

Los Angeles Regional Water Quality Control Board

**ORDER NO. R4-2022-0213 TO PROVIDE A  
TECHNICAL OR MONITORING REPORT ON**

**"BIG BANG ON THE BAY" FIREWORKS DISPLAY  
AT ALAMITOS BAY AND THE PACIFIC OCEAN**

**CALIFORNIA WATER CODE SECTION 13267**

**DIRECTED TO THE BOATHOUSE ON THE BAY**

The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) makes the following findings and issues this Order pursuant to California Water Code section 13267.

1. The Boathouse on the Bay (BHOTB) operates a restaurant located at 190 North Marina Drive in the City of Long Beach. The BHOTB's property is located on a portion of Alamitos Bay Landing, which is bordered by Alamitos Bay at its western side and the Pacific Ocean at its southern side. Alamitos Bay and the Pacific Ocean are surface waters of the United States. BHOTB organizes an annual "Big Bang on the Bay!" fireworks display over Alamitos Bay to celebrate Independence Day. This year, the fireworks display is scheduled to occur on July 3, 2022, starting at approximately 9:00 p.m.
2. California Water Code section 13267 specifies, in part:
  - (a) *A regional board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirements authorized by this division, may investigate the quality of any waters of the state within its region.*
  - (b) *In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region....shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.*

3. The Los Angeles Water Board is investigating the impacts of public fireworks displays on surface waters of the United States in the Los Angeles Region. This is a follow-up to previous investigations regarding these impacts and may form the basis of future permitting actions, as described in more detail below.
4. BHOTB proposes to put on the "Big Bang on the Bay" fireworks display on July 3, 2022. BHOTB's website advertises the "Big Bang on the Bay" fireworks display as an annual event.
5. The San Diego Regional Water Quality Control Board (San Diego Water Board) adopted a *General National Pollutant Discharge Elimination System (NPDES) Permit For Residual Firework Pollutant Waste Discharges to Waters of the United States in the San Diego Region from the Public Display of Fireworks* (NPDES No. CAG999002, initially adopted on May 11, 2011, by Order No. R9-2011-0022 and renewed on February 9, 2022, by Order R9-2022-0002). The San Francisco Bay Regional Water Quality Control Board (San Francisco Bay Water Board) adopted its *Fireworks General Permit* on June 10, 2020 (NPDES No. CAG992001, Order No. R2-2020-0021). These permits regulate discharges from fireworks displays. In issuing the general permits, the San Diego Water Board and San Francisco Bay Water Board evaluated the potential impact of fireworks-related activities on the water quality of receiving waters.
6. The general permits identified typical firework pollutants to include, but not be limited to, aluminum, antimony, barium, carbon, calcium, chlorine, cesium, copper, iron, potassium, lithium, magnesium, oxidizers including nitrates, chlorates and perchlorates, phosphorus, sodium sulfur, strontium, titanium, and zinc. These chemicals burn at high temperatures when the firework is detonated, which promotes incineration. The chemicals within the fireworks are scattered by the burst charge, which separates them from the fireworks casing and internal shell components. Combustion residuals are produced in the form of smoke, airborne particulates, chemical pollutants, and debris including paper, cardboard, wires, and fuses. This combustion residue can fall into surface waters. In addition, un-ignited pyrotechnic material, including duds and misfires, can also fall into surface waters. The general permits found that the receiving water fallout area affected by the fireworks residue can vary depending on wind speed and direction, size of the shells, the angle of mortar placement, the type and height of firework explosions and other environmental factors. Once the fireworks residue enters a waterbody, it can be transported to waters and shorelines outside the fallout area due to wind shear and tidal effects.
7. This Order identifies BHOTB as a suspected discharger, as that term is used in Water Code section 13267, because it is the organizer of the "Big Bang on the Bay" fireworks display.



8. This Order requires BHOTB to prepare and submit technical and/or monitoring reports providing the information described below. The Los Angeles Water Board requires this information as part of its investigation of potential impacts associated with public displays of fireworks in the Los Angeles Region. The burden, including costs, of the reports required by this Order bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. Specifically, the information is needed to determine possible impacts to water quality and beneficial uses of receiving waters and to determine the effectiveness of best management practices (BMPs). The Los Angeles Water Board will also utilize the information received from its investigation in its consideration of preparing a general NPDES permit for the Los Angeles Region to regulate discharges of wastes to surface waters associated with public fireworks displays. The estimated costs of compliance would be no more than \$20,000 based on the anticipated number of samples and sampling locations, and the planning and reporting requirements.
9. The issuance of this Order requires information collection and is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, section 15306.
10. Any person aggrieved by this action of the Los Angeles Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order. If the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

