

CALIFORNIA COASTAL COMMISSION

SAN DIEGO DISTRICT OFFICE
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4402
VOICE (619) 767-2370
FAX (619) 767-2384



Th21b

Filed: 11/19/24
180th Day: 5/18/25
Staff: A. Llerandi -SD
Staff Report: 1/23/25
Hearing Date: 2/6/25

STAFF REPORT: REGULAR CALENDAR

Application No.: 6-24-0806

Applicant: San Diego Unified Port District & Armed Services Young Men's Christian Association (YMCA)

Agent: Allison Rolfe

Location: San Diego Bay, San Diego, San Diego County (APN: N/A)

Project Description: Conduct a fourth of July fireworks show approx. twenty minutes in duration from four barges with eight support boats located in San Diego Bay.

Staff Recommendation: Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

The San Diego Unified Port District (Port) and the Armed Services Young Men's Christian Association (YMCA) are proposing to conduct an approximately twenty-minute fireworks show within San Diego Bay that will be free for the public to view. The fireworks will be launched from four barges, with two support boats for each barge securing an approximately 1,000 ft. safety zone, on July 4, 2025. The show will utilize up to 5,342 pounds of fireworks, from approximately 9:00 PM to 9:20 PM. Preparations for the fireworks show would commence on June 30, 2025, and take-down will be completed by July 6, 2025.

San Diego Bay is a visitor-serving tourist destination consisting of open space, aquatic infrastructure, retail and dining structures, boardwalks, and marinas in addition to the commercial, military, and industrial water-dependent uses that are housed along the bay. The project site is four barges with two support boats each in northern San Diego Bay from which the twenty-minute firework show will be launched from. Due to the presence of multiple barges and the curved topography of the bay, the fireworks display will be visible from miles of shoreline on both sides of the bay. There will be no charge to view the fireworks from the shoreline, and the display will also be simulcast on local and regional television networks.

However, while the proposed event site is located within a mostly urban bay environment, many birds inhabit or utilize the bay over the course of the year or during seasonal migrations due to its location in the Pacific Flyway. Fireworks displays have the potential to impact coastal wildlife, particularly birds, including the state and federally listed California least tern, which has two nesting sites approximately one mile from the launch barges. One colony is located at the San Diego International Airport to the north and one to the southwest within the boundaries of Naval Air Station North Island. Past iterations of the event have conducted monitoring of the California least tern site at the airport only, which is one mile from the closest of the four proposed fireworks barges.

The California least tern monitoring report from the 2024 event observed the nesting site in the days leading up to the event, during the firework display, and immediately after. The monitoring report concluded that there was no permanent disruption to the nesting birds since all nestlings previously observed the day before as well as the day of the event were still present. However, the agitated behavior of the least terns could potentially be considered a form of harassment impacting their long-term health.

In addition, debris from a fireworks show can impair water quality as well as harm wildlife that may ingest and/or become entangled in such debris. Fireworks debris that may enter the ocean includes fireworks casing, cardboard cylinders, disks, shell case fragments, paper strips and wadding, plastic wadding, tubes, aluminum foil, cotton string, and whole unexploded shells (i.e. duds or misfires). It is likely that paper strips, cardboard, and cotton string are biodegradable and do not persist for long periods of time in the ocean environment. However, other materials, such as plastic and aluminum, are likely to persist in the marine environment for lengthy periods if they are not washed ashore or removed by personnel.

Therefore, Commission staff directed the YMCA to look into conducting a drone show based on their successful operation in venue across the world and demonstrated lower noise levels. The Alternatives Analysis conducted by the YMCA acknowledges that a drone show would produce considerably less noise than a fireworks display but argues that the presence of drones could antagonize local birds into attacking the drones as potential threats. The Alternatives Analysis also noted that the YMCA has no experience operating a drone show and concluded it would be infeasible to produce such an event for this year's Independence Day holiday.

Drone shows are not a new technology. Shows of various sizes have been produced all over the world for several years, including in San Diego. However, the Big Bay Boom is a substantially large-scale show intended for tens of thousands of views spread out over a large area, and staff acknowledge that shifting to a drone show as a replacement for the Big Bay Boom would be difficult if not infeasible in the remaining months before Independence Day.

Thus, Commission staff worked with the Port and the applicant to develop conditions that will both limit impacts of fireworks on San Diego Bay and explore options for alternatives in future years. The Port has offered a comprehensive approach to fireworks displays regulated under its Ordinance No. 2892 and has proposed to adjust either the size and/or the scale of its annual permitted fireworks in order to reduce cumulative impacts of fireworks in San Diego Bay. Port Ordinance No. 2892 allows up to 47 total fireworks shows utilizing up to 9,056 total pounds of fireworks per year. The Port has offered to reduce that weight total by fifteen percent, representing a reduction of 1,358 pounds. While the Port acknowledges that the historic fireworks data for the years 2021- 2024 show that in no year has anything close to 47 firework shows been conducted, with an annual average of 18 shows ([Exhibit 6](#)), such a reduction would still be a concession within the ordinance that the Port will have to negotiate with their tenants and represents a good faith effort to lessen the cumulative prevalence of fireworks over coastal waters. Understanding that the shift from the longtime use of fireworks toward new, less-impactful displays such as drones require investment and planning by the applicant, **Special Condition No. 1** formalizes the agreement for this fifteen percent reduction, with the Port allowed discretion to work with its tenants in determining the mixture of deleted and reduced shows to achieve that overall reduction.

Because it appears to be infeasible this year to replace the fireworks with a quieter alternative, **Special Condition No. 1** places limits on the date and time of the fireworks display to ensure that it is performed within approved parameters, while **Special Condition No. 3** places limits on the type and design of fireworks to be used, namely the louder “salute” type fireworks. In pyrotechnics, a salute is a device primarily designed to make a loud concussive noise, which may or may not be accompanied by a flash. Furthermore, in order to evaluate what would be required to successfully implement a drone show, **Special Condition No. 1** requires the applicants, including the Port, to conduct an implementation study that looks to design a show that utilizes drones, either wholly or in conjunction with a substantially lower volume of fireworks, to implement in future years so as to still be able to hold an Independence Day event that further minimizes impacts to biological resources.

