents.
33. As a result, interim limits have been prescribed for bis(2-ethylhexyl)phthalate and copper for all discharges from Owens. The proposed Order contains a compliance schedule that allows the Discharger up to two years to comply with the revised effluent limitations. Within one year after the effective date of the Order, the Discharger must prepare and submit a compliance plan that describes the steps that will be taken to ensure compliance with applicable limitations.
34. 40 CFR 131.38(e) and the CTR provide conditions under which interim effluent limits and compliance schedules may be issued. The CTR and SIP allow inclusion of an interim limit with a specific compliance schedule included in a NPDES permit for priority pollutants if the limit for the priority pollutant is CTR-based. Interim limits for bis(2-ethylhexyl)phthalate and copper have been included in this Order. During the compliance period, the current treatment facility performance is imposed as the interim effluent limitations. These interim limitations shall be effective from the date of this Order until November 4, 2006, after which, the Discharger shall demonstrate compliance with the final effluent limitations.
35. The SIP requires that the Regional Board establish other interim requirements such as requiring the Discharger to develop a pollutant minimization plan and/or source control measures and participate in the activities necessary to achieve the final effluent limitations.

## **CEQA and Notifications**

36. The Regional Board has notified the Discharger and interested agencies and persons of its intent to issue waste discharge requirements for this discharge, and has provided them with an opportunity to submit their written views and recommendations.
37. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.
38. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to section 402 of the Federal Clean Water Act or amendments thereto, and is effective 30 days (January 12, 2005) from the date of its adoption, in accordance with federal law, provided the Regional Administrator, U.S. EPA, has no objections.
39. Pursuant to California Water Code section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, Office of Chief Counsel, ATTN: Elizabeth Miller Jennings, Senior Staff Counsel, 1001 I Street, 22nd Floor, Sacramento, California, 95814, within 30 days of adoption of this Order.
40. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with section 21100) of Division 13 of the Public Resources Code (CEQA) in accordance with the California Water Code, section 13389.

**IT IS HEREBY ORDERED** that Owen-Illinois, Inc., Owens-Brockway Glass Container, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted there under, shall comply with the following:

### **I. DISCHARGE REQUIREMENTS**

#### **A. Discharge Prohibitions**

1. Wastes discharged shall be limited to process water (i.e., up to 500,000 gpd of furnace draining water), and non-process water (i.e., up to 5,300 gpd of fire protection system test water, up to 10,000 gpd of oxygen plant vacuum pump seal water, and storm water runoff from equipment wash pad area), as proposed. The discharge of wastes from accidental spills or other sources is prohibited.  
  
Furnaces B and C shall not be drained concurrently. In the event of concurrent furnace draining, the Owens must notify the Regional Board and obtain approval prior to draining both furnaces.
2. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to the storm drain system, Los Angeles River, or waters of the State, are prohibited.

**B. Effluent Limitations for Internal Outfall 01A:**

The discharge of furnace drain wastewater from internal Outfall 01A containing constituents in excess of the following effluent limitations is prohibited. The internal Outfall 01A shall be established prior Discharge Serial No. 001 (i.e., prior Strip Drain in Driveway).

Constituent	Units	Average Monthly Effluent Limitations (AMELs)	Maximum Daily Effluent Limitations (MDELs)
pH	Standard units	--	Between 6.0 – 9.0
Oil and Grease	Lbs/day <sup>1</sup>	24	49
	mg/L <sup>2</sup>	6	12
Total Suspended Solids	Lbs/day <sup>1</sup>	55	115
	mg/L <sup>2</sup>	13	28

<sup>1</sup> The effluent limitations in lbs/day are based on 40 CFR section 426.82 and are applicable to furnace drain wastewater only. See attachment F-A of the Factsheet for the calculations.

