CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

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ORDER NO. R9-2022-0002
NPDES NO. CAG999002

GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR RESIDUAL FIREWORK POLLUTANT DISCHARGES TO WATERS OF THE UNITED STATES IN THE SAN DIEGO REGION FROM THE PUBLIC DISPLAY OF FIREWORKS

The following Dischargers may apply for coverage under this Order in compliance with the waste discharge requirements (WDRs) set forth in this Order:

Discharger: Any person discharging pollutants associated with the public display of fireworks to surface waters of the United States in the San Diego Region.

Administrative Information

This Order was adopted on:	**<Adoption Date>**
This Order shall become effective on:	**<Effective Date>**
This Order shall expire on:	**<Expiration Date>**

The United States Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) have classified this discharge as follows: **Minor**

I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, San Diego Region, on **the date indicated above**.

_____
David W. Gibson, Executive Officer

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1. DISCHARGE INFORMATION

This Order regulates residual pollutant discharges associated with the public display of fireworks to receiving surface waters of the United States (surface waters) within the jurisdiction of the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board). The San Diego Region covers a large portion of San Diego County, portions of South Orange County, and the southwestern portion of Riverside County based on hydrologic drainage areas. In this Order, the public display of fireworks refers to an entertainment feature where the public or a private group is admitted to, or permitted to, view the display or discharge of fireworks.

Public displays of fireworks (also referred to as fireworks shows or events) are conducted throughout the year at various locations within the San Diego Region as part of national and community celebrations and other special events. Located within the San Diego Region are entertainment theme parks and a major league baseball stadium that use firework displays during regular activities and special events. Additionally, fireworks displays and pyrotechnics special effects are periodically used in other venues such as business grand openings, special events, school events, weddings, sport events, and local fairs. The most significant and widespread use of fireworks displays for celebrations in the San Diego Region are for annual Fourth of July and New Year's Eve events. Firework display sites on or adjacent to urban shorelines are often the preferred setting to provide public access and avoid fire hazards associated with terrestrial display sites.

Professional pyrotechnic devices used in fireworks displays are grouped into three general categories: 1) aerial shells (paper and cardboard spheres or cylinders filled with pyrotechnic materials), 2) low-level comet and multi-shot devices such as roman candles, and 3) set piece displays mounted on the ground. Typical chemical constituents in firework displays include, but are not 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. The chemical constituents burn at high temperatures when a firework is detonated which promotes incineration. The chemical constituents within the fireworks are scattered by the burst charge, which separates the chemical constituents from the fireworks casing and internal shell components. Firework combustion residue is produced in the form of smoke, chemical pollutants, airborne particulates, and debris including paper, cardboard, wires, and fuses. This combustion residue can fall into surface waters. Un-ignited pyrotechnic material including duds and misfires can also fall into surface waters. The receiving water fallout area affected by the fireworks residue can vary depending on wind speed and direction, shells sizes, the angle of mortar placement, the type and height of firework explosions and other environmental factors. Once the firework residue enters a water body, it can be transported to waters and shorelines outside the fallout area due to wind shear and tidal effects. Clean Water Act (CWA) section 301(a) broadly prohibits the discharge of any pollutant to waters of the United States, except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Residual firework pollutant discharged into surface waters constitutes discharge of a pollutant from a point source within the meaning of the

CWA. Therefore, coverage under an NPDES permit is required before residual firework pollutants can be lawfully discharged.

This Order requires implementation of best management practices (BMPs) described in section 5.2 of this Order to ensure the pollutant discharges associated with the public display of fireworks do not cause pollution or nuisance conditions in surface waters within the San Diego Region. This Order requires post firework event monitoring and reporting, as well as receiving water monitoring and reporting for discharges meeting certain criteria described in the Monitoring and Reporting Program (MRP; Attachment E), section 8.2.

2. PERMIT COVERAGE AND APPLICATION REQUIREMENTS

2.1. Permit Coverage

This Order covers the point source discharge of residual firework pollutants to surface waters resulting from the public display of fireworks. Users of fireworks for public shows or events in the San Diego Region are required to obtain coverage under this Order prior to the public display of fireworks event.

2.2. Discharger Eligibility Criteria

Any person who proposes to discharge pollutants from the public display of fireworks to surface waters of the United States in the San Diego Region must submit a Notice of Intent (NOI) for coverage under this Order. The NOI may address multiple fireworks events at different locations throughout the San Diego Region. When a fireworks event(s) is hosted by one person but is operated or conducted by another person, it is the host's duty to submit an NOI for coverage under this Order. The San Diego Water Board may require the joint submission of an NOI from both the host and the person operating the fireworks event on a case-by-case basis.

2.3. Permit Application

To obtain coverage under this Order, a Discharger shall submit a complete application containing the items below to the San Diego Water Board no later than sixty (60) days prior to a fireworks event, unless a shorter deadline has been granted by the San Diego Water Board. The application must contain the following items:

- A completed NOI form (Attachment B) signed in accordance with the signatory requirements of the Standard Provisions in Attachment D, section 5.2, *Signatory and Certification Requirements*;
- Payment of the application fee, equal to the first annual fee, made payable to California State Water Resources Control Board or "SWRCB"; and
- A Fireworks Best Management Practices Plan (FBMPP) pursuant to section 5.2.1 of this Order.

The NOI, including, the application fee, and other attachments must be submitted to the following address:

San Diego Water Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

Attn: Fireworks General NPDES Permit
Source Control Regulation Unit
NOTICE OF INTENT

The San Diego Water Board has implemented an Electronic Content Management system to reduce paper use. Please convert all submissions to a searchable Portable Document Format (PDF) and submit the NOI and associated attachments by email to SanDiego@waterboards.ca.gov, with the subject line titled "Notice of Intent – Fireworks General NPDES Permit". The Discharger must submit a request for an amended NOA when a fireworks event is proposed at new location.

2.4. Notice of Applicability

The San Diego Water Board will review the application package for completeness and applicability to this Order. The Discharger is authorized to discharge residual firework pollutants starting on the effective enrollment date specified in the San Diego Water Board's Notice of Applicability (NOA). The Discharger will obtain coverage under this Order when all of the following have occurred:

- The Discharger submitted a complete permit application and the application fee;
- The San Diego Water Board accepted the FBMPP; and
- The San Diego Water Board issued an NOA to the Discharger.

2.5. Notice of Exclusion

The San Diego Water Board may issue a Notice of Exclusion (NOEX), which either terminates the permit coverage or requires submittal of an application for an individual permit. An NOEX is a notice that indicates that the proposed Discharger is not eligible for coverage under this Order and states the reason why. This justification can include, but is not limited to, necessity to comply with a total maximum daily load or to protect sensitive water bodies.

2.6. Dischargers Enrolled Under Order No. R9-2011-0022

Dischargers subject to Order No. R9-2011-0022 (referred to in this Order as existing Dischargers) will continue coverage under Order No. R9-2011-0022 for up to one year following the effective date for this Order. Existing Dischargers shall continue to comply with Order No. R9-2011-0022 until their enrollment under this Order has been processed. After May 31, 2023, all Notices of Enrollment issued under Order No. R9-2011-0022 will be administratively terminated by the San Diego Water Board. Existing Dischargers shall submit a complete permit application no later than February 28, 2023, for continued coverage.

2.7. Fees

The annual fee associated with this category can be found on the California State Water Resources Control Board's (State Water Board's) Water Quality Fees

webpage under NPDES Permit Fees (https://www.waterboards.ca.gov/resources/fees/water_quality/#npdes). Fireworks discharges require no treatment systems to meet the terms and conditions of this Order and pose no significant threat to water quality if properly controlled and regulated. As such, these discharges are classified as Category 3 pursuant to the fee schedule. This category is appropriate because regulation of firework discharge under this Order incorporates BMPs to control potential adverse effects to beneficial uses, and this Order prohibits residual firework pollutants from causing exceedances of water quality objectives.

2.8. Terminating Coverage

To terminate permit coverage, the Discharger shall submit a complete and accurate Notice of Termination (NOT) form (Attachment I) by email to SanDiego@waterboards.ca.gov, with the subject line titled "Notice of Termination – Fireworks General NPDES Permit". The Discharger's coverage under this Order terminates on the termination effective date specified in the coverage termination letter issued by the San Diego Water Board. Prior to the termination effective date, the Discharger is subject to the terms and conditions of this Order and responsible for submitting the annual fee and reports required under this Order. The Discharger must submit an NOT when one of the following conditions occurs:

- A new host has taken over responsibility of the Discharger's fireworks display activities covered under an existing NOI;
- The Discharger has ceased all discharges of residual firework pollutants for which it obtained Order coverage and does not expect to discharge during the remainder of this Order term; or
- The Discharger has obtained coverage under an individual permit for all residual firework pollutant discharges to waters of the United States required to be covered by an NPDES permit.

2.9. Transfer of Ownership

Enrollment under this Order is not transferable. The Discharger must submit an NOT to the San Diego Water Board in the event a new host has taken over responsibility of the Discharger's fireworks display activities. A new owner or operator must submit an application to enroll under this Order and obtain authorization from the San Diego Water Board before commencing firework displays.

3. FINDINGS

The San Diego Water Board finds:

3.1. Background. In 1972, the Federal Water Pollution Control Act [Title 33 of the United States Code (33 U.S.C.) §1251 et seq. (1972)], currently referred to as the CWA, was amended to provide that the discharge of pollutants to waters of the United States from any point source is prohibited, unless the discharge is in compliance with an NPDES permit. The federal regulations allow either the United States Environmental Protection Agency (USEPA) or states with USEPA-approved

programs to issue either general NPDES permits or individual NPDES permits to regulate discharges of pollutants to waters of the United States. The State of California (State) has a USEPA-approved program.