The applicant has proposed to offset the impacts through the same mitigation measures for the event utilized in past years’ events, such as the support boats skimming the water’s surface for debris and daytime cleanups of the shoreline of detritus, whether fireworks related or not. The debris will be photographed and logged for later reporting. Furthermore, the event operator will provide crew to the Port’s annual “Operation Clean Sweep” event that conducts volunteer shoreline cleaning, generally in August of each year.

However, regardless of how effective a debris removal plan is, the best way to avoid pollutants entering coastal waters is to avoid them being present in the first place.

Special Condition No. 3 places limits on the type and design of the fireworks to be used, prohibiting materials that are less likely to be consumed by the detonation and fall into the water, such as plastic casings, labels, wiring, etc. Despite these prohibitions, it is still likely that debris will enter coastal waters, so to ensure that the highest feasible volume of debris is collected, **Special Condition No. 4** requires the applicant to submit a Fireworks Best Management Plan (BMP) that adheres to past plans that they have implemented during the fireworks event. **Special Condition No. 5** dictates certain steps that must be taken immediately after the event and the following days regarding debris removal. In order to ensure that proper monitoring of both least tern behavior and noise levels is done, **Special Condition No. 6** requires the approval of a monitoring plan by a qualified biologist prior to the fireworks display, while **Special Condition No. 7** imposes reporting requirements for the cleanup effort to create a record of how much debris entered the water and was collected for comparison to efforts in previous years. Finally, **Special Condition No. 1**, which requires the applicant to conduct an implementation study that will design a show utilizing drones, will allow the Commission to evaluate potential impacts associated with drones on water quality compared to large-scale fireworks shows.

Launching fireworks raises the question of whether such an activity could increase fire hazard. In this case, the fireworks would be launched over the water and viewed from surrounding public and private areas. Coastal areas are often the preferred venue for celebrations with fireworks displays in California because they optimize public viewing opportunities while minimizing fire hazards that are associated with such displays. To ensure consistency with Coastal Act Section 30253(a), **Special Condition No. 2** requires the applicant to obtain authorization from relevant local, state, and federal authorities, including fire authorities, prior to the fireworks display to ensure adequate precautions are taken to protect against potential fire hazards.

Commission staff recommend that the Commission **APPROVE** coastal development permit application 6-24-0806, as conditioned. The motion is on page 6. The standard of review is Chapter 3 of the Coastal Act.

TABLE OF CONTENTS

I. MOTION AND RESOLUTION	6
II. STANDARD CONDITIONS	6
III. SPECIAL CONDITIONS	7
IV. FINDINGS AND DECLARATIONS	15
A. Project Description and Background	15
B. Biological Resources and Water Quality	17
C. Public Access and Recreation	21
D. Fire Hazard and Air Pollution	23
E. Local Coastal Planning.....	25
F. California Environmental Quality Act	26
APPENDIX A – SUBSTANTIVE FILE DOCUMENTS	27

EXHIBITS

[Exhibit 1 – Vicinity Map](#)

[Exhibit 2 – Aerial View](#)

[Exhibit 3 – Barge Locations](#)

[Exhibit 4 – Fireworks Best Management Practices \(BMPs\)](#)

[Exhibit 5 – Unified Port Ordinance No. 2892](#)

[Exhibit 6 – Past Fireworks Display Data](#)

I. MOTION AND RESOLUTION

Motion:

I move that the Commission approve Coastal Development Permit 6-24-0806 pursuant to the staff recommendation.

Staff recommend a **YES** vote on the foregoing motion. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of Commissioners present.

Resolution:

The Commission hereby approves the Coastal Development Permit for the proposed project and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

- 1. Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the applicant or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
- 4. Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 5. Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the applicant to bind

all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. **Duration and Scope of Permit.** This coastal development permit, as conditioned, shall authorize only:

- a. The single “Big Bay Boom” event to take place on July 4, 2025; and
- b. Set-up and timely removal of all temporary development associated with the event. Set-up activities shall begin no earlier than June 30, 2025, and take-down shall conclude no later than July 6, 2025.
- c. BY ACCEPTANCE OF THIS COASTAL DEVELOPMENT PERMIT, the applicant agrees that if they wish to implement a future Big Bay Boom event or similar fireworks show in 2026 or later, the applicant shall submit a complete coastal development permit application for the event by no later than September 15th of the year prior to when the event will occur. The coastal development permit application shall include a comprehensive analysis of all potential alternatives to the use of fireworks that would minimize or avoid adverse impacts to habitat, wildlife, and water quality, including but not limited to the alternative of drone shows.
- d. The Big Bay Boom Event shall be subject to the environmental mitigation measures and best practices required in the “Port of San Diego’s Fireworks Display Ordinance No. 2892,” as well as the Mitigation Monitoring and Reporting Program (MMRP) included in the “Port of San Diego’s Final Environmental Impact Report for San Diego Bay and Imperial Beach Oceanfront Fireworks Display Event’s Project San Diego,” both of which were adopted by the Board of Port Commissioners on May 25, 2017.
- e. BY ACCEPTANCE OF THIS COASTAL DEVELOPMENT PERMIT, the Port of San Diego shall initiate an implementation study for a future drone show(s) and unmanned aerial vehicle (UAV) operations on Port Tidelands evaluating (1) public safety, (2) potential environmental impacts, and (3) a time frame for implementation of a show to activate the Port Tidelands on Independence Day as an alternative to the Big Bay Boom Fireworks Display, or in addition to a reduced scale fireworks show. For the purpose of evaluating the implementation of such shows, said study shall specifically include comparisons to a range of previously executed drone shows such as:
 - a. October 23, 2024, Kansas City, MO
 - b. April 22, 2024, Petco Park San Diego

San Diego Unified Port District & Armed Services YMCA

- c. November 28, 2024, Mansfield, TX
- d. September 3, 2024, San Francisco
- e. May 1, 2024, Anaheim
- f. July 4, 2024, Tahoe City
- g. Uluru, Australia (ongoing)

The study parameters and methodology shall be submitted to the Executive Director for review and written approval prior to the initiation of the study.