<sup>2</sup> The effluent limitations in concentration (mg/L) are calculated based on the maximum flow of 500,000 gpd, using the formula:

$$m = 8.34 C_i Q$$

where: m = mass discharge for a pollutant, lbs/day  
C<sub>i</sub> = concentration for a pollutant, mg/L  
Q = discharge flow rate, million gallons per day (mgd)

**C. Final Effluent Limitations for Discharge Serial No. 001:**

The discharge of an effluent in excess of the following limitations is prohibited:

1. A pH value less than 6.5 or greater than 8.5.
2. Temperature:
  - a. A temperature greater than 86 °F; and
3. Toxicity limitations:
  - a. Acute Toxicity Limitation and Requirements
    - i. The acute toxicity of the effluent shall be such that (i) the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.
    - ii. If either of the above requirements [Section I.C.3.a.(i)] is not met, the

Discharger shall conduct six additional tests over a 6-week period. The Discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the completion of the test, and the additional tests shall begin within 3 business days of the receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing. However if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the source(s) of toxicity. Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the objective.

- iii. If any two of the initial test and the additional six acute toxicity bioassay tests result in less than 70% survival, the Discharger shall immediately begin a TIE.
- iv. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. CI-6079.

4. Final Effluent Limitations for Discharge Serial No. 001:

In addition to the Requirements I.A.1, I.C.1 through I.C.3, the final effluent limitations established in this Order are applicable to all final discharges, including individual or combined waste streams, through Discharge Serial No. 001 (Latitude 33°52'30" North, Longitude 118°07'30" West):

Constituent	Units	Maximum Daily Effluent Limitations (MDELs)	Average Monthly Effluent Limitations (AMELs)
Oil and Grease	mg/L	15	10
Total Suspended Solids	mg/L	75	50
Settleable Solids	ml/L	0.2	0.1
Turbidity	NTU	75	50
BOD <sub>5</sub> @ 20°C	mg/L	30	20
Residual Chlorine	mg/L	0.1	--
Phenols	mg/L	1.0	--
Sulfides	mg/L	0.1	--
Fluoride	mg/L	1.0	--
Total Dissolved Solids	mg/L	1,500	--
Chloride	mg/L	150	--

Constituent	Units	Maximum Daily Effluent Limitations (MDELs)	Average Monthly Effluent Limitations (AMELs)
Sulfate	mg/L	350	--
Nitrate-nitrogen plus nitrite-nitrogen (as Nitrogen)	mg/L	8	--
Copper <sup>1</sup>	µg/L	30	15
Thallium	µg/L	13	6
Cyanide	µg/L	8	3
2,3,7,8-TCDD	µg/L	2.8E-8	1.4E-8
Bis(2-ethylhexyl) Phthalate	µg/L	12	6
Arsenic <sup>1</sup>	µg/L	50	--
Cadmium <sup>1</sup>	µg/L	10	--
Total Chromium <sup>1</sup>	µg/L	50	--
Chromium <sup>1</sup>	µg/L	50	--
Lead <sup>1</sup>	µg/L	50	--
Mercury	µg/L	2	--
Selenium <sup>1</sup>	µg/L	10	--
Silver <sup>1</sup>	µg/L	50	--

<sup>1</sup> Discharge limitations for these metals are expressed as total recoverable.

5. Interim Effluent Limitations for Discharge Serial No. 001:

In addition to the Requirements I.A.1, I.C.1 through I.C.3, the interim effluent limitations established in this Order are applicable to all final discharges, including individual or combined waste streams, through NPDES Discharge Serial No. 001 (Latitude 33°52'30" North, Longitude 118°07'30" West). From the effective date of this Order until November 4, 2006, the discharge of effluent in excess of the following limitations is prohibited:

Constituents	Units	30-day Average Discharge Limitations	Daily Maximum Discharge Limitations
Bis(2-ethylhexyl) Phthalate	µg/L	17	---
Copper <sup>1</sup>	µg/L	100	---

<sup>1</sup> Discharge limitations for copper is expressed as total recoverable.

The Discharger must comply with the limits for these constituents stipulated in the table in section I.B.4. after November 4, 2006.