Public displays of fireworks are conducted throughout the year at locations within the San Diego Region. Although this Order does not precisely specify the point(s) at which fireworks residue becomes a pollutant, discharges from the public display of fireworks contain pollutants that have a potential to cause exceedances of applicable water and sediment quality objectives. Residual firework pollutants discharged into surface waters constitutes discharge of a pollutant from a point source within the meaning of the CWA. Therefore, coverage under an NPDES permit is required.

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and State laws, regulations, plans, or policies are held to be equivalent to references to the Discharger herein.

3.2. Discharge Description. Public displays of fireworks are frequently conducted over or adjacent to surface water bodies throughout the San Diego Region, including but not limited to, the San Diego River, San Diego Bay, Mission Bay, and the Pacific Ocean. Typical firework constituents include but are not 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. The chemical constituents burn at high temperatures when a firework is detonated, which promotes incineration. The chemical constituents within fireworks are scattered by the burst charge, which separates the chemical constituents from the fireworks casing and internal shell components. Firework combustion residue is 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. Un-ignited pyrotechnic material including duds and misfires can also fall into surface waters. The receiving water fallout area affected by the fireworks residue can vary depending on wind speed and direction, shell sizes, the angle of mortar placement, the type and height of firework explosions and other environmental factors. Once the firework residue enters a water body, pollutants can be transported to waters and shorelines outside the fallout area due to wind shear and tidal effects.

3.3. Legal Authorities. This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (Water Code; commencing with section 13260). This Order is also issued pursuant to section 402 of the federal CWA and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in an NOA issued pursuant to section 2.4 of this Order.

3.4. Background and Rationale for Requirements. The San Diego Water Board developed the requirements in this Order based on monitoring data and reporting

programs, and other available information related to the effects, characteristics, and regulation of firework pollutant discharges. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes findings for this Order. Attachments A through E, G, H, and I, are also incorporated into this Order.

3.5. Provisions and Requirements Implementing State Law. The provisions/requirements in sections 4.1, 5.3, 5.4, and 6.3 of this Order are included to implement State law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

3.6. Executive Officer Delegation of Authority. The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to Water Code section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this Order unless such delegation is unlawful under Water Code section 13223 or this Order explicitly states otherwise.

3.7. Notification of Interested Parties. The San Diego Water Board has notified Dischargers and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in Fact Sheet (Attachment F), section 8.1.

3.8. Consideration of Public Comment. The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in Fact Sheet (Attachment F), section 8.3.

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes Order No. R9-2011-0022 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. Existing Dischargers will continue coverage under Order No. R9-2011-0022 for up to one year following the effective date of this Order. After May 31, 2023, all enrollments in Order No. R9-2011-0022 will be administratively terminated. Existing Dischargers shall apply for and obtain coverage under this Order no later than February 28, 2023 for continued coverage. This action in no way prevents the San Diego Water Board from taking enforcement action for violations of Order No. R9-2011-0022.

4. DISCHARGE PROHIBITIONS

4.1. The discharge of residual firework pollutants to waters of the State in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in Water Code section 13050, is prohibited.

4.2. The discharge of residual firework pollutants shall not cause, have a reasonable potential to cause, or contribute to exceedances of any applicable criterion

promulgated by USEPA pursuant to section 303 of the CWA, or water quality objective adopted by the State Water Board or San Diego Water Board.

4.3. The discharge of residual firework pollutants to designated Areas of Special Biological Significance (ASBSs), is prohibited except as provided in 1) section 7.3.2 of the Order, *Special Provisions for Discharges into the La Jolla ASBS and Heisler Park ASBS of this Order* or 2) an exception issued by the State Water Board pursuant to the provisions of *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan).

4.4. The discharge of residual firework pollutants to waters of the United States within the San Diego Region is prohibited unless an NOI has been submitted, and the San Diego Water Board has provided the Discharger with an NOA identifying the discharge subject to WDRs. Discharge in a location or manner not prescribed in the issued NOA is prohibited.

4.5. The Discharger must comply with Discharge Prohibitions contained in the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan), incorporated into this Order as if fully set forth herein and summarized in Attachment H, as a condition of this Order.

4.6. The Discharger must comply with Discharge Prohibitions contained in chapter 4 of the *Water Quality Control Plan for the San Diego Basin* (Basin Plan) incorporated into this Order as if fully set forth herein and summarized in Attachment H, as a condition of this Order.

4.7. Discharges of residual firework pollutants in a manner, or to a location which have not been specifically regulated by WDRs of this Order are prohibited.

4.8. Pursuant to the Total Maximum Daily Load (TMDL) wasteload allocations (WLAs), summarized in Attachment G of this Order, discharges of copper to the Shelter Island Yacht Basin (SIYB) watershed are prohibited. A monitoring result of non-detect using approved analytical laboratory methods and minimum levels for copper is required to comply with this Discharge Prohibition.

4.9. Pursuant to the TMDL WLAs, summarized in Attachment G of this Order, discharges of total nitrogen and total phosphorus to Rainbow Creek is prohibited. A monitoring result of non-detect using approved methods and minimum levels for total nitrogen and total phosphorus is deemed to comply with this Discharge Prohibition.

4.10. Pursuant to the TMDL WLAs, summarized in Attachment G of this Order, discharges of dissolved copper and zinc to Chollas Creek is prohibited. A monitoring result of non-detect using approved methods and minimum levels for dissolved copper and zinc is deemed to comply with this Discharge Prohibition.

5. DISCHARGE SPECIFICATIONS

5.1. Effluent Limitations – Not Applicable

5.2. Best Management Practices

5.2.1. **Fireworks Best Management Practices Plan (FBMPP)**

The Discharger shall prepare and implement an FBMPP to prevent and/or reduce the discharge of pollutants associated with the display of fireworks and shall make the FBMPP available to all persons who request it. Information may be made available by electronic means, including posting prominently on a well-known website. The FBMPP shall provide specific examples of how each BMP will be implemented. The FBMPP shall address, at a minimum, the elements described below.

5.2.1.1. Whenever practicable and feasible, the Discharger shall consider the use of alternative fireworks produced with new pyrotechnic formulas that replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke, and reduce pollutant loading to surface waters.

5.2.1.2. Whenever practicable, feasible, and safe, the Discharger shall 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.

5.2.1.3. Whenever practicable and feasible, the Discharger shall select fireworks that do not contain plastic outer casings or have non-biodegradable inner components that make up more than five percent of the mass of the shell/device.

5.2.1.4. Whenever practicable and feasible, the Discharger shall design the firing range, or consider alternative firing ranges, to eliminate or reduce residual firework pollutant discharges to waters of the United States.

5.2.1.5. As soon as practicable and feasible, and no later than 24 hours following a display of fireworks, the Discharger, in addition to complying with 19 California Code of Regulation (CCR) section 1003, shall, 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).

5.2.1.6. If the fireworks are launched or ignited on barges or floating platforms, the fireworks and fireworks equipment shall be setup, discharged, and taken down in accordance with the laws and regulations applying to that display by a display operator licensed by the State. All required permits, licenses and approvals shall be obtained from the authorities having jurisdiction over the fireworks display, and the parties responsible under applicable law and regulation shall comply with the requirements and conditions of those permits and licenses. All equipment used to hold and launch the fireworks shall be secured properly 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. Barges and floating platforms shall be inspected for leaks and other potential safety issues. Other than system firing cables and common or grounding wires intended to be recovered after the display, electric igniter wires

used to trigger the fireworks shall be secured to minimize the risk that the wires would fall into the water during or after the discharge. As soon as practicable, and no later than 24 hours following a display of fireworks, the decks of each barge or floating platform that contained fireworks shall be raked or swept to collect fireworks debris and prevent it from being deposited into the water.

5.2.1.7. Immediately following a display of fireworks, all hazardous fireworks waste (including duds) and pyrotechnics waste resulting from the set-up, firing, and strike of the display, shall be handled and managed in accordance with applicable fireworks and hazardous waste laws and regulations.

5.2.1.8. All non-hazardous solid waste resulting from the set-up, firing, and strike of the display, including wires, boxes, and packaging, shall be collected to the extent practicable and properly disposed of.

5.2.1.9. Fireworks shall be packaged, transported, stored, set-up, and handled in accordance with 19 CCR Division 1, Chapter 6, Fireworks and 22 CCR Chapter 33, *Best Management Practices for Perchlorate Materials* to prevent or minimize firework pollutants from entering surface waters.

5.2.1.10. Residual firework pollutant discharges shall be located a sufficient distance from areas designated ASBS to assure maintenance of natural water quality conditions in these areas, except as provided in section 7.3.2 of this Order, *Special Provisions for Discharges into the La Jolla ASBS and Heisler Park ASBS*.

5.2.1.11. Residual firework pollutant discharges shall be located a sufficient distance from waters with TMDLs for fireworks constituents to assure fireworks pollutants do not contribute to the pollutant load allocation or impairment of the water body.

5.2.1.12. All personnel implementing the BMPs shall be properly trained regarding BMP implementation. The Discharger shall identify the personnel to be trained, their responsibilities, and the type of training they are to receive.

5.2.1.13. As soon as practicable, the Discharger shall collect visual observations to assess the effectiveness of the BMPs and update the FBMPP accordingly. All FBMPP changes must be submitted to the San Diego Water Board.

5.3. Land Discharge Specifications – Not Applicable

5.4. Recycling Specifications – Not Applicable

6. RECEIVING WATER LIMITATIONS

6.1. Water Quality Objectives and Criteria

The discharge shall not cause violations of water quality objectives, federal pollutant criteria or other provisions applicable to the authorized receiving water as contained in the State water quality control plans and policies and federal regulations set forth below:

6.1.1. The San Diego Water Board's Basin Plan, including beneficial uses, water quality objectives, and implementation plans.

6.1.2. State Water Board plans for water quality control including:

- *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries* (Thermal Plan), and
- *Water Quality Control Plan Ocean Waters of California* (Ocean Plan), including beneficial uses, water quality objectives, and implementation plans;
- *Water Quality Control Plan for Enclosed Bays and Estuaries of California – Sediment Quality Provisions* (Sediment Quality Provisions), including the narrative objectives for sediment quality.