**THEREFORE, IT IS HEREBY ORDERED** that The Boathouse on the Bay (BHOTB), pursuant to section 13267, subdivision (b), of the California Water Code, is required to do the following for the "Big Bang on the Bay" fireworks display:

**A. Conduct an Alternative Study:**

The Alternative Study should report on the feasibility of using alternative fireworks materials or selecting alternative debris fallout locations to avoid and/or mitigate potential impacts to water quality from the fireworks display. Actions to be considered in the plan include but are not limited to:

- i. Using non-perchlorate fireworks;
- ii. Using fireworks that do not contain plastic outer casings or have non-biodegradable inner components;

- iii. Using fireworks with alternative propellants that burn cleaner, produce less smoke, and reduce pollutant loading to surface waters; and
- iv. Assessing alternative onshore firing ranges to eliminate or reduce residual firework pollutant waste discharges to waters of the United States.

**The Alternative Study Report is due to the Los Angeles Water Board no later than December 1, 2022.**

**B. Prepare Best Management Practices Report:**

BHOTB shall prepare a Best Management Practices Plan (BMPs Plan) for implementation and display at the fireworks site that describes steps to ensure that residual firework debris and pollutants will not adversely affect receiving water quality. The BMPs Plan is **due no later than June 22, 2022**. The BMPs Plan will be kept onsite and used by BHOTB to provide training to staff who will be conducting the fireworks display and implementing the requirements in this Order. The BMPs Plan shall include the following BMPs:

**1. Discharge Characterization**

Describe activities conducted within the firing range, potential pollutant sources associated with each activity, and the nature of the pollutants that could be discharged.

**2. BMP Identification**

Describe the BMPs to be implemented to control pollutant discharges, including BMPs for each potential pollutant source that represent the best available technology that is economically achievable. Describe the anticipated effectiveness of each BMP. Consider, and include as appropriate, the following:

**Preventative BMPs**

Measures to reduce or eliminate the generation of pollutants and waste.

**Control BMPs**

Measures to control or manage pollutants and waste after they are generated and before they come in to contact with water.

**Response BMPs**

Measures to respond to discharges with containment control, or cleanup measures to minimize the potential adverse effects of pollutant discharge.

Additional BMPs to consider include:

- a) Use alternative fireworks that replace perchlorate with other oxidizers and contain biodegradable components.



- b) Use propellants that burn cleaner, produce less smoke, and reduce residual firework pollutant loading to surface waters.
- c) Select firing range locations and designs that reduce residual firework pollutant discharges.
- d) Secure all pyrotechnic equipment and fireworks in a manner that minimizes the risk of such materials and objects entering receiving waters before, during, and after fireworks displays.
- e) Inspect each firework launch area for potential safety issues on an ongoing basis.
- f) Perform visual observations and monitoring activities to assess BMP performance.
- g) Prior to fireworks displays, deploy containment measures to collect and control the mobility of fireworks debris, particulate matter, and waste from within the design firing ranges for all fireworks launch areas.
- h) As soon as practicable and no later than 24 hours after fireworks displays, collect, remove, and manage fireworks debris, particulate matter, and waste from within the design firing ranges for all fireworks launch areas.
- i) As soon as practicable, properly dispose of fireworks debris, particulate matter, and waste collected from within the design firing ranges for all fireworks launch areas.
- j) As soon as practicable after fireworks displays, conduct BMP effectiveness evaluations.
- k) Remove all plastic and aluminum labels and wrappings from aerial shells and special effect pyrotechnic devices prior to use and before they are launched or detonated.
- l) As soon as practicable, and no later than 24 hours following a public display of fireworks, to the extent practical, collect, remove, and manage particulate matter and debris from ignited and un-ignited pyrotechnic material including aerial shells, stars (small pellets of composition that produce color pyrotechnic effects), paper, cardboard, wires and fuses found during inspection of the entire firing range and adjacent affected surface water(s) in addition to complying with title 19 of the California Code of Regulations, section 1003.
- m) Setup, discharge, and take down the fireworks and fireworks equipment in accordance with the laws and regulations applying to that display by a public display operator licensed by the State of California. Obtain all required permits, licenses and approvals from the authorities having jurisdiction over the fireworks display and comply with the requirements and conditions of those permits and licenses. Properly secure all equipment used to hold and launch the fireworks in accordance with applicable laws and regulations and in such a way as to minimize the risk that the equipment and fireworks would fall into the water. Inspect barges and floating platforms for leaks and other potential safety issues. Other than system firing cables and common or grounding wires intended to be recovered after the display, secure electric igniter wires used to trigger the fireworks to minimize the risk that the wires fall into the water during or after the discharge. As soon as practicable, and no later than 24 hours following a public display of fireworks, rake or sweep the decks of each barge or floating platform that contained fireworks to gather fireworks debris and prevent it from being deposited into the water.