- f. The Port of San Diego's Fireworks Display Ordinance No. 2892 authorizes the Port of San Diego to issue permits for up to forty-seven (47) fireworks display events annually in the City of San Diego, provided the cumulative total does not exceed 9,056 pounds of fireworks per year. This is an aggregated total based on the shows authorized in the Fireworks Display Ordinance, which places additional size limitation on each individual show. The Port of San Diego has agreed to limit the number of fireworks permits to ensure the cumulative total of fireworks pounds does not exceed 7,698 pounds in calendar year 2025, resulting in a 1,358-pound reduction of the fireworks pounds authorized under the ordinance. This coastal development permit does not authorize any other fireworks displays, the applicants of which shall separately obtain review of Coastal Act consistency from the relevant agency(ies) with jurisdiction.
- g. At least 24 hours before the event, the Port of San Diego shall implement sound monitoring to capture data at sensitive receptor locations, such as the active California least tern nesting sites described in **Special Condition No. 6**. The intent is to better understand the noise levels at these sites during the July 4, 2025, Big Bay Boom Fireworks Display.

The permittee shall undertake development in accordance with the approved plans. Any proposed change of event activities shall be reported to the Executive Director. No changes to the event activities shall occur without a new Commission CDP, unless the Executive Director determines that no new permit is legally required.

2. Other Agency Approvals.

PRIOR TO THE COMMENCEMENT OF THE EVENT, the permittee shall submit to the Executive Director for review and approval evidence of all permits, permissions, or approvals granted for the proposed temporary event, as applicable, from local, state, and federal authorities.

The permittee shall inform the Executive Director of any changes to the current approved project required by any of the relevant agencies. Such changes shall not

be incorporated into the project until the permittee obtains a new Commission CDP, unless the Executive Director determines that no new permit is legally required.

3. Fireworks Limitations.

AT LEAST 30 DAYS PRIOR TO THE COMMENCEMENT OF THE FIREWORKS EVENT, the permittee shall submit, for the review and written approval of the Executive Director, evidence that the fireworks display will comply with the following fireworks limitations:

- a) **Fireworks.** The permittee shall select and use fireworks that do not use plastic outer casings. The inner components of the fireworks shall be made with biodegradable materials. Fireworks produced with pyrotechnic formulas which replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke, and reduce pollutant waste loading to surface waters shall be used.
- b) **Wire Pollution Prevention.** Wires from the electric match placed in the fireworks shall be secured to avoid strain (such as wrapped around nails that are on the racks, tied to the racks, or tied to the mortar) to prevent wires from being pulled out and falling into the water. Wire cables connected to computer firing equipment modules shall also be properly secured to ensure they remain on the barge during the fireworks display event.
- c) **Aerial Salute Limitations.** The total number of aerial "salute" shells or devices used in the fireworks event shall not exceed six (6) percent of the total number of aerial shells or special effect pyrotechnic devices combined. Aerial "salute" shells/devices shall not be launched or detonated until the last five minutes of the fireworks display.
- d) **All Labels and Wrapping Removed.** All plastic and aluminum labels and wrappings shall be removed from all aerial shells and special effect pyrotechnic devices and properly disposed of prior to use and before they are launched or detonated. The use of aluminum labels and wrappings on aerial shells and special effect pyrotechnic devices shall be minimized to the greatest extent feasible, and only when necessary to comply with safety protocols.
- e) **Prohibited Devices.** Aerial shells or special effect pyrotechnic devices that include plastic outer casing, ignition wires, or non-biodegradable inner components of the shell/device are prohibited.
- f) **Duration of Display.** The fireworks display shall be limited to no longer than 20 minutes.

The permittee shall undertake development in conformance with the above fireworks limitations. Any proposed changes to the approved fireworks restrictions shall be reported to the Executive Director. No changes to the approved fireworks restrictions shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

4. Fireworks Best Management Practices Plan.

BY ACCEPTANCE OF THIS COASTAL DEVELOPMENT PERMIT, the permittee agrees to comply with the submitted Fireworks Best Management Practices (BMPs) Plan ([Exhibit 3](#)). The permittee shall undertake development in conformance with the Fireworks BMPs Plan. Any proposed changes to the approved Plan shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

5. Clean-up and Restoration of Shoreline and Adjacent Ocean Waters.

IMMEDIATELY FOLLOWING THE EVENT, all event waste and firework debris in the event area and around the fireworks launch site shall be recovered and properly disposed of. The permittee shall periodically inspect the potentially affected area as well as adjacent bay waters and bay bottom following the conclusion of the fireworks event to locate any remaining event waste and firework debris including, but not limited to, all firework detritus. All such waste and debris found shall be properly disposed of. Collection efforts shall continue until fifty percent (50%) of the net explosive firework weight (shipping manifest weight of the aerial shells and special effect pyrotechnic devices prior to use) has been retrieved. If the permittee is unable to collect 50% of the net explosive firework weight, the permittee shall collect alternative marine debris in the vicinity of the event to account for the difference in expected debris and implement additional water quality measures to undertake. More specifically, the permittee shall ensure compliance with the following containment, search, and clean-up procedures:

- a) Immediate effective containment and prompt removal of any firework debris that falls onto the barge during the fireworks display;
- b) Immediately after the safety perimeter around the barge is lifted (at approximately fifteen (15) to twenty (20) minutes after the conclusion of the fireworks display), surface clean-up of any floating firework debris within the entire anticipated fireworks debris fallout zone using a boom or other debris collection device; and
- c) At a minimum, periodic debris surveys and clean-up, conducted by qualified persons on the mornings of July 5, 2025, and July 6, 2025, of the San Diego Bay bottom within the anticipated fireworks debris

discharge zone, and the shoreline areas within the anticipated fireworks debris discharge zone.

- d) If the debris collection does not collect at least 50% of the net explosive weight, the permittee shall identify a water quality improvement project in the San Diego Bay watershed, preferably within the Coastal Zone, that addresses copper-impaired discharges flowing into the Bay, to which the permittee shall either contribute staff, funding, or both.