6.1.3. State Water Board policies for water and sediment quality control including the

- *Water Quality Control Policy for the Enclosed Bays and Estuaries of California*;
- *Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP); and
- *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (State Water Board Resolution No. 68-16).

6.1.4. Priority pollutant criteria promulgated by USEPA through the:

- National Toxics Rule (NTR), 40 CFR 131.36, (promulgated on December 22, 1992, and amended on May 4, 1995, and November 9, 1999); and
- California Toxics Rule (CTR), 65 Federal Register 31682-31719 (May 18, 2000), adding section 131.38 to 40 CFR. If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies.

6.2. Receiving Water Limitations for Inland Surface Waters, Enclosed Bays, and Estuaries

Receiving water limitations for inland surface waters, enclosed bays, and estuaries include, but are not limited to:

6.2.1. Bacterial Characteristics

6.2.1.1. *Escherichia coli (E. coli)*

The bacteria water quality objective for all waters where the salinity is equal to or less than 1 part per thousand (ppth) 95 percent or more of the time during the calendar year is:

6.2.1.1.1. A six-week rolling geometric mean of *E. coli* not to exceed 100 colony forming units (CFU) per 100 milliliters (mL), calculated weekly; and

6.2.1.1.2. A statistical threshold value (STV) of 320 CFU per 100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

6.2.1.2. *Enterococci*

The bacteria water quality objective for all waters where the salinity is greater than 1 ppth more than 5 percent of the time during the calendar year is:

6.2.1.2.1. A six-week rolling geometric mean of enterococci not to exceed 30 CFU per 100 mL, calculated weekly; and

6.2.1.2.2. A STV of 110 CFU per 100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

6.2.2. Chemical Characteristics

6.2.2.1. *pH Characteristics*

6.2.2.1.1. Changes in normal ambient pH levels shall not exceed 0.5 pH units in waters designated cold freshwater habitat or warm freshwater habitat beneficial uses. The pH shall not be depressed below 6.5 nor raised above 8.5 in inland surface waters.

6.2.2.1.2. Changes in normal ambient pH levels shall not exceed 0.2 pH units in waters designated marine or estuary, or saline beneficial uses. The pH shall not be depressed below 7.0 nor raised above 9.0 in bays and estuaries.

6.2.2.2. Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth.

6.2.2.3. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH3) to exceed 0.025 milligram per Liter (mg/L) as nitrogen.

6.2.2.4. Dissolved oxygen levels shall not be less than 5.0 mg/L in inland surface waters with designated warm freshwater habitat beneficial uses or less than 6.0 mg/L in waters designated cold freshwater habitat beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7.0 mg/L more than 10 percent of the time.

6.2.2.5. Inland surface waters shall not contain concentrations of fluoride, chlorides, sulfate, iron, manganese, nitrate, methylene blue activated substances, boron, or sodium in excess of the numerical objectives in Table 3-2 of the Basin Plan.

6.2.2.6. Waters designated for use as domestic or municipal supply shall not contain concentrations of inorganic chemicals in excess of the maximum contaminant levels set forth in 22 CCR, Table 64431-A of section 64431.

6.2.2.7. Waters designated for use as domestic or municipal supply shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in 22 CCR, Table 64444-A of section 64444.

6.2.2.8. Waters designated for use as domestic or municipal supply shall not contain concentrations of trihalomethanes in excess of the criteria set forth in 22 CCR, section 64439.

6.2.2.9. Waters designated for use as domestic or municipal supply shall not contain concentrations of phenolics in excess of 1.0 micrograms per liter.

6.2.2.10. No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms

6.2.3. Physical Characteristics

6.2.3.1. Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. The natural color of fish, shellfish, or other resources shall not be impaired.

6.2.3.2. Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.

6.2.3.3. Waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or otherwise adversely affect beneficial uses.

6.2.3.4. The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

6.2.3.5. Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.

6.2.3.6. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

6.2.3.7. Waters shall not contain taste or odor producing substances at concentrations which cause a nuisance or adversely affect beneficial uses.

6.2.3.8. The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the San Diego Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any waters with designated cold freshwater habitat be increased more than 5°F above the natural receiving water temperature.

6.2.3.9. Inland surface waters shall not contain total dissolved solids in concentrations in excess of the numerical objectives contained in Table 3-2 of the Basin Plan

6.2.4. Toxicity Characteristics

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods, as specified by the San Diego Water Board.

6.2.5. Biological Characteristics

Aquatic communities and populations, including vertebrates, invertebrates, and non-target plant species are not to be degraded.

6.2.6. Sediment Characteristics for Enclosed Bays and Estuaries

6.2.6.1. Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities.

6.2.6.2. Pollutants in sediments shall not be present at levels that will bioaccumulate in aquatic life to levels that are harmful to human health.

6.2.6.3. Pollutants in sediments shall not be at levels that alone or in combination are toxic to wildlife and resident finfish by direct exposure or bioaccumulate in aquatic life at levels that are harmful to wildlife or resident finfish by indirect exposure.

6.2.7. Radioactivity Characteristics

Radionuclides shall not be present in concentrations that are harmful/deleterious to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

6.3. Receiving Water Limitations for Ocean Waters

Receiving water limitations for ocean waters, include but are not limited to:

6.3.1. Bacterial Characteristics

Within a zone bounded by the shoreline and a distance of three nautical miles from the shoreline, including all kelp beds, the following bacterial objectives shall be maintained throughout the water column.

6.3.1.1. *Fecal Coliform*

6.3.1.1.1. Thirty-day geometric mean of fecal coliform density not to exceed 200 CFU per 100 mL calculated based on the 5 most recent samples from each site.

6.3.1.1.2. Single sample maximum not to exceed 400 CFU per 100 mL.

6.3.1.2. *Enterococci*

6.3.1.2.1. Six-week rolling geometric mean shall not exceed 30 CFU per 100 mL, calculated weekly.

6.3.1.2.2. An STV of 110 CFU per 100 mL shall not be exceeded by more than 10 percent of samples collected in a calendar month, calculated in a static manner.

6.3.1.2.3. At all areas where shellfish may be harvested for human consumption, as determined by the San Diego Water Board, the median total coliform density shall not exceed 70 per 100 mL throughout the water column, and not more than 10 percent of the samples shall exceed 230 per 100 mL.

6.3.2. Physical Characteristics

6.3.2.1. Floating particulates and grease and oils shall not be visible.

6.3.2.2. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.

6.3.2.3. Natural light shall not be significantly reduced at any point outside the initial dilution zone as a result of the discharge of waste.

6.3.2.4. The rate of deposition of inert solids and the characteristics of inert solids in the ocean sediments shall not be changed such that benthic communities are degraded.

6.3.2.5. Trash shall not be present in ocean waters, along shorelines or adjacent areas in amounts that adversely affect beneficial uses or cause nuisance.

6.3.3. Chemical Characteristics

6.3.3.1. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.

6.3.3.2. The pH shall not be changed at any time more than 0.2 pH units from that which occurs naturally.

6.3.3.3. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.

6.3.3.4. The concentration of substances set forth in chapter II, Table 3 of the Ocean Plan, shall not be increased in marine sediments to levels that would degrade indigenous biota.

6.3.3.5. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.

6.3.3.6. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

6.3.4. Toxicity Characteristics

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods, as specified by the San Diego Water Board.

6.3.5. Biological Characteristics

6.3.5.1. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.

6.3.5.2. The natural taste, odor, color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

6.3.5.3. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

6.3.6. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

6.4. Groundwater Limitations – Not Applicable

7. PROVISIONS

The Discharger shall comply with the provisions listed below. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply.

7.1. Standard Provisions

7.1.1. The Discharger shall comply with all Standard Provisions included in Attachment D.

7.1.2. San Diego Water Board Standard Provisions. The Discharger shall comply with the following provisions:

7.1.2.1. The Discharger shall comply with all requirements and conditions of this Order. Any permit non-compliance constitutes a violation of the CWA or the Water Code and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of an application for permit renewal, modification, or reissuance.

7.1.2.2. This Order shall not be construed as replacement or substitution for any necessary federal, State, and local approvals. The Discharger is responsible for compliance with all applicable federal, State, and local laws, regulations and ordinances for handling, transport, treatment, and the discharge of waste and shall obtain authorization from applicable regulatory agencies prior to the commencement of discharge. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under State and federal law, including the Porter-Cologne Water Quality Control Act and the CWA.

7.1.2.3. No discharge of waste into waters of the State, whether or not the discharge is made pursuant to WDR, shall create a vested right to continue the discharge. All discharges of waste into waters of the State are privileges, not rights.

7.1.2.4. For the purposes of this Order, the term “permittee” used in parts of 40 CFR incorporated into this Order by reference and/or applicable to this Order shall have the same meaning as the term “Discharger” or “Enrollee” used elsewhere in this Order.

7.1.2.5. This Order expires on May 31, 2027, after which, the terms and conditions of this Order are automatically continued pending issuance of a new WDR, provided that all requirements of USEPA’s NPDES regulations at 40 CFR, section 122.6 and the State’s regulations at CCR Title 23, section 2235.4 regarding the continuation of expired Orders and WDRs are met.

7.1.2.6. A copy of this Order shall be made available to all personnel/staff (including field staff) involved with the compliance of this Order.

7.1.2.7. The Discharger shall comply with any interim limitations established by addendum, enforcement action, or revised WDRs that have been or may be adopted by the San Diego Water Board.

7.1.2.8. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges of fireworks pollutants, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, State, or federal law enforcement entities.