- n) Immediately following the public display of fireworks, handle and manage all hazardous fireworks waste, including duds, resulting from the set-up, firing, and strike of the public display, including live pyrotechnics waste, in accordance with applicable fireworks and hazardous waste laws and regulations.
- o) Collect all non-hazardous solid waste resulting from the set-up, firing, and strike of the public display, including wires, boxes, and packaging, to the extent practicable and properly disposed of the solid waste.
- p) Package, transport, store, set-up, and handle firework in accordance with California Code of Regulations, Title 19, Division1, Chapter 6, Fireworks and Title 22, Chapter 33, Best Management Practices for Perchlorate Materials to prevent or minimize firework pollutant wastes from entering surface waters.

### **C. Monitoring and Reporting Program**

BHOTB shall develop and implement a monitoring and reporting program containing the following elements.

#### **1. Visual Monitoring:**

a. Video and photographic monitoring. BHOTB or its pyrotechnics company shall:

- i. Collect video footage of the event, with filming taking place on the barge to capture the extent of debris and potential fallout zone in the immediate vicinity of the barge
  - A. The intent is to monitor any discharge of fireworks into the water, (i.e., the base-level explosive material discharges), not the display itself;
  - B. More than one video could be mounted to capture any discharge in the water adjacent to the barge and the potential discharge from the barge itself.
- ii. Take photos of the barge before and after the show to capture debris fallout.
- iii. Take photos of the debris collected from the barge cleanup/sweeping efforts.

b. Dive Team/Equivalent Monitoring Device. Take photographs of the bay floor prior to the fireworks display events and as soon thereafter as possible to capture visual evidence of debris deposition within the fallout zone.

#### **2. Surface and Water Column Sampling Plan (Water Sampling Plan)**

Develop a surface and water column Sampling and Analysis Plan with a focus on the potential water quality impact from the fireworks display based on methods described in Title 40, Code of Federal Regulations, Part 136 (*Guidelines Establishing Test Procedures for the Analysis of Pollutants under the Clean Water Act*). The Water Sampling Plan is due to the Los Angeles Water Board **no later than June 22, 2022**. Sampling shall be conducted once before the fireworks display to determine baseline conditions and once after the fireworks display to determine any changes in water quality. Monitoring locations shall be established within the fallout zone and adjacent affected surface waters. The proposed sampling locations must be based upon results on the fate and transport of pollutants from the

Conceptual Model<sup>1</sup>. At a minimum, the monitoring shall include collection and weighing of fireworks debris, particulate matter, and any other solid wastes after the fireworks display, and sampling and analysis of the water quality for Arsenic, Barium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Thallium, Tin, Titanium, Vanadium, Zinc, bis-phthalate, Total Phosphorous, and Perchlorate. Laboratory analytical methods must have sufficiently low detection limits in order to evaluate any exceedances of water quality objectives. The Water Sampling Plan shall be in consistent with the 2017 Surface Water Ambient Monitoring Program (SWAMP) Quality Assurance Program Plan. BHOTB shall implement the submitted Water Sampling Plan for the July 4, 2022, fireworks display.

### 3. Reporting Program

**Within 60 days after the fireworks event**, BHOTB shall submit a Monitoring Report to the Los Angeles Water Board. The electronic copy of the report should be sent to [losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov) Attention General Permitting Unit. The Report shall include the following:

- a. An evaluation of the BMPs' effectiveness.
- b. A summary of the sampling activities conducted in accordance with the submitted Surface and Water Column Sampling Plan.
- c. A summary of the analytical results from the sampling activities conducted before and after the fireworks display, as required above.
- d. Original lab reports for the sampling and analytical activities shall be included with the Monitoring Report.
- e. A completed Fireworks Display Report Form (Attachment A).
- f. Photographs and video recordings of the firework related activities.

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<sup>1</sup> Develop a Conceptual Model to identify the physical and chemical factors that control the fate and transport of pollutants and receptors that could be exposed to pollutants in the water. The Conceptual Model will serve as the basis for assessing the appropriateness of the Plan design. The Conceptual Model shall consider:

- Points of discharge into the segment of the water body or region of interest;
- Tidal flow and/or direction of predominant currents;
- Historic or legacy conditions in the vicinity;
- Nearby land and marine uses or actions;
- Beneficial Uses;
- Potential receptors of concern;
- Other sources or discharges in the immediate vicinity.



The technical reports are required to be submitted under this California Water Code section 13267 Order. Pursuant to California Water Code section 13268, subdivision (a)(1), any person who fails to submit reports in accordance with this Order is guilty of a misdemeanor and may be liable civilly. Pursuant to California Water Code section 13268, subdivision (b)(1), failure to submit the required report described above by the specified due date(s) may result in the imposition of administrative civil liability by the Los Angeles Water Board in an amount up to one thousand dollars (\$1,000) per day for each day the report is not received after the above due date(s). These civil liabilities may be assessed by the Los Angeles Water Board for failure to comply, beginning with the date that the violations first occurred, and without further warning.