6. Nesting Bird Surveys and Protection.

AT LEAST THIRTY DAYS PRIOR TO THE COMMENCEMENT OF THE EVENT, the permittee shall retain the services of a qualified biologist(s) to conduct nesting bird species surveys of active California Least Tern nesting sites at the San Diego International Airport and Naval Base Coronado, North Island. The qualified biologist(s) at each nesting site shall have at least one season of experience observing California least terns at the nesting grounds and experience deploying and maintaining wildlife acoustic monitoring devices. The permittee shall submit the name and qualifications of the consulting qualified biologist(s), as well as a Bird Survey and Monitoring Plan, for the review and written approval of the Executive Director. All project construction and operations shall be carried out consistent with the following requirements:

- a) The Bird Survey and Monitoring Plan shall have the primary goal of recording any observed behaviors and tern or egg loss at the site reasonably related to event impacts. The Plan shall include the details of the specific dates, times, locations, and methods of the surveys. The permittee's qualified biologist(s) shall monitor bird behavior, the number of nests, adults, chicks, fledglings, and eggs, any observed tern predators or other potential disturbances and noise levels prior to, during, and after the event noise levels. Noise monitoring shall be designed to capture ambient and event noise levels. The nests shall not be removed or disturbed. The monitor(s) shall be present during all significant event activities (i.e., those with potential noise impacts) to observe any direct or indirect disturbance to nesting birds from event-related noise. The applicant may submit an ambient noise study, AT LEAST THIRTY DAYS PRIOR to the event and for the review and written approval of the Executive Director, to evaluate an alternative noise criterion that may be appropriately applied, in the case that the criterion is higher than 65 dB. If event-related noise exceeds a peak level of 65 dB (or the alternative appropriate threshold) at the nest site(s), sound mitigation measures such as sound shields, blankets around smaller equipment, modification of amplified music or speaker volume levels, re-direction and of loud sound sources, and other such approaches shall be employed, to the maximum extent feasible. Should the 65 dB (or the appropriate alternative) threshold be exceeded, the permittee shall notify the

Executive Director of the efficacy of the sound mitigation measures in the Bird Monitoring Report required in **Special Condition No. 7(b)**.

7. Pre- and Post-Event Monitoring Report.

WITHIN 30 DAYS OF THE CONCLUSION OF THE EVENT, the permittee shall submit a Pre- and Post-Event Monitoring Report, prepared by a qualified biologist/resource specialist(s), to the Executive Director for review and approval. The Report shall, at a minimum, include:

a) Marine Wildlife Monitoring Report

- i. A record and description of any marine wildlife injuries, including serious injuries and mortalities, observed in the vicinity of the impact area of the event during the debris containment, search, and clean-up efforts required by **Special Condition 5**. Monitoring for injury, including serious injury and mortality, of marine wildlife such as pinnipeds (sea lions and seals), cetaceans (dolphins and whales), and turtles shall occur no later than the morning after the fireworks event, and shall occur for no less than 30 minutes;
- ii. An analysis of the data collected at the subject 2025 event, indicating whether, and to what extent, the event had an impact, if any, on marine wildlife.

b) Bird Monitoring Report

- i. Nesting site conditions and observed tern behaviors per the Bird Survey and Monitoring Plan (as required in **Special Condition No. 6**) seven (7) days prior to the fireworks display, with observations to occur for no less than 30 minutes;
- ii. A record and description of all adults and active bird nests with eggs, chicks, or fledglings observed in the monitoring area of the event immediately prior to the fireworks display (i.e., on July 3, 2025), during the fireworks, immediately afterwards, and on the day thereafter. All surveys shall include monitoring for changes in nesting bird behavior, including flight, drop, stun, nest abandonment, and return to nests, and shall occur for no less than 30 minutes in each instance. Video footage of the nesting sites may be used to supplement and aid in data collection;
- iii. A record and description of all bird injuries, including serious injuries and mortalities, observed in the vicinity of the monitoring area of the event. Monitoring for injuries, including serious injury and mortality, shall occur no later than the morning after the fireworks event, and shall occur for no less than 30 minutes;

- iv. The quantification and range of ambient and event noise levels recorded using noise monitoring devices from all monitoring sites, including the time and date of recordings, likely source(s) and mapped location of recorded noise, and an analysis of recorded noise data with regards to noise impacts on nesting avian species available in the scientific literature and observed bird behaviors or tern loss; and
- v. An analysis of the data collected at the subject 2025 event, indicating whether, and to what extent, the event had an impact, if any, on nesting avian species.

c) Water Quality Monitoring Report

- i. Quantification of toxic pollutants of concern that may leach from fireworks, found in the affected bay water column, including, but not limited to, arsenic, barium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, potassium, selenium, silver, thallium, tin, titanium, vanadium, zinc, nitrate, bis-phthalate, total phosphorous, sulfur, and perchlorate.
- ii. Quantification and qualification of the debris recovered and removed upon conclusion of the fireworks event, found (i) floating on the water surface or within the water column, (ii) atop the bay bottom, (iii) within bay bottom sediments, (iv) strewn on the beach, and (v) scattered on the shoreline.
- iii. An analysis of the data collected at the subject 2025 event, as well as from past events, indicating whether, and to what extent, the event had an impact, if any, on water quality and pollutant levels. In addition to the proposed water sampling methods, the permittee may employ a water quality (auto)sampler directly attached to the fireworks barge to collect real-time data. The analysis shall assess the impacts to water quality by comparing it to water quality standards and thresholds established by the relevant resource agencies.