7.1.2.9. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, discharge specification, or receiving water limitation of this Order, the Discharger shall notify the San Diego Water Board by telephone at (619) 516-1990 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five business days by email to SanDiego@waterboards.ca.gov, unless the San Diego Water Board waives the written notification. The written notification shall include a description of the noncompliance and its cause; the period of non-compliance including exact dates and times, and if noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7.1.2.10. The Discharger is required to retain records, including all monitoring information and copies of all reports required by this Order, for five years unless directed otherwise by the San Diego Water Board.

7.1.2.11. This Order may be modified, revoked and reissued, or terminated for cause due to promulgation of amended regulations, receipt of USEPA guidance concerning regulated activities, judicial decision, or in accordance with 40 CFR sections 122.62, 122.63, 122.64, and 124.5.

7.1.2.12. Enrollment in this Order is temporary. Dischargers enrolled in this Order planning to discharge fireworks related waste after the expiration date of May 31, 2027, may be subject to new prohibitions or requirements based on the reissuance of this Order.

7.1.2.13. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order and the NOA from the San Diego Water Board, including accelerated or additional monitoring as may be necessary to determine the nature, and effect of the non-complying discharge.

7.1.2.14. This Order or the NOA from the San Diego Water Board, may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- Violation of any terms or conditions of this Order or the NOA from the San Diego Water Board;
- Failure to pay annual permitting fees;
- Obtaining enrollment under this Order, or an NOA from the San Diego Water Board, by misrepresentation or failure to disclose fully all relevant facts;
- A change in any condition that requires either a temporary or permanent reduction or elimination of the discharge subject to WDRs; or
- A finding that monitoring "indicator" pollutants listed in this Order do not ensure compliance with water quality criteria or objectives for the pollutants expected to be represented by the "indicator" pollutants.

7.1.2.15. The filing of a request by the Discharger for modification, revocation and reissuance, or termination of this Order or an associated discharge NOA from the San Diego Water Board, or a notification of planned change in or anticipated noncompliance with this Order or discharge NOA does not stay any condition of this Order or the NOA from the San Diego Water Board.

7.1.2.16. Notwithstanding section 7.1.2.11. above, if any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA section 307(a) for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the San Diego Water Board may institute proceedings under these regulations to modify or revoke and reissue this Order to conform to the toxic effluent standard or prohibition.

7.1.2.17. In addition to any other grounds specified herein, this Order or an NOA from the San Diego Water Board shall be modified or revoked at any time if, on the basis of any data, the San Diego Water Board determines that continued discharges may cause unreasonable degradation of the aquatic environment.

7.1.2.18. The San Diego Water Board or the Director of the USEPA may require any person requesting enrollment under this Order or subject to WDRs under this Order to apply for and obtain an individual NPDES permit. Cases where an individual NPDES permit may be required include but are not limited to those described in 40 CFR section 122.28 (b)(3).

7.1.2.19. The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order which has a reasonable likelihood of adversely affecting human health or the environment.

7.1.2.20. For the purposes of this Order, the term permit, general permit, and WDR, shall have the same meaning as the term Order used elsewhere in this Order.

7.2. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E.

7.3. Special Provisions

7.3.1. Reopener Provisions

7.3.1.1. This Order or the NOA may be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR parts 122, 123, 124, and 125. The San Diego Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations or adoption of new regulations by the State Water Board or San Diego Water Board, including revisions to the Basin Plan.

7.3.1.2. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

7.3.2. Special Provisions for Discharges into the La Jolla ASBS and Heisler Park ASBS

Discharges of residual fireworks pollutants by the La Jolla Community Fireworks (previously referred to as La Jolla Community Fireworks Foundation under the previous order) into the Pacific Ocean offshore of Scripps Park approximately a quarter mile south from the La Jolla ASBS, and by the City of Laguna Beach into the Heisler Park ASBS, are subject to the following conditions:

- The residual firework pollutant discharges shall be limited to those resulting from one Fourth of July celebration public fireworks display event per calendar year.
- The net explosive weight of fireworks used in the public fireworks display event shall not exceed 1,000 pounds of pyrotechnic material.
- The Discharger shall minimize the use of aerial “salute” shells or devices and the use of these fireworks during the first five minutes of each fireworks display is prohibited.
- The areal extent of the firing range in the ASBS shall be limited to the maximum extent practicable to prevent or reduce residual firework pollutant discharges into the ASBS.
- The residual firework pollutant discharges shall not permanently alter natural water quality conditions in the ASBS receiving waters. Temporary excursions from natural ocean water quality conditions resulting from residual firework pollutant discharges within any portion of the firing range located in the ASBS are permissible if beneficial uses are protected.
- The residual firework pollutant discharges shall comply with all other applicable provisions, including water quality standards, of the Ocean Plan.

7.3.3. **Threatened and Endangered Species**

This Order does not authorize any act which results in the take of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (CESA) (California Fish & Game Code, §§ 2050-2097) or the federal Endangered Species Act (FESA) (16 U.S.C. §§ 1531-1544), except as authorized by an agency with jurisdiction to protect those species under CESA and/or FESA. The Discharger is responsible for compliance with all requirements of the applicable endangered species act for the discharge authorized under this Order.

7.3.4. **Marine Mammals**

This Order does not authorize any act which results in the take of marine mammals, under the federal Marine Mammal Protection Act (MMPA) (16 U.S.C. §§ 1361-1407), except as authorized by an agency with jurisdiction to protect those species under MMPA. The Discharger is responsible for compliance with all requirements of the MMPA for the discharge authorized under this Order.

7.3.5. **Construction, Operation and Maintenance Specifications – Not Applicable**

7.3.6. **Special Provisions for Publicly-Owned Treatment Works (POTWs) – Not Applicable**

7.3.7. **Other Special Provisions – Not Applicable**

7.3.8. **Compliance Schedules – Not Applicable**

8. COMPLIANCE DETERMINATION

This Order requires the use of minimum stipulated BMPs to control and abate the discharge of pollutants from public fireworks events to surface waters in the San Diego Region. Proper implementation of BMPs will assure the protection of water and sediment quality within the receiving waters. Dischargers enrolled under this Order are expected to comply with all water and sediment quality objectives through the implementation of BMPs. Compliance will be determined by evaluating the proper implementation of the minimum stipulated BMPs and their effectiveness in preventing and minimizing pollutant loading from public fireworks events to surface waters. Compliance will also be evaluated using information obtained under the monitoring and reporting program of this Order.

ATTACHMENT A – ABBREVIATONS AND DEFINITIONS

Part 1. – Abbreviations

Abbreviation	Definition
40 CFR	Title 40 of the Code of Federal Regulations
AMEL	Average Monthly Effluent Limitation
APA	American Pyrotechnic Association
APCD	Air Pollution Control District
AQMD	Air Quality Management District
AQUA	Aquaculture
ASBS	Areas of Special Biological Significance
ATP	Alternative Test Procedures
AWEL	Average Weekly Effluent Limitation
Basin Plan	*Water Quality Control Plan for the San Diego Basin*
Bight	Southern California Bight Regional Monitoring Program
BIOL	Preservation of Biological Habitats of Special Significance
BOD_5	Biochemical Oxygen Demand (5-Day @ 20°C)
BPJ	Best Professional Judgement
BRI	Benthic Response Index
°C	Degrees Celsius
CA LRM	California Logistic Regression Model
$CBOD_5$	Carbonaceous Biochemical Oxygen Demand (5-Day @ 20°C)
CCR	California Code of Regulations
CEDEN	California Environmental Data Exchange Network
CEQA	California Environmental Quality Act
CERF	Coastal Environmental Rights Foundation
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CFU	Colony Forming Units
CIWQS	California Integrated Water Quality System
CO_2	Carbon Dioxide
COMM	Commercial and Sport Fishing
Court of Appeal	Court of Appeal, Fourth Appellate Division
CSI	Chemical Score Index
CSM	Conceptual Site Model
CTR	California Toxics Rule
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DNQ	Detected, But Not Quantified
DOT	Department of Transportation
DTSC	Department of Toxic Substances Control
E. Coli	Escherichia coli
EC25	Effects Concentration at 25 Percent
ELAP	Environmental Laboratory Accreditation Program
eSMR	Electronic Self-Monitoring Reports

Abbreviation	Definition
°F	Degrees Fahrenheit
FBMPP	Fireworks Best Management Practices Plan
FESA	Federal Endangered Species Act
GPS	Global Positioning System
H	Shannon-Weiner's Diversity Index
Ho	Hypothesis
HSA	Hydrologic Subarea
HU	Hydrologic Unit
IBI	Index of Biotic Integrity
IND	Industrial Service Supply
IU	Industrial User
IWC	"In-Stream" Waste Concentration
J	Pielou Evenness Index
LC	Lethal Concentration
LC 50	Percent Waste Giving 50 Percent Survival of Test Organisms
MAR	Marine Habitat
MCL	Maximum Contaminant Level
MDEL	Maximum Daily Effluent Limitation
MDL	Method Detection Limit
MEC	Maximum Effluent Concentration
MER	Mass Emission Rate
MGD	Million Gallons per Day
mg/kg	Milligram per Kilogram
mg/L	Milligram per Liter
MIGR	Migration of Aquatic Organisms
ML	Minimum Level
mL	Milliliter
MMPA	Marine Mammal Protection Act
MRP	Monitoring and Reporting Program
NAV	Navigation
ND	Not Detected
NH3	Ammonia
NOA	Notice of Applicability
NOAA's	National Oceanic and Atmospheric Administration's
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
NOEX	Notice of Exclusion
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NTR	National Toxics Rule
NTU	Nephelometric Turbidity Unit
Ocean Plan	*Water Quality Control Plan for Ocean Waters of California, California Ocean Plan*