C. Receiving Water Limitations

1. The discharge shall not cause the following conditions to exist in the receiving waters:
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - c. Visible, floating, suspended or deposited oil or other products of petroleum origin;
  - d. Bottom deposits or aquatic growths; or,
  - e. Toxic or other deleterious substances present in concentrations or quantities that cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge shall not cause nuisance or adversely affect beneficial uses of the receiving water.
3. No discharge shall cause a surface water temperature rise greater than 5°F above the natural temperature of the receiving waters at any time or place.
4. The discharge shall not cause the following limits to be exceeded in the receiving waters at any place within the waterbody of the receiving waters:
  - a. The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units;
  - b. Dissolved oxygen shall not be less than 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation;
  - c. Dissolved sulfide shall not be greater than 0.1 mg/L;
  - d. The ammonia in the 1994 Basin Plan were revised by Regional Board Resolution No. 2002-011, adopted on April 28, 2002, to be consistent with the 1999 U.S. EPA update on ammonia criteria. Regional Board Resolution No. 2002-011 was approved by State Board, OAL and U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively

and is now in effect. Total ammonia (as N) shall not exceed concentrations specified in the Regional Board Resolution 2002-011.

5. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or State Board. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Regional Board will revise or modify this Order in accordance with such standards.
6. The discharge shall not cause the following to be present in receiving waters:
  - a. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses;
  - b. Chemical substances in amounts that adversely affect any designated beneficial use;
  - c. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water;
  - d. Suspended or settleable materials in concentrations that cause nuisance or adversely affect beneficial uses;
  - e. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses;
  - f. Substances that result in increases of BOD<sub>5</sub>20°C that adversely affect beneficial uses;
7. The discharge shall not alter the color, create a visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters.
8. The discharge shall not degrade surface water communities and population including vertebrate, invertebrate, and plant species.
9. The discharge shall not damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload their design capacity.
10. The discharge shall not cause problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.

## II. REQUIREMENTS

A. The Discharger shall submit within 90 days of the effective date of this Order:

1. An updated Storm Water Pollution Prevention Plan (SWPPP) that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The SWPPP shall be developed in accordance with the requirements in Attachment A.
2. Best Management Practices (BMPs) that entails site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. The BMPP shall be consistent with the general guidance contained in the U.S. EPA *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004). In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters. BMPs shall be included in the updated SWPPP.
3. An updated Spill Contingency Plan that shall be site specific and shall cover all areas of the facility must be prepared. The Contingency Plan shall be reviewed at the same time as the SWPPP and BMP.

Plans shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge points; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of the storm water. The plans shall be reviewed annually and at the same time. Updated information shall be submitted within 30 days of revision.

B. Compliance Plan

1. The Discharger shall develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of bis(2-ethylhexyl)phthalate and copper in their discharge. This plan must evaluate options to achieve compliance with the Order limitations specified in provision 1.B.4. The Discharger shall submit the plan within six months after the adoption of this Order.
2. The Discharger shall submit quarterly progress reports to describe the progress of studies and or actions undertaken to reduce bis(2-ethylhexyl)phthalate and copper in the effluent, and to achieve compliance with the limitations in this Order by the deadline specified in provision I.B.5. The Regional Board shall receive the first annual progress report at the same time the annual summary report is due, as required in Section I.B of Monitoring and Reporting Program (*M&RP*) No. 6079.

3. The interim limitations stipulated in section I.B.5 shall be in effect for a period not to extend beyond November 4, 2006. Thereafter, the Discharger shall comply with the limitations specified in Section I.B.4 of this Order.
- C. Pursuant to the requirements of 40 CFR section 122.42(a), the Discharger must notify the Board as soon as it knows, or has reason to believe (1) that it has begun or expected to begin, to use or manufacture a toxic pollutant not reported in the permit application, or (2) a discharge of toxic pollutant not limited by this Order has occurred, or will occur, in concentrations that exceed the specified limits in 40 CFR section 122.42(a).
- D. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.
- E. The Discharger shall comply with the waste load allocations that will be developed from the TMDL process for the 303(d)-listed pollutants.
- F. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.
- G. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream which ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.
- H. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to the planned discharge of any chemical, other than chlorine or other product previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:
  - a. Name and general composition of the chemical,
  - b. Frequency of use,
  - c. Quantities to be used,
  - d. Proposed discharge concentrations, and
  - e. U.S. EPA registration number, if applicable.