8. Assumption of Risk, Waiver of Liability and Indemnity

BY ACCEPTANCE OF THIS COASTAL DEVELOPMENT PERMIT, the permittee acknowledges and agrees (i) that the approved development involves potentially hazardous activities; (ii) to assume the risks to the permittee and property that may be affected by this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's

approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

9. Liability for Costs and Attorney's Fees.

BY ACCEPTANCE OF THIS COASTAL DEVELOPMENT PERMIT, the permittee agrees to reimburse the California Coastal Commission in full for all Coastal Commission costs and attorneys' fees including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys' fees that the Coastal Commission may be required by a court to pay, which the Coastal Commission may incur in connection with the defense of any action brought by a party other than the permittee or its authorized agents against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval, issuance, and implementation of this CDP. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

IV. FINDINGS AND DECLARATIONS

A. Project Description and Background

Project

The San Diego Unified Port District (Port) and the Armed Services Young Men's Christian Association (YMCA) are proposing to conduct an approximately twenty-minute fireworks show within San Diego Bay that will be free for the public to view. The fireworks will be launched from four barges, with two support boats for each barge securing an approximately 1,000 ft. safety zone, on July 4, 2025. The show will utilize up to 5,342 pounds of fireworks, approximately 1,335.5 pounds of fireworks per barge, with a maximum shell size of ten inches. The barges will be located off the Shelter Island, Harbor Island, North Embarcadero, and South Embarcadero segments of the City of San Diego's bayfront. The fireworks display would occur from 9:00 PM to 9:20 PM. Preparations for the fireworks show would commence on June 30, 2025, and take-down will be completed by July 6, 2025.

Background

The Big Bay Boom is an annual fireworks show conducted in San Diego Bay since 2001, held on Fourth of July of each calendar year in celebration of Independence Day. In addition to Big Bay Boom, other fireworks shows are periodically performed throughout the year at various venues around San Diego Bay, such as the USS Midway Museum, the National Steel and Shipbuilding Company (NASSCO) shipyard, and the Rady Shell music venue at Embarcadero Marina Park South, though the Big Bay Boom is the largest of all the annual firework shows, utilizing more fireworks than all of the other shows combined.

In order to regulate these annual firework shows, in May 2017, the Port finalized an Environment Impact Report (EIR) entitled "San Diego and Imperial Beach Oceanfront Fireworks Display Events Project" supporting the adoption of Ordinance No. 2892, establishing the "San Diego Unified Port District Fireworks Event Display Ordinance" as part of the San Diego Unified Port District Code. Ordinance No. 2892 governs existing and proposed new fireworks display events that occur within San Diego Bay and Imperial Beach oceanfront that require a discretionary action by the Port or that are operated by the Port's tenants.

Ordinance No. 2892 identifies the five venues where an Independence Day fireworks display may occur, along with related limits on duration and firework weight:

- Big Bay Boom at up to four locations in northern San Diego Bay, up to twenty minutes in duration and 5,342 pounds of fireworks;
- Imperial Beach Pier at one location along the pier, up to twenty minutes in duration and 456 pounds of fireworks;

San Diego Unified Port District & Armed Services YMCA

- Glorietta Bay at one location in the bay, up to twenty minutes in duration and 397 pounds of fireworks;
- Chula Vista Bayfront at one location along the bayfront, up to twenty minutes in duration and 400 pounds of fireworks; and
- National City Bayfront at one location along the bayfront, up to twenty minutes in duration and 400 pounds of fireworks.

Ordinance No. 2892 further identifies the five locations where non-Independence Day fireworks displays may occur, along with related limits on total number of events, their duration, and firework weight:

- National Steel and Shipbuilding Company (NASSCO) shipyard at Pier 12, not to exceed two displays up to ten minutes in duration per year and 281 pounds of fireworks per display (439 pounds total);
- U.S.S. Midway Museum not to exceed twenty-three displays up to ten minutes in duration per year and 235 pounds of fireworks per display (1,759 pounds total);
- San Diego Symphony Summer Pops Concerts at Embarcadero Marina Park South (Rady Shell), not to exceed twenty displays up to ten minutes in duration per year and 95 pounds of fireworks per display (1,498 pounds total);
- Our Lady of Rosary Church Annual Procession at Grape Street Pier, not to exceed one display up to ten minutes per year in duration and 18 pounds of fireworks per display (18 pounds total);
- Chula Vista Bayfront, not to exceed two displays up to ten minutes in duration per year and 114 pounds per fireworks display (228 pounds total);

Over the years, either the Port or the Coastal Commission have granted exemptions to the firework shows based on their location in San Diego Bay relative to the respective jurisdiction area of the two entities, with the exception of the fireworks at the Rady Shell, which are included in the Port's coastal permit for that venue (CDP-2019-05) and mirror the fireworks limits in Ordinance No, 2892. The Big Bay Boom has typically received annual exemptions in past years (e.g. 6-15-0029-X, 6-21-0327-X), but in light of growing concern of impacts due to such events in the form of water pollution and noise disturbance of sensitive receptors such as the California least tern, the YMCA and Port were informed by the Coastal Commission staff in 2024 that the 2025 iteration would require a coastal development permit to determine the appropriate conditions and measures necessary for the least impactful event design.

The site is within an area of original jurisdiction where the Chapter 3 policies of the Coastal Act are the standard of review with the City's certified LCP used as guidance.

B. Biological Resources and Water Quality

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

The proposed fireworks event would take place on July 4, 2025, over the open coastal waters of San Diego Bay. The display would be launched from four barges in different locations on the bay ([Exhibits 1 and 2](#)). Fireworks displays have historically been conducted in California coastal communities as part of national and local celebrations. Launching fireworks over the ocean can avoid or reduce fire hazards associated with such displays. However, nighttime lighting and loud noises from the fireworks blasts can disturb birds and other species living in the urban environments surrounding locations like that of the proposed Big Bay Boom celebration. Coastal wildlife may avoid or temporarily depart the impact area during the hours immediately prior to the beginning of the fireworks displays due to increased human recreational activities associated with the event. Additionally, firework displays with aerial shells launched over open waters and runoff from event activities have the potential to discharge pollutants and debris into coastal waters, which can be damaging to marine species and biological productivity.

Marine Wildlife and Nesting Birds

The proposed event site is located within a mostly urban bay environment. However, many birds inhabit or utilize the bay over the course of the year or during seasonal migrations due to its location in the Pacific Flyway. Fireworks displays have the potential to impact coastal wildlife, particularly birds, in the surrounding area. The Commission's ecologist has prepared a memorandum ([Exhibit 7](#)) describing the potential and observed impacts to avian wildlife from the Big Bay Boom, including the state and federally listed California least tern, which has two nesting sites approximately one mile from the launch barges. One colony is located at the San Diego International Airport to the north and one to the southwest within the boundaries of Naval Air Station North Island. Past iterations of the event have conducted monitoring of the California least

tern site at the airport only, which is one mile from the closest of the four proposed fireworks barges.