Abbreviation	Definition
PAHs	Polynuclear Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
PHG	Public Health Goal
PMP	Pollutant Minimization Program
PMSD	Percent Minimum Significant Difference
POTWs	Publicly-Owned Treatment Works
PPP	Pollution Prevention Plan
ppth	Parts per Thousand
psu	Practical Salinity Unit
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RARE	Rare, Threatened, or Endangered Species
RBI	Relative Benthic Index
RCRA	Resource Conservation and Recovery Act
REC-1	Contact Water Recreation
REC-2	Non-Contact Water Recreation
Regional Water Boards	Regional Water Quality Control Boards
RIVPACS	River Invertebrate Prediction and Classification System
RL	Reporting Level
ROWD	Report of Waste Discharge
RPA	Reasonable Potential Analysis
San Diego Water Board	California Regional Water Quality Control Board, San Diego Region
Sanctuary	Monterey Bay National Marine Sanctuary
SCCWRP	Southern California Coastal Water Research Project
Sediment Quality Provisions	*Water Quality Control Plan for Enclosed Bays and Estuaries of California –Sediment Quality Provisions*
SFM	State Fire Marshall
SHELL	Shellfish Harvesting
SIC	Standard Industrial Classification
SIYB	Shelter Island Yacht Basin
SMR	Self-Monitoring Report
SOPs	Standard Operating Procedures
SOU	Single Operational Upset
SPoT	Stream Pollution Trend Monitoring Program
SPP	Spill Prevention Plan
SPWN	Spawning, Reproduction, and/or Early Development
SQO LOE Tool	Sediment Quality Objectives Line of Evidence Evaluation Tool
SRP	Spill Response Plan
State	State of California

Abbreviation	Definition
State Implementation Policy or SIP	*Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California*
State Water Board	State Water Resources Control Board
State Water Board Resolution No. 68-16	*Statement of Policy with Respect to Maintaining High Quality of Waters in California*
Superior Court	Superior Court for the State of California, County of San Diego, Central Division
STV	Statistical Threshold Value
TAC	Test Acceptability Criteria
TBELs	Technology-Based Effluent Limitations
Thermal Plan	*Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries*
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solids
TUa	Toxic Units Acute
TUc	Toxic Units Chronic
µg	Microgram
µg/L	Microgram per Liter
U.S.	United States
U.S.C.	United States Code
USCG	United States Coast Guard
USEPA	United States Environmental Protection Agency
Water Code	California Water Code
WDID	Waste Discharge Identification
WDRs	Waste Discharge Requirements
WET	Whole Effluent Toxicity
WILD	Wildlife Habitat
WLAs	Wasteload Allocations
WQBELs	Water Quality-Based Effluent Limitations
ZID	Zone of Initial Dilution

Part 2 – Definitions

Arithmetic Mean (μ)
Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean } (\mu) = \frac{\Sigma x}{n}$$

where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Aerial Shell
A cylinder or spherical cartridge containing a burst charge and pyrotechnic or non-pyrotechnic effects, a fuse, a black powder lift charge and is fired from a mortar. (19 California Code of Regulations (CCR) § 980 (a))

Alternative Fireworks
Refers to fireworks produced with new pyrotechnic formulas that replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutant loading to surface waters.

Areas of Special Biological Significance (ASBS)
Those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All ASBS are also classified as a subset of State Water Quality Protection Areas.

Barge
Water vessel from which fireworks are launched or fired.

Best Management Practices (BMPs)
Defined in title 40 of the Code of Federal Regulations (CFR) section 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Break
An individual burst from an aerial shell, producing either a visible or audible effect or both, and may consist of a single burst or multiple effects. (19 CCR § 980 (b) (7))

Bioaccumulative
Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic
Pollutants are substances that are known to cause cancer in living organisms.

Contamination
"Contamination" means an impairment of the quality of the waters of the State of California (State) by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. "Contamination" includes any equivalent effect resulting from the disposal of waste, whether or not waters of the State are affected. (Water Code § 13050(k))

Coefficient of Variation (CV)
CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge
Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Degrade
Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

Detected, but Not Quantified (DNQ)
DNQ are those sample results less than the Reporting Level (RL), but greater than or equal to the laboratory's Method Detection Limit (MDL). Sample results reported as DNQ are estimated concentrations.

Discharger
Any person discharging pollutants associated with the public display of fireworks to surface waters of the United States in the San Diego Region.

Enclosed Bays
Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration
The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the RL value.

Estuaries
Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Existing Discharger
Dischargers subject to Order No. R9-2011-0022.

Fallout Area
The area in which firework debris and pollutants fall after a pyrotechnic device is detonated. The extent of the fallout area depends on the wind and the angle of mortar placement.

Fireworks
"Fireworks" means any device containing chemical elements and chemical compounds capable of burning independently of the oxygen of the atmosphere and producing audible, visual, mechanical, or thermal effects which are useful as pyrotechnic devices or for entertainment. The term "fireworks" includes, but is not limited to, devices designated by the manufacturer as fireworks, torpedoes, skyrockets, roman candles, rockets, Daygo bombs, sparklers, party poppers, paper caps, chasers, fountains, smoke sparks, aerial bombs, and fireworks kits. (California Health and Safety Code § 12511)

Fireworks Event (also referred to as Public Display of Fireworks)
Fireworks event means an entertainment feature where the public or a private group is admitted or permitted to view the display or discharge of fireworks. (22 CCR § 67384.3)

Firing Range
The firing range is that area over which fireworks may travel by design or accident and upon which firework pollutants may fall. It includes the fireworks launching area and adjacent shorelines, quays, docks and the fireworks fallout area.

Ground Display Piece
A pyrotechnic device that functions on the ground (as opposed to an aerial shell that functions in the air) and that includes fountains, wheels, and set pieces.

Inland Surface Waters
All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Kelp Beds
For purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

Method Detection Limit (MDL)
MDL is the minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 CFR part 136, Attachment B.

Minimum Level (ML)
ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Misfire
A pyrotechnic item which fails to function as designed after initiation. (19 CCR § 980 (m) (5))

Mortar
A cylinder that is used to hold and fire public display or special effects pyrotechnic items or compositions. (19 CCR § 980 (m) (8))

Multiple Break
Aerial shell which has two or more breaks. (19 CCR § 980 (m) (11))

Natural Light
Reduction of natural light may be determined by the San Diego Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the San Diego Water Board.

Net Explosive Weight
"Net explosive weight" means the weight of all pyrotechnic compositions, explosives material, and fuse only. (22 CCR § 67384.3)

Not Detected (ND)
Sample results which are less than the laboratory's MDL.

Nuisance
"Nuisance" means anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. (Water Code § 13050(m))

Ocean Waters
The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the State could affect the quality of the waters of the State, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

Person
Person includes any city, county, district, state, and the United States, to the extent authorized by federal law. (Water Code § 13050(c)). Person also includes any citizen, domiciliary, political agency, or entity of California. (Water Code § 13050(o))

Pollutant
"Pollutant" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean: (a) Sewage from vessels; or (b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources. NOTE: Radioactive materials covered by the Atomic Energy Act are those encompassed in its definition of source, byproduct, or special nuclear materials. Examples of materials not covered include

radium and accelerator-produced isotopes. See Train v. Colorado Public Interest Research Group, Inc., 426 U.S. 1 (1976). (40 CFR § 122.2)

Pollution
"Pollution" means an alteration of the quality of the waters of the State by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses. (B) Facilities which serve these beneficial uses. "Pollution" may include "contamination." (Water Code § 13050(l))

Pyrotechnic operator
Pyrotechnic operator means any licensed pyrotechnic operator, who by examination, experience, and training, has demonstrated the required skill and ability in the use and discharge of fireworks as authorized by the license granted. (22 CCR § 67384.3)

Pyrotechnic Compositions
Pyrotechnic compositions means any combination of chemical elements or chemical compounds capable of burning independently of the oxygen of the atmosphere. (California Health and Safety Code § 12525)

Pollutant Minimization Program (PMP)
PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The San Diego Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Reporting Level (RL)
The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the San Diego Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Roman Candle
A heavy paper or cardboard tube containing pellets of pyrotechnic composition which, when ignited, are expelled into the air at several second intervals. (19 CCR § 980 (r) (3))

Salute
An aerial shell as well as other pyrotechnic items whose primary effects are detonation and flash of light. (19 CCR § 980 (s) (1))

San Diego Water Board
As used in this document the term "San Diego Water Board" is synonymous with the term "Regional Board" as defined in Water Code section 13050(b) and is intended to refer to the California Regional Water Quality Control Board for the San Diego Region as specified in Water Code section 13200.

Shellfish
Organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference
Defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Source of Drinking Water
Any water designated as municipal or domestic supply (MUN) in the San Diego Basin Plan.

Significant Difference
Defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Standard Deviation (σ)
Standard Deviation is a measure of variability that is calculated as follows:

$$\text{Standard Deviation } (\sigma) = \frac{\Sigma(X-\mu)^2}{(n-1)^{0.5}}$$

where: x is the observed value; μ is the arithmetic mean of the observed values; and n is the number of samples.

Star
“Star” means a small pellet of composition that produces a pyrotechnic effect. A single aerial firework shell could contain several hundred stars. (22 CCR § 67384.3)

State Water Quality Protection Areas (SWQPAs)
Non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All ASBS that were previously designated by the State Water Board in Resolution Nos. 74-28, 74-

32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

Waste
Water Code section 13050(d) provides that "Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

Waters of the State
Any water, surface or underground, including saline waters within the boundaries of the State (Water Code §13050 (e)). The definition of the waters of the State is broader than that for the waters of the United States in that all water in the State is considered to be a Waters of the State regardless of circumstances or condition. Under this definition, a municipal separate storm sewer system (MS4) is always considered to be a Waters of the State.

Waters of the United States
Waters of the United States are defined as: "(a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purpose by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition: (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial seas; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA." (40 CFR § 122.2)

ATTACHMENT B – NOTICE OF INTENT

I. NOTICE OF INTENT STATUS

Mark only one item:

☐ New Application (first time enrollee)

☐ New Application (existing Discharger under R9-2011-0022): WDID# _____

☐ Change of Information: WDID# _____

☐ Change of Discharger or Responsibility: WDID# _____

II. STIPULATION OF APPLICABILITY

☐_____ (Discharger Name) has reviewed the eligibility criteria of the subject Order as stated below and hereby certifies that the criteria is met.