No discharge of such chemical shall be made prior to the Executive Officer's approval.

- K. The Regional Board and U.S. EPA shall be notified immediately, by telephone, of the presence of adverse conditions in the receiving waters or on beaches and shores as a result of wastes discharged; written confirmation shall follow as soon as possible but not later than five working days after occurrence.

### III. PROVISIONS

- A. This Order includes the attached Standard Provisions and General Monitoring and Reporting Requirements (Standard Provisions, Attachment N). If there is any conflict between provisions stated herein and the attached Standard Provisions, those provisions stated herein shall prevail.
- B. This Order includes the attached *M&RP* No. CI-6079. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former shall prevail.
- C. The Discharger shall comply with the requirements of SWPPP updates associated with industrial activity (State Board Order No. 97-03-DWQ adopted on April 17, 1997) and SWPPP updates and monitoring and reporting requirements of State Board general permit for discharges of storm water and Construction Activity (State Board Order No. 99-08-DWQ adopted on August 19, 1999). This Order R4-2004-0171 shall take precedence where conflicts or differences arise between it and the aforementioned Orders. This Order includes the relevant requirements contained in the attached *Storm Water Pollution Prevention Plan Requirements* (Attachment A).
- D. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
- E. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Board to local agencies.
- F. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.
- G. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, and 423 of the Federal Clean Water Act and amendments thereto.

#### H. Compliance Determination

1. Compliance with single constituent effluent limitation – If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (see Effluent Monitoring Requirement II.C. of the *M&RP* No. CI-6079), then the Discharger is out of compliance.
2. Compliance with monthly average limitations - In determining compliance with monthly average limitations, the following provisions shall apply to all constituents:
  - a. If the analytical result of a single sample, monitored monthly, quarterly, semi-annually, or annually, does not exceed the monthly average limit for that constituent, the Discharger has demonstrated compliance with the monthly average limit for that month.
  - b. If the analytical result of a single sample, monitored monthly, quarterly, semi-annually, or annually, exceeds the monthly average limit for any constituent, the Discharger shall collect up to four additional samples at approximately equal intervals during the month. All analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later.

When all sample results are greater than or equal to the reported Minimum Level (see Effluent Monitoring Requirement II.C. of *M&RP* No. CI-6079), the numerical average of the analytical results of these samples will be used for compliance determination.

When one or more sample results are reported as “Not-Detected (ND)” or “Detected, but Not Quantified (DNQ)” (see Effluent Monitoring Requirement II.C. of *M&RP* No. CI-6079), the median value of these samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.
  - c. In the event of noncompliance with a monthly average effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the monthly average effluent limitation has been demonstrated.
  - d. If only one sample was obtained for the month or more than a monthly period and the result exceed the monthly average, then the Discharger is in violation of the monthly average limit.
3. Compliance with effluent limitations expressed as a sum of several constituents. If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero, provided that the applicable ML is used.

- I. In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for “Not Detected” (ND) and the estimated concentration for “Detected, but Not Quantified” (DNQ) for the calculation of the monthly average concentration. To be consistent with section III.H.3., if all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations should be considered as zero for the calculation of the monthly average concentration.

#### **IV. REOPENERS**

- A. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.
- B. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.
- C. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include new minimum levels (MLs) for each pollutant.
- D. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for Los Angeles River.
- E. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order and permit, and endangerment to human health or the environment resulting from the permitted activity.

#### **V. EXPIRATION DATE**

This Order expires on November 10, 2009.

The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

Owens-Illinois, Inc.  
(Owens-Brockway Glass Container)  
Order No. R4-2004-0171

CA0056464

## **VI. RESCISSION**

Order No. 97-017 adopted by this Regional Board on March 3, 1997, is hereby rescinded except for enforcement purposes.

I, Jonathan Bishop, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on December 13, 2004.

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Jonathan S. Bishop  
Executive Officer