The California least tern monitoring report from the 2024 event observed the nesting site in the days leading up to the event, during the firework display, and immediately after. The pre-event monitoring found up to 18 California least terns, 19 nests, 1-2 chicks, and 1-2 fledglings at various points in time. Monitoring during the fireworks display itself observed the fledglings standing and running or attempting flight, with adults vocalizing and flying in low circles around the nesting area. Upon cessation of the show, the least terns were vocalizing and reuniting with fledglings. The monitoring report concluded that there was no permanent disruption to the nesting birds since all nestlings previously observed the day before as well as the day of the event were still present. However, the agitated behavior of the least terns could potentially be considered a form of harassment impacting their long-term health. Furthermore, the monitoring did not record ambient sound levels either in the days leading up to the fireworks display or during the fireworks display itself and thus lacks an important metric in determining the sound levels this sensitive species is exposed to during the fireworks display. No least terns nested at North Island in 2023 or 2024, although the site has previously hosted up to 170 breeding pairs of least terns.

In order to ensure that proper monitoring of both least tern behavior and noise levels is done, **Special Condition No. 6** requires the approval of a monitoring plan by a qualified biologist prior to the fireworks display, while **Special Condition No. 7** describes the pre- and post-event reporting regimen that will ensure that the necessary parties have adequate information to assess the impacts from this year's events in order to better plan for future years' events.

As concussive noise is the primary and immediate source of impacts to birds, Commission staff directed the YMCA to look into conducting a drone show based on their successful operation in venues across the world and demonstrated lower noise levels. The Alternatives Analysis conducted by the YMCA acknowledges that a drone show would produce considerably less noise than a fireworks display but argues that the presence of drones could antagonize local birds into attacking the drones as potential threats. The Alternatives Analysis also noted that the YMCA has no experience operating a drone show and concluded it would be infeasible to produce such an event for this year's Independence Day holiday.

Drone shows are not new technology. Shows of various sizes have been produced all over the world for several years, including in San Diego. However, the Big Bay Boom is a substantially large-scale show intended for tens of thousands of views spread out over a large area, and the Commission acknowledges that shifting to a drone show as a replacement for the Big Bay Boom would be difficult is not infeasible in the remaining months before Independence Day (however, as discussed further below, evaluating the feasibility of a replacement drone show through implementation of a pilot show would be a feasible first step at this time).

Nevertheless, recognizing that fireworks displays emit substantial concussive force that may adversely impact species, the Port has offered to take a comprehensive look at the fireworks displays regulated under its Ordinance No. 2892 and has offered to adjust either the size and/or the scale of its annual permitted fireworks in order to reduce cumulative impacts of fireworks in San Diego Bay. As described in the Background section of the report, in addition to the Big Bay Boom, Ordinance No. 2892 allows up to 47 total fireworks shows utilizing up to 9,056 total pounds of fireworks per year. The Port has offered to reduce that total weight by fifteen percent, representing a reduction of 1,358 pounds. While the Port acknowledges that the historic fireworks data for the years 2021- 2024 show that in no year has anything close to 47 firework shows been conducted, with an annual average of 18 shows ([Exhibit 6](#)), such a reduction would still be a concession within the ordinance that the Port will have to negotiate with their tenants and represents a good faith effort to lessen the cumulative prevalence of fireworks over coastal waters. Understanding that the shift from the longtime use of fireworks toward new, less-impactful displays such as drones require investment and planning by the applicant, **Special Condition No. 1** formalizes the agreement for this fifteen percent reduction, with the Port allowed discretion to work with its tenants in determining the mixture of deleted and reduced shows to achieve that overall reduction.

Because it appears to be infeasible this year to replace the fireworks with a quieter alternative, **Special Condition No. 1** places limits on the date and time of the fireworks display to ensure that it is performed within approved parameters, while **Special Condition No. 3** places limits on the type and design of fireworks to be used, namely the louder “salute” type fireworks. In pyrotechnics, a salute is a device primarily designed to make a loud concussive noise, which may or may not be accompanied by a flash. Furthermore, in order to evaluate what would be required to successfully implement a drone show, **Special Condition No. 1** requires the applicants, including the Port, to conduct an implementation study that looks to design a show that utilizes drones, either wholly or in conjunction with a substantially lower volume of fireworks, to implement in future years so as to still be able to hold an Independence Day event that further minimizes impacts to biological resources.

Marine Debris

Debris from a fireworks show can impair water quality as well as harm wildlife that may ingest and/or become entangled in such debris. Fireworks debris that may enter the ocean includes fireworks casings, cardboard cylinders, disks, shell case fragments, paper strips and wadding, plastic wadding, disks, tubes, aluminum foil, cotton string, and whole unexploded shells (i.e., duds or misfires). It is likely that paper strips, cardboard, and cotton string are biodegradable and do not persist for long periods of time in the ocean environment. However, other materials, such as plastic and aluminum, are likely to persist in the marine environment for lengthy periods if they are not washed ashore or removed by personnel.

Plastic pollution is a persistent and growing problem worldwide that significantly impacts the health of our oceans and coasts. Roughly eight million metric tons of plastics are estimated to enter the ocean each year, and the United States is one of the top 20

contributors to plastic pollution. Plastic has been found in a wide range of marine environments including the seafloor, surface water, the water column, and on beaches and shorelines. California communities are estimated to spend more than \$428 million annually to clean up and control plastic pollution. Plastic never fully degrades into its chemical components; instead, it physically breaks down into smaller pieces, creating microplastics. Plastics have been found in the digestive tracts of marine organisms ranging from zooplankton to whales, and in drinking water and food.