Eligibility Criteria
Any person who proposes to discharge pollutants from the public display of fireworks to surface waters in the San Diego Region may submit a Notice of Intent (NOI) for coverage under this Order. When a fireworks event is hosted by one person but is operated or conducted by another person, it is the host's duty to submit an NOI and obtain coverage under the Order. The San Diego Water Board may require the joint submission of an NOI from both the host and the person operating the fireworks event on a case-by-case basis. The Discharger must submit a request for an amended NOA when a fireworks event is proposed at new location.

☐_____ (Discharger Name) has reviewed the Order and hereby certifies that:

1. _____ (Discharger Name) understands the requirements of the Order; and
2. _____ (Discharger Name) will comply with all terms, conditions, and requirements of the Order.
3. _____ (Discharger Name) understands its duty pursuant to section 7.1.2.2 of this Order to comply with all applicable federal, state, and local laws, regulations or ordinances and to obtain authorization from applicable regulatory agencies prior to the commencement of discharge.
4. _____ (Discharger Name) understands that the Display of Fireworks Post Event Report Form is due to the San Diego Water Board thirty (30) days following the end of the month in which a public display of fireworks event occurred and that it must be submitted with the Annual Report.

III. DISCHARGER INFORMATION

Discharger Name:			
Mailing Address:			
City:	County:	State:	ZIP:
Contact Person Name and Title:			
Contact Person Email:		Contact Person Phone:	

IV. BILLING INFORMATION

☐ Same as Discharger Information (Enter information only if different from Section III above)			
Discharger Name:			
Mailing Address:			
City:	County:	State:	ZIP:
Contact Person Name and Title:			
Contact Person Email:		Contact Person Phone:	

V. PUBLIC FIREWORKS DISPLAY EVENT DETAILS

1. Name(s) of the water body nearest to each fireworks display event(s):

Attach a map for each fireworks display event location, including the locations of the water body, firing range, and any other pertinent information.

2. Is the fireworks display event at a location where firework pollutants may enter an Area of Special Biological Significance (ASBS)?

☐ Yes ☐ No

If yes, provide the name the ASBS and the distance from the fireworks event location.

3. Is the water body above listed as impaired by Clean Water Act section 303(d)? ☐ Yes ☐ No If yes, provide the distance from the fireworks event location to the impaired segments of the water body.
4. Is the water body above a drinking water reservoir? ☐ Yes ☐ No
5. Expected number of firework display event(s) per year and the expected date of each firework display event (attach additional sheets if needed):
6. Estimated duration of each firework display event:
7. Expected fireworks net explosive weight per fireworks display event (provide a range and average if the fireworks display events will vary in size):

VI. FIREWORKS BEST MANAGEMENT PRACTICES PLAN

Has a Fireworks Best Management Practices Plan been prepared pursuant to the requirements listed in section 5.2.1 of this Order? ☐ Yes ☐ No If yes, attach a copy of the Fireworks Best Management Practices Plan to this form.

VII. APPLICATION FEE

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

☐ Yes ☐ No ☐ N/A (existing Discharger)

The initial fee and annual fee are based upon the type of pollutants to be discharged or potentially discharged.

Make checks payable to "**State Water Resources Control Board**" and include "Fireworks General NPDES Permit" in the check memo field.

Category 3 Lowest Threat to Water Quality
Discharges that require minimal or no treatment systems to meet limits and pose no significant threat to the environment in accordance with California State Water Resources Control Board's (State Water Board's) California Code of Regulations Title 23. Division 3. Chapter 9 fee schedule. Information on fees can be found can be found on the State Water Board's Water Quality Fees webpage under NPDES Permit Fees (https://www.waterboards.ca.gov/resources/fees/water_quality/#npdes).

VIII. CERTIFICATION – (Must be signed by the legally responsible official described in section 5.2 of Attachment D of this Order)

I certify under penalty of law that the information provided in this application and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is true, accurate, and complete to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the criteria for eligibility will be complied with.

Printed Name and Title:	
Signature:	**Date:**

INSTRUCTIONS FOR COMPLETING THE NOTICE OF INTENT

These instructions are intended to help you, the Discharger, complete the Notice of Intent (NOI) form for this Order. **Please type or print clearly when completing the NOI form**. For any field, if more space is needed, submit supporting documentation with the NOI.

Send the completed and signed form along with the filing fee and supporting documentation to the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) (see Section VIII below).

Section I – Notice of Intent Status

Indicate whether this request is for the first time coverage under this Order, for an existing Discharger under Order No. R9-2011-0022, a change of information for the discharge already covered under this Order, or change of Discharger or responsibility. If available, please provide the eleven-digit Waste Discharge Identification (WDID) number for an existing discharger under Order No. R9-2011-0022, change of information, or change of discharger or responsibility.

Section II – Stipulation of Applicability

The Discharger must review the eligibility criteria for enrollment under the Order and certify that the Discharger meets the qualifications for enrollment. The Discharger must acknowledge that they have reviewed, understand, and will comply with the terms, conditions, and requirements of the Order. Fill in all of the “Discharger Name” blanks and check the appropriate boxes to certify that the Discharger understands and accepts these stipulations.

Section III – Discharger Information

1. Enter the name of the Discharger.
2. Enter the mailing address, including street number and street name, where correspondence should be sent (P.O. Box is acceptable).
3. Enter the city that applies to the mailing address given.
4. Enter the county that applies to the mailing address given.
5. Enter the state that applies to the mailing address given.
6. Enter the zip code that applies to the mailing address given.
7. Enter the name (first and last) and title of the contact person.
8. Enter the email address of the contact person.
9. Enter the daytime telephone number of the contact person.

Section IV – Billing Address

Check the box if the Billing Information is the same as the Discharger Information. Enter other information only if it is different from section III above.

1. Enter the name (first and last) of the person who will be responsible for the billing.
2. Enter the billing address, including street number and street name, where the billing should be sent (P.O. Box is acceptable).
3. Enter the city that applies to the billing address.
4. Enter the county that applies to the billing address.
5. Enter the state that applies to the billing address.
6. Enter the zip code that applies to the billing address.
7. Enter the name and title of the person responsible for billing.
8. Enter the email address of the person responsible for billing.
9. Enter the daytime telephone number of the person responsible for billing.

Section V – Public Fireworks Display Event Details

1. Provide the name(s) of the water body nearest to the fireworks display event location and attach a map of the fireworks event location showing the location of the waterbody in relation to the fireworks firing range.
2. Indicate whether the fireworks display event is at a location where fireworks pollutants may enter an Area of Special Biological Significance (ASBS). If yes, estimate the distance from the fireworks display event location to the ASBS.
3. Indicate whether the firework pollutants may enter a Clean Water Act section 303(d) listed impaired water body. For an updated list of impaired waterbodies please visit the San Diego Water Board's 303(d) List Website.
4. Indicate whether the receiving water body is a drinking water reservoir.
5. Provide the expected number of public fireworks display events per year and the expected dates of these events.
6. Provide the estimated duration of each firework display event.
7. Provide the expected total net explosive weight of fireworks per fireworks display event. If the net explosive weight varies among firework display events, provide a range and average of net explosive weight.

Section VI – Fireworks Best Management Practices Plan

The Discharger must prepare and complete a Fireworks Best Management Practices Plan (FBMPP). The minimum contents of the FBMPP are specified in section 5.2.1 of the Order. The Discharger must ensure that the operator(s) and all other appropriate personnel are familiar with the FBMPP contents before conducting a public display of fireworks covered under this Order.

Section VII – Application Fee

The annual fee shall be based on Category 3 discharge specified in the fee schedule. Information on fees can be found can be found on the California State Water Resources Control Board's (State Water Board's) Water Quality Fees webpage under NPDES Permit Fees

(https://www.waterboards.ca.gov/resources/fees/water_quality/#npdes).Check the YES box if you have included payment of the annual fee. Check the NO box if you have not included this payment.
NOTE: The Discharger will be billed annually and payment is required to enroll and continue coverage. The State Water Resources Control Board (State Water Board) may modify the fee at any time.

Section VIII– Certification

1. Print the name of the appropriate official. For a municipality, State, federal, or other public agency, this would be a principal executive officer, ranking elected official, or duly authorized representative. The principal executive officer of a federal agency includes the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of United States Environmental Protection Agency (USEPA)).
2. The person whose name is printed above must sign and date the NOI.
3. Enter the title of the person signing the NOI.

Submit the NOI and application fee to the following address:

San Diego Water Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

Attn: Fireworks General NPDES Permit
Source Control Regulation Unit
NOTICE OF INTENT

The San Diego Water Board has implemented an Electronic Content Management system to reduce paper use. Please convert all submissions with attachments to a searchable Portable Document Format (PDF) may submit the NOI and associated attachments by email to SanDiego@waterboards.ca.gov, with the subject line titled “Notice of Intent – Fireworks General NPDES Permit”.

ATTACHMENT C – DISPLAY OF FIREWORKS POST EVENT REPORT FORM

This form shall be completed and submitted no later than thirty (30) days following the end of the month in which a public display of fireworks event occurred. This form shall also be submitted in the Annual Report to the San Diego Water Board in accordance with the schedule outlined in section 10.2.3 of the Monitoring and Reporting Program (Attachment E) or when requested by the San Diego Water Board.

The Discharger shall electronically submit this form using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (https://www.waterboards.ca.gov/water_issues/programs/ciwqs).