The Los Angeles Water Board, under the authority given by California Water Code section 13267, subdivision (b)(1), requires BHOTB to include a perjury statement in all reports submitted under this Order. The perjury statement shall be signed by a senior authorized representative of BHOTB (not by a consultant). The perjury statement shall be in the following format:

"I, [NAME], certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

SO ORDERED.

Hugh  
Marley

Digitally signed by  
Hugh Marley  
Date: 2022.06.13  
14:52:42 -07'00'

6/13/2022

Renee Purdy  
Executive Officer

Date

Anna Christensen



**CALIFORNIA COASTAL COMMISSION**

South Coast Area Office  
301 E Ocean Blvd, Suite 300  
Long Beach, CA 90802  
(562) 590-5071



June 3, 2022

Boathouse on the Bay (Attn: John Morris)  
190 North Marina Drive  
Long Beach, CA 90803

Subject: **EXCLUSION OF TEMPORARY EVENT FROM PERMIT REQUIREMENTS**  
Site: 190 Marina Drive (on Marina Drive adjacent to Boathouse on the Bay restaurant),  
Alamitos Bay Landing, City of Long Beach, Los Angeles County  
Applicant: Boathouse on the Bay (Attn: John Morris)  
Event Date: July 3, 2022  
Commission Reference Number: 5-22-0066-X

Dear Mr. Morris:

On March 17, 2022, Commission staff received your application for exclusion of the subject temporary event from coastal development permit requirements. Commission staff has reviewed your request and determined, pursuant to Section 30610(i) of the Coastal Act and the *Guidelines for the Exclusion of Temporary Events from Coastal Commission Permit Requirements* adopted by the Commission on May 12, 1993, that the proposed event is excluded from coastal development permit requirements.

The Big Bang on the Bay July 3<sup>rd</sup> Block Party is a one-day event proposed to occur at Marina Drive—west side of Basin One between the Boathouse on the Bay restaurant and Marina Headquarters, in the City of Long Beach. The proposed activities associated with the event involve a temporary closure of the street for a fundraising event (Children Today and other Long Beach charities) on Sunday, July 3, 2022, as described in your application. The event features a DJ (one stage), food trucks, and a firework display over Alamitos Bay. The fireworks, made of biodegradable and non-plastic material, will be launched from a barge in the harbor. Firework debris that falls onto the barge during the event will be effectively contained and removed promptly. Fireworks are not proposed within or adjacent to the Los Cerritos Wetlands. The fee for access to the food trucks and concert is \$75 per adult (\$30 per child). This area will be fenced off using 10 panels of 8'-tall chain-link fence. Public access will remain open along the two easternmost Basin One gangways at all times. Any trees with active bird nests shall be cordoned-off (a 50-foot radius) with cones to prevent people from disturbing the birds. The applicant will implement a proposed bird monitoring program by a qualified biologist, including surveys conducted prior, during, and after the event with a report summarizing the effects of the event on all bird nesting activity within the area.

Additionally, on July 3<sup>rd</sup>, a free shuttle service will be provided (5 p.m.-10 p.m.) via golf cart and trolley to transport event attendees between Alamitos Bay Landing and the off-site parking area near 6400 Pacific Coast Highway, with appropriate signage demarcating pick-up locations. The parking lot near the block party will be accessible on a first-come, first-served basis and parking for Basin One of the Long Beach Marina will remain open for boaters. The event set-up commences at 2 p.m. on the day of the event and clean-up is completed the same night (July 3<sup>rd</sup>). The applicant is responsible for cleaning all trash and debris during and after the event so that the event area and adjacent marine waters remain clean and safe. A thorough search and removal of floating and washed-up debris will be conducted immediately after the event, and the bottom of the bay will be visually surveyed for debris using a remotely operated vehicle (ROV) before and after the event. Divers will additionally search the potential debris field for sunken firework debris on Tuesday, July 5, 2022, and will collect the remainder; surface water and sediment samples will be tested before and after the event for contamination and water quality impacts from the fireworks. Water quality and bird survey results will be reported to the Executive Director within two weeks after the event.

Please be advised that only the project described above is excluded from the permit requirements of the Coastal Act. Any change in the project may cause it to lose its excluded status. This certification is based on information provided by the recipient of this letter. If, at a later date, this information is found to be incorrect or incomplete, this letter will become invalid, and any development occurring at that time must cease until a coastal development permit is obtained or a new determination is made that no permit is required. Thank you for contacting Commission staff regarding your event. You may call me at (562) 590-5071 if you have any questions.

Sincerely,

Shahar Amitay  
Coastal Program Analyst