The applicant's Event Alternative Analysis evaluated potential impacts of marine debris and concluded that water-based firework shows do have a significant impact. The analysis acknowledges that fireworks shows generally pose high impacts to the marine environment but describes how the impacts can be offset through proposed mitigation measures for the event utilized in past years' events, such as the support boats skimming the water's surface for debris and daytime cleanups of the shoreline of detritus, whether fireworks related or not. The analysis further asserts that although drone shows do not generate trash and debris in the same manner as a fireworks show, failure of the drones could result in hundreds of drones falling into San Diego Bay, thereby resulting in marine debris and chemical battery pollution.

With regard to the specific water quality mitigation measures proposed for the subject show, the applicant is proposing a variety of measures. Upon completion of the fireworks show at 9:20 PM, an approximately twenty-minute safety period required by the Fire Marshall will be observed, wherein no further activity will occur. After the safety period elapses, the barge crew will begin sweeping the barge deck of any accumulated debris into bags for later removal and weighing. The debris will be photographed and logged for later reporting. The two support boats assigned to each barge will commence in-water cleanup after the safety period ends. The boat crew will visually scan for debris and remove any debris from the water with skimming equipment. The support boats will cover the area around their assigned barge as well as water surfaces downwind that may have received debris. Any collected debris is bagged, photographed, and weighed for later reporting. Cleanup efforts in shoreline parks will commence at approximately midnight and proceed until staff determine any fireworks detritus located there has been collected.

On the following day on July 5th, starting around 8:00 AM, teams will walk the shoreline along Shelter Island, Harbor Island, North Embarcadero, and South Embarcadero to collect debris that may have washed ashore overnight, as well as general litter that is found. The crew will also have paddleboards to conduct near-shore debris removal as necessary. Any collected debris is bagged, photographed, and weighed for future reporting. Finally, the event operator will provide crew to the Port's annual "Operation Clean Sweep" event that conducts volunteer shoreline cleaning, generally in August of each year.

The Commission's water quality staff have reviewed the proposed measures and determined that the above measures are likely to be effective in getting a substantial amount, but likely not all, of the event-related debris. However, the post-event shoreline cleanup and its removal of litter, whether related to the event or not, is a tangible benefit

to water quality, as is the organizer's participation in the Port's annual bay cleanup event held in August. Overall, the mitigation measures proposed will help significantly reduce impacts on water quality.

However, regardless of how effective a debris removal plan is, the best way to avoid pollutants entering coastal waters is to avoid them being present in the first place.

Special Condition No. 3 places limits on the type and design of the fireworks to be used, prohibiting materials that are less likely to be consumed by the detonation and fall into the water, such as plastic casings, labels, wiring, etc. Despite these prohibitions, it is still likely that debris will enter coastal waters, so to ensure that the highest feasible volume of debris is collected, **Special Condition No. 4** requires the applicant to submit a Fireworks Best Management Plan (BMP) that adheres to past plans that they have implemented during the fireworks event. **Special Condition No. 5** dictates certain steps that must be taken immediately after the event and the following days regarding debris removal. **Special Condition No. 7** imposes reporting requirements for the cleanup effort to create a record of how much debris entered the water and was collected for comparison to efforts in previous years.

Finally, **Special Condition No. 1**, which requires the applicant to conduct an implementation study that will design a show utilizing drones, will allow the Commission to evaluate potential impacts associated with drones on water quality compared to large-scale fireworks shows.

Thus, as conditioned, the 2024 iteration of the Big Bay Boom can be found to be the least impactful design feasible while allowing the parties adequate time to gather the necessary information and planning to design an even less impactful show for future years, whether it is a drone show or a mix of drones and a smaller volume of fireworks. Thus, as conditioned, the project can be found consistent with the Coastal Act.

C. Public Access and Recreation

Section 30210 of the Coastal Act states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30212 of the Coastal Act states, in relevant part:

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby [...]

Section 30213 of the Coastal Act states, in relevant part:

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Section 30214 of the Coastal Act states, in relevant part:

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

- (1) Topographic and geologic site characteristics.
- (2) The capacity of the site to sustain use and at what level of intensity.
- (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
- (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

(b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

Section 30220 of the Coastal Act states:

Coastal areas suited for water-oriented recreational activities that cannot be readily provided at inland water areas shall be protected for such uses.

Section 30221 of the Coastal Act states:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30223 of the Coastal Act states:

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30252 of the Coastal Act states, in relevant part:

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, ... (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation ...

San Diego Bay is a visitor-serving tourist destination consisting of open space, aquatic infrastructure, retail and dining structures, boardwalks, and marinas in addition to the commercial, military, and industrial water-dependent uses that are housed along the bay. The project site is four barges with two support boats each in northern San Diego Bay from which the twenty-minute firework show will be launched from. Due to the presence of multiple barges and the curved topography of the bay, the fireworks display will be visible from miles of shoreline on both sides of the bay. There will be no charge to view the fireworks from the shoreline, and the display will also be simulcast on local and regional television networks.

Due to fire and maritime safety regulations, each of the four barges will have a 1,000 ft. safety zone around them enforced by two support boats, ensuring that no boat traffic passes in close proximity before, during, or after the fireworks display. This could adversely impact maritime traffic with the bay due to the presence of four barges. However, maritime traffic volume is lower at night than during the day, and San Diego Bay is large enough that traffic that is present will be able to navigate around the safety zones without under burden.

To ensure that the Big Bay Boom is conducted in a manner that enhances coastal recreation and avoids impacts to public access, **Special Condition No. 1** describes the limits and parameters on the set up, operation, and take down of the event. Thus, as conditioned, the Commission finds that the one-night event would not adversely affect coastal access and would enhance coastal recreation. Thus, the event, as conditioned, is consistent with the public access and coastal recreation policies of the Coastal Act.

D. Fire Hazard and Air Pollution

Section 30253 of the Coastal Act states, in relevant part:

New development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard [...]
- (c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.