<table>
<tr><td colspan="2">Name of Organization Hosting the Event</td><td colspan="2">WDID No.</td></tr>
<tr><td colspan="4">Contact Person for Organization Hosting the Event:
Name:
Phone Number:
Email:</td></tr>
<tr><td colspan="2">Location of Event – Address and GPS Coordinates:</td><td colspan="2" rowspan="2">Name of Receiving Water(s):</td></tr>
<tr><td>Latitude</td><td>Longitude</td></tr>
<tr><td>Date of Display:</td><td colspan="3">Time of Display:
From: (AM / PM) To: (AM / PM)</td></tr>
<tr><td colspan="4">Map. Attach a map or diagram identifying the firing range, adjacent shorelines, quays, and docks, any other appropriate features of the firing range and adjacent affected surface water(s). The firing range is that area over which fireworks may travel by design or accident and upon which firework pollutants may fall. It includes the fireworks launching area and adjacent shorelines, quays, docks and the fireworks fallout area.</td></tr>
<tr><td colspan="4">Name and License No. of Pyrotechnic Operators:</td></tr>
<tr><td colspan="4">1.</td></tr>
<tr><td colspan="4">2.</td></tr>
<tr><td colspan="4">3.</td></tr>
</table>

Particulars of Display						**Low Level Items**		**Ground Displays**	
Shell Size	No. Single Breaks	No. Multi Breaks	Shell Size	No. Single Breaks	No. Multi Breaks	Type	Qty	Type	Qty
25 mm			7”			Mines		Sets	
80 mm			8”			Romans		Devices	
2”			9”			Comets			
3”			10”			Cakes			
4”			11”						
5”			12”						
6”									

Net Explosive Weight:

Were alternative fireworks used? If so, indicate which fireworks were environmentally friendly.

Defective Shells - List Manufacturer's Name, Size of Shell, and Malfunction.[1]

Were the entire firing range (including the fireworks launching area, adjacent shorelines, quays, docks and the fireworks fallout area), barge(s) (if used) and adjacent surface water(s) inspected and cleaned of particulate matter and debris from ignited and un-ignited pyrotechnic material within 24 hours following the display?

☐ Yes Date _____ Time _____
☐ No

If no, explain:

[1] The Discharger may attach a copy of the Pyrotechnic Operator Post Display Report submitted to the Office of the State Fire Marshall to satisfy this requirement.

Amount of debris collected from the firing range:_____lbs dry weight	
Amount of floating debris collected from adjacent surface water(s): _____lbs wet weight _____lbs dry weight (if known)	
I certify under penalty of law that the information provided in this application and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is true, accurate, and complete to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the criteria for eligibility will be complied with.	
Printed Name and Title:	
Signature:	**Date:**

ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

1.1.1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 Code of Federal Regulations (CFR.) § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

1.1.2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR. § 122.41(a)(1).)

1.2. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR. § 122.41(c).)

1.3. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR. § 122.41(d).)

1.4. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR. § 122.41(e).)

1.5. Property Rights

1.5.1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR § 122.41(g).)

1.5.2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR § 122.5(c).)

1.6. Inspection and Entry

The Discharger shall allow the San Diego Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. § 1318(a)(4)(B); 40 CFR § 122.41(i); Wat. Code, §§ 13267, 13383):

1.6.1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(i); 40 CFR § 122.41(i)(1); Wat. Code, §§ 13267, 13383);

1.6.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 CFR § 122.41(i)(2); Wat. Code, §§ 13267, 13383);

1.6.3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 CFR § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and

1.6.4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(B); 40 CFR § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

2. STANDARD PROVISIONS – PERMIT ACTION

2.1. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR § 122.41(f).)

2.2. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 CFR § 122.41(b).)

2.3. Transfers

This Order is not transferable to any person except after notice to the San Diego Water Board. The San Diego Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR §§ 122.41(l)(3), 122.61.)

3. STANDARD PROVISIONS – MONITORING

3.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR § 122.41(j)(1).)

3.2. Monitoring must be conducted according to test procedures approved under 40 CFR part 136 for the analyses of pollutants unless another method is required under 40 CFR chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 CFR part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

3.2.1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

3.2.2. The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter 1, subchapter N for the measured pollutant or pollutant parameter. In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136, or otherwise required under 40 CFR chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 CFR §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

4. STANDARD PROVISIONS – RECORDS

4.1. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the San Diego Water Board Executive Officer at any time. (40 CFR § 122.41(j)(2).)

4.2. Records of monitoring information shall include:

4.2.1. The date, exact place, and time of sampling or measurements (40 CFR § 122.41(j)(3)(i));

4.2.2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii));

4.2.3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii));

4.2.4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv));

4.2.5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v)); and

4.2.6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

4.3. Claims of confidentiality for the following information will be denied (40 CFR § 122.7(b)):

4.3.1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and

4.3.2. Permit applications and attachments, permits and effluent data. (40 CFR § 122.7(b)(2).)

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information

The Discharger shall furnish to the San Diego Water Board, State Water Board, or USEPA within a reasonable time, any information which the San Diego Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the San Diego Water Board, State Water Board, or USEPA copies of records required to be kept by this Order.
(40 CFR § 122.41(h); Wat. Code, §§ 13267, 13383.)

5.2. Signatory and Certification Requirements

5.2.1. All applications, reports, or information submitted to the San Diego Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 CFR § 122.41(k).)

5.2.2. All permit applications shall be signed as follows:

5.2.2.1. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 CFR § 122.22(a)(1).)

5.2.2.2. For a partnership or sole proprietorship, all permit applications shall be signed by a general partner or the proprietor, respectively. (40 CFR § 122.22(a)(2).)

5.2.2.3. For a municipality, state, federal, or other public agency, all permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR § 122.22(a)(3).).

5.2.3. All reports required by this Order and other information requested by the San Diego Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting 5.2.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

5.2.3.1. The authorization is made in writing by a person described in Standard Provisions – Reporting 5.2.2 above (40 CFR § 122.22(b)(1));

5.2.3.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and

5.2.3.3. The written authorization is submitted to the San Diego Water Board and State Water Board. (40 CFR § 122.22(b)(3).)

5.2.4. If an authorization under Standard Provisions – Reporting 5.2.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting 5.2.3 above must be submitted to the San Diego Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)

5.2.5. Any person signing a document under Standard Provisions – Reporting 5.2.2 or 5.2.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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." (40 CFR § 122.22(d).)

5.2.6. Any person providing the electronic signature for documents described in Standard Provisions – 5.2.1, 5.2.2, or 5.2.3 that are submitted electronically shall

meet all relevant requirements of Standard Provisions – Reporting 5.2, and shall ensure that all relevant requirements of 40 CFR part 3 (Cross-Media Electronic Reporting) and 40 CFR part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 CFR § 122.22(e).)

5.3. Monitoring Reports

5.3.1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.41(l)(4).)

5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the San Diego Water Board or State Water Board. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting 5.10 and comply with 40 CFR part 3, 40 CFR section 122.22, and 40 CFR part 127. (40 CFR § 122.41(l)(4)(i).)

5.3.3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the San Diego Water Board or State Water Board.
(40 CFR § 122.41(l)(4)(ii).)

5.3.4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order.
(40 CFR § 122.41(l)(4)(iii).)

5.4. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than fourteen (14) days following each schedule date.
(40 CFR § 122.41(l)(5).)

5.5. Twenty-Four Hour Reporting

5.5.1. The Discharger shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A report shall also be provided within five business (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of

overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

5.5.2. The following shall be included as information that must be reported within 24 hours:

5.5.2.1. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(A).)

5.5.2.2. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)

5.5.3. The San Diego Water Board may waive the above required written report on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(ii)(B).)

5.6. Planned Changes

The Discharger shall give notice to the San Diego Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR § 122.41(l)(1)):

5.6.1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR § 122.41(l)(1)(i)); or

5.6.2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR § 122.41(l)(1)(ii).); or

5.6.3. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels 7.1.1). (40 CFR § 122.41(l)(1)(ii).)

5.7. Anticipated Noncompliance

The Discharger shall give advance notice to the San Diego Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 CFR § 122.41(l)(2).)

5.8. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting 5.5 above. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting 5.5 and the applicable required data in appendix A to 40 CFR part 127. The San Diego Water Board may also require the Discharger to electronically submit reports not related to

combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 CFR § 122.41(l)(7).)

5.9. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the San Diego Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR § 122.41(l)(8).)

5.10. Initial Recipient for Electronic Reporting Data

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 CFR part 127 to the initial recipient defined in 40 CFR section 127.2(b). USEPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 CFR section 127.2(c)]. USEPA will update and maintain this listing. (40 CFR § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

6.1. The San Diego Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Section 308 of the federal Clean Water Act (CWA) and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of title 40 of the Code of Federal Regulations (40 CFR) require that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code (Water Code) section 13383 also authorizes the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. Pursuant to this authority, this Monitoring and Reporting Program (MRP) establishes monitoring, reporting, and recordkeeping requirements that implement the federal and State of California (State) laws and/or regulations. The MRP requires the Discharger to report the results to the San Diego Water Board with information necessary to evaluate discharge characteristics and compliance status. The purpose of the MRP is to determine and ensure compliance with requirements established in this Order.

This MRP is designed to address the following two key questions:

1) Is the Discharger adequately implementing best management practices (BMPs) specified in this Order and in the approved Firework Best Management Practices Plan (FBMPP)?
2) For Dischargers required to conduct water quality and sediment monitoring, are the BMPs specified in this Order and the Discharger's approved FBMPP adequate to prevent an exceedance of the receiving water and sediment quality limitations of this Order?

1. GENERAL MONITORING PROVISIONS

1.1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge and shall not be diluted by another waste stream, body of water, or substance. All samples shall be taken at the anticipated monitoring locations specified in the Discharger's Water and/or Sediment Monitoring Plan. Monitoring locations shall not be changed without notification to and approval of the San Diego Water Board.

1.2. Water monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved under 40 CFR part 136, *Guidelines Establishing Test procedures for the Analysis of Pollutants Under the Clean Water Act*, as amended, or an alternative test procedure (ATP) approved by USEPA, or by the San Diego Water Board when there are no methods specified for a pollutant at 40 CFR part 136.