Fire Hazards

Launching fireworks raises the question of whether such an activity could increase fire hazard. In this case, the fireworks would be launched over the water and viewed from surrounding public and private areas. Coastal areas are often the preferred venue for celebrations with fireworks displays in California because they optimize public viewing opportunities while minimizing fire hazards that are associated with such displays. The applicant's Event Alternative Analysis did not analyze potential fire hazard impacts. Presumably, a drone show would pose a lower fire hazard risk than fireworks, however, as discussed above, a drone show does not appear to be a feasible alternative for July 4, 2025. Nonetheless, fireworks pose a potential for a misfire landing on nearby buildings or in other developed areas, especially in the case of sudden strong winds. To ensure consistency with Coastal Act Section 30253(a), **Special Condition No. 2** requires the applicant to obtain authorization from relevant local, state, and federal authorities, including fire authorities, prior to the fireworks display to ensure adequate precautions are taken to protect against potential fire hazards.

Applicants are regularly required to acknowledge inherent hazards and agree to waive any claims of liability on the part of the Commission for allowing potentially hazardous development to proceed. This allows for such potentially hazardous development or events, such as a fireworks display, to occur while avoiding placing the economic burden for damage onto the people of the State of California. Accordingly, this approval is conditioned for the applicant to assume all risks for developing at this location (**Special Condition No. 8**). In addition, Coastal Act Section 30620(c)(1) and section 13055(g) of Title 14 of the California Code of Regulations authorize the Commission to require applicants to reimburse the Commission for expenses incurred in processing CDP applications. Thus, the Commission is authorized to require reimbursement for expenses incurred in defending its actions on pending CDP applications in the event that the Commission's action is challenged by a party other than the applicant or its authorized agents, in most circumstances. Therefore, consistent with this authority, the Commission imposes **Special Condition No. 9** requiring reimbursement for any costs and attorneys' fees that the Commission incurs in connection with the defense of any action brought by a party other than the applicant or its authorized agents challenging the approval or issuance of this CDP, or challenging any other aspect of its implementation, including with respect to condition compliance efforts.

Air Quality

Coastal Act Section 30253(c) requires development to be consistent with requirements imposed by the regional or state air pollution control district. The air pollution control district for this area is the San Diego County Air Pollution Control District (SDCAPCD), which is a regulatory agency responsible for inspecting and controlling emissions from primarily stationary sources of air pollution. The California Air Resources Board (CARB) recognizes that fireworks, while temporary, emit high levels of particulate matter (including PM_{2.5} and PM₁₀), as well as metal air pollutants, all of which can contribute to a variety of negative health effects. High levels of these pollutants can lead to a wide

variety of cardiovascular and respiratory health effects such as heart attacks, asthma aggravation, decreased lung function, coughing and difficulty breathing.

Air quality on and around the Fourth of July holiday varies each year depending on the number of fireworks as well as weather conditions but typically reaches 'Very Unhealthy' or 'Hazardous' levels in Southern California due to numerous fireworks events. Especially during the summer months, the typical regional weather pattern becomes stagnant, and an inversion layer develops with warm, subsiding air from above. While the coastal areas of the City of San Diego enjoy a coastal breeze and, at times, a marine layer beneath the shallow inversion, particulate matter and emissions from fireworks tend to become trapped near the surface along with other airborne contaminants or smoke from wildfire, which can exacerbate impacts to air quality.

National Weather Service July 4th records for the period 1981 – 2010 shows that conditions at 9 PM are clear approximately twenty percent of the time, cloudy thirty percent of the time, and mixed conditions fifty percent of the time. At 9 PM, the wind is typically onshore with a speed of four miles per hour from the west-northwest. An air quality assessment was conducted as part of the Port's EIR for Ordinance No. 2892, which found that at an air quality monitoring station one mile from South Embarcadero, data consistent with the 2015 Big Bay Boom fireworks event found that hourly measurements for particulate matter, a mixture of solid particles and liquid droplets, 2.5 micrometers in diameter (PM 2.5) peaked during and immediately after the firework display event and declined to background levels two hours after the event.

Compared to fireworks, a drone show would pose a low potential for air quality impacts, while a water-based firework show poses a low to medium potential impact and a land-based show poses a medium to high potential impact. However, since the applicant asserts that a drone show is not feasible for the July 4, 2025, event date, a water-based show poses the least potential impact to air quality being located further from land where emissions may dissipate more rapidly.

Currently, SDCAPCD does not require written permits for pyrotechnic equipment, special effects, or fireworks paraphernalia equipment for "entertainment purposes." However, to ensure consistency with Coastal Act Section 30253(c), the Commission imposes **Special Condition No. 2**, which requires that the applicant provide evidence of any requisite permits, approvals, or exemptions from SDCAPCD.

E. Local Coastal Planning

Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding can be made.

The Unified Port District of San Diego has jurisdiction over much of San Diego Bay's coastline and adjacent waters under its certified Port Master Plan. However, the proposed location of the Big Bay Boom barges is within the central, deeper waters of

San Diego Bay, outside of the PMP's jurisdiction area. Thus, the Coastal Commission retains permit jurisdiction of this site and Chapter 3 of the Coastal Act remains the legal standard of review with the PMP used as guidance. As conditioned, the development is consistent with Chapter 3 of the Coastal Act. Approval of the project will not prejudice the ability of the local government to incorporate this area into the certified PMP.

F. California Environmental Quality Act

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. In preparing Ordinance 2892, the "Fireworks Display Events Ordinance", the Port released a May 2017 "Final Environmental Impact Report: San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project" (UPD #EIR-2015-115; SCH #2015081013), which covered the Big Bay Boom and other fireworks shows in San Diego Bay and Imperial Beach that would be covered by the ordinance.

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including conditions addressing firework design and duration, water quality monitoring and cleanup, and sensitive receptor monitoring will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives, or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

- “Final Environmental Impact Report: San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events Project”, prepared by ICF and dated May 2017.
- “Business Negotiated Event Agreement Between San Diego Unified Port District and Armed Services YMCA of the USA dba San Diego Armed Services YMCA For a Fireworks Show on July 4, 2024, Agreement No. 2023-P-0017340 BNE” dated January 24, 2024
- “Port of San Diego Big Bay Boom July 4th Fireworks Show 2024 North Bay Water Clean Up” by dated August 2024
- “Big Bay Boom Water and Sediment Monitoring Workplan” by Mission Environmental, LLC, dated April 26, 2024
- “Alternatives Analysis: Big Bay Boom Fireworks Display Event on San Diego Bay” by Armed Services YMCA