1.3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR part 136, or as specified in this Order or by the San Diego Water Board, the results of the monitoring shall be included with the calculation and reporting of the data submitted in the Discharger's Water and/or Sediment Monitoring Report. The increased frequency of the monitoring shall also be reported.

1.4. Records of monitoring information shall include information required under Standard Provision (Attachment D) section 4.

1.5. Calculations for limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order.

1.6. All monitoring instruments and devices used by the Discharger to fulfill the monitoring program shall be properly maintained and calibrated to ensure reliability and accuracy.

1.7. If laboratory services are used, records and monitoring information shall include:

- The date, exact location, and time of sampling or measurements;
- The name(s) of individual(s) who performed the sampling or measurements;
- The date(s) analysis(es) was (were) performed;
- The name(s) of the laboratory(ies) and individual(s) who performed the analysis(es);
- The analytical techniques or methods used; and
- The results of such analysis(es).

1.8. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.

1.9. Data produced and reports submitted pursuant to this Order shall be generated by a laboratory accredited by the State's Environmental Laboratory Accreditation Program (ELAP). The laboratory must hold a valid certificate of accreditation for the analytical test method specified in 40 CFR part 136, or an ATP approved by USEPA, or by the San Diego Water Board when there are no methods specified for a pollutant at 40 CFR part 136. The laboratory must include quality assurance/quality control data in all data reports required by this Order and submit electronic data as required by the San Diego Water Board. Data generated using field tests is exempt pursuant to California Water Code Section 13176. Additional information can be found on the ELAP website (https://www.waterboards.ca.gov/drinking_water/certlic/labs/index.html).

1.10. When requested by USEPA, the San Diego Water Board, or the State Water Board, the Discharger shall participate in the NPDES Discharge Monitoring Report QA (DMR-QA) performance study or submit the most recent Water Pollution Performance Evaluation Study. If required, the Discharger shall ensure that the results of the DMR-QA Study or the most recent Water Pollution Performance Evaluation Study are submitted annually by December 31 to the State Water Board at the following address:

Office of Information Management and Analysis
State Water Resources Control Board
1001 I Street, Sacramento, CA 95814

2. MONITORING LOCATIONS

Each Discharger shall establish monitoring locations within the public firework event firing range and adjacent affected surface waters to demonstrate adequate implementation of the BMPs specified in this Order and in the approved FBMPP. For Dischargers required to conduct water quality and/or sediment monitoring under this Order or monitoring coalitions shall also establish receiving water and/or sediment monitoring locations to demonstrate compliance with the applicable receiving water limitations of this Order.

3. INFLUENT MONITORING REQUIREMENTS – Not Applicable

4. EFFLUENT MONITORING REQUIREMENTS – Not Applicable

5. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS – Not Applicable

6. LAND DISCHARGE MONITORING REQUIREMENTS – Not Applicable

7. RECYCLING MONITORING REQUIREMENTS – Not Applicable

8. RECEIVING WATER MONITORING REQUIREMENTS

8.1. Visual Monitoring

Visual monitoring shall occur within and adjacent to the firing range, and at the shoreline most likely to accumulate fireworks debris based on the prevailing wind, current, and tides. When practical and feasible, the Discharger shall conduct visual monitoring within one hour following the end of the fireworks event. The Discharger must conduct visual monitoring in the morning of the day immediately following the fireworks event. Visual observations of the surface water conditions at the designated receiving water shall be conducted in such a manner as to enable the observer to describe and report the presence, if any, of floatable fireworks debris. Observations of wind (direction and speed), weather (cloudy, sunny, or rainy), direction of current, tidal conditions (high or low), discoloration, oil and grease, turbidity, and odor shall be recorded. The results of visual monitoring shall be submitted with the Display of Fireworks Post Event Report Form and Annual Report in accordance with the schedule in section 10.2.3 of this MRP.

8.2. Water Quality and/or Sediment Monitoring

The San Diego Water Board may require water quality and/or sediment monitoring pursuant to this Order and Water Code section 13383 based on the following considerations:

- Receiving water body characteristics including circulation, depth, assimilative capacity; CWA 303(d) listed impairments, and beneficial uses;
- The frequency of firework events in the receiving water including those at or near the same firework fallout area;
- The estimated firework pollutant loading from an individual or repeated firework event(s) affecting the same water body or segment thereof;

- Accumulative effects from repeat firework events in the same location or other firework events affecting the same water body or segment thereof;
- Proximity of the firework event to existing or proposed State Water Quality Protection Areas, inclusive of Areas of Special Biological Significance (ASBSs) or other environmental sensitive receiving waters; or
- Any other relevant water quality factors.

If the San Diego Water Board determines that receiving water quality and/or sediment monitoring is required, the Discharger shall comply with the following:

8.2.1. **Monitoring Coalitions**. To achieve maximum efficiency and resource economics, the San Diego Water Board encourages Dischargers required to conduct receiving water quality and/or sediment monitoring to establish or join a water body-monitoring coalition. Monitoring coalitions enable the sharing of technical resources, trained personnel, and associated costs and create an integrated water and/or sediment monitoring program within each water body. Focusing resources on water body issues and developing a broader understanding of pollutants effects in these water bodies enables the development of more rapid and efficient response strategies and facilitates better management of water and/or sediment quality.

8.2.1.1. If a monitoring coalition is established for the receiving water, the coalition shall be responsible for water and/or sediment quality assessment within the designated water body and for ensuring that appropriate studies and reports required under this Order are completed in a timely manner.

8.2.1.2. The monitoring coalitions shall coordinate with the San Diego Water Board to ensure that all coalition participants are proactive and responsive to potential water and/or sediment quality related issues as they arise during monitoring and assessment.

8.2.2. **Water and/or Sediment Monitoring Plan**. The Discharger or monitoring coalition shall prepare and submit a Water and/or Sediment Monitoring Plan to assess compliance with applicable receiving water limitations of this Order. The Water and/or Sediment Monitoring Plan shall be submitted within twelve (12) months following the date specified by the San Diego Water Board and shall contain the following elements:

8.2.2.1. **Quality Assurance Project Plan**. A Quality Assurance Project Plan (QAPP) describing the project's objectives and organization, functional activities, and quality assurance/quality control protocols for the water and/or sediment monitoring.

8.2.2.2. **Conceptual Model.** A Conceptual Model identifying the physical and chemical factors that control the fate and transport of pollutants and receptors that could be exposed to pollutants in the water and/or sediment. The Conceptual Model will serve as the basis for assessing the appropriateness of the Water and/or Sediment Monitoring 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;
- Change in grain size, salinity, water depth, and organic matter; and
- Other sources or discharges in the immediate vicinity.

8.2.2.3. **Sampling and Analysis Plan**. A Sampling and Analysis Plan must be proposed based on methods or metrics described in 40 CFR part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*. For enclosed bays and estuaries, sediment monitoring shall be based on *Water Quality Control Plan for Enclosed Bays and Estuaries - Sediment Quality Objective*s (Sediment Quality Provisions), as amended on June 5, 2018. The plan shall include a list of chemical analytes for the water column and/or sediment, proposed analytical methods, and analytical method reporting limits.

8.2.2.3.1. **Water Column Sampling**

8.2.2.3.1.1. **Frequency:** The Sampling and Analysis Plan shall propose the frequency and timing for water column sampling. The proposed sampling must be based upon results on the fate and transport of pollutants from the Conceptual Model, but shall be no less than once per permit term.

8.2.2.3.1.2. **Pollutants:** The Sampling and Analysis Plan must propose what pollutants will be monitored. Metals shall be analyzed for both total and dissolved phase. At a minimum, monitoring shall include the pollutants listed below. If a pollutant is non-detect for three or more consecutive sampling events, the Discharger may request to discontinue monitoring the parameter.

- Total Phosphorous
- Bis-(2-ethylhexyl) phthalate
- Arsenic
- Perchlorate
- Antimony
- Barium
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Mercury
- Molybdenum
- Nickel
- Potassium
- Strontium
- Selenium
- Silver
- Thallium
- Tin
- Titanium
- Vanadium
- Zinc

8.2.2.3.2. **Sediment Sampling**

8.2.2.3.2.1. **Frequency:** The Sampling and Analysis Plan shall propose the frequency and timing for sediment monitoring based on the results on the fate and transport of pollutants from the Conceptual Model. Sediment monitoring comprised of sediment chemistry, sediment toxicity and benthic community condition shall not be required more often than twice per permit term or less than once per five years.

8.2.3.3.2.2. **Sediment Chemistry:** For all water body types, sediment chemistry must include, at minimum, the parameters listed in section 8.2.2.3.1.2 of this MRP.

8.2.3.3.2.2.1. Discharges to Enclosed Bays and Estuaries. Sediment chemistry shall be monitored in accordance with section IV.A.1.h of the Sediment Quality Provisions and include the parameters listed in Appendix A-3 of the Sediment Quality Provisions in addition to the parameters listed in section 8.2.2.3.1.2 of this MRP. The sediment chemistry exposure shall be assessed using the Chemical Score Index (CSI) and California Logistic Regression Model (CA LRM). Each sediment chemistry guideline result shall be categorized according to exposure as described in Table 8 of the Sediment Quality Provisions.

8.2.3.3.2.2.2. Discharges to the Pacific Ocean. Sediment chemistry shall be monitored in accordance with methods developed for the Southern California Bight Regional Monitoring Program (Bight) conducted by the Southern California Coastal Water Research Project (SCCWRP). The Discharger may be required to monitor for the sediment chemistry parameters listed in the Bight Sediment Quality Assessment Field Operations Manual (current version located on the SCCWRP Website) in addition to the parameters listed in section 8.2.2.3.1.2 of this MRP.

8.2.3.3.2.2.3. Discharges to Inland Surface Waters. The Discharger shall propose sediment chemistry monitoring and analysis procedures for freshwater inland surface waters. The Discharger may reference the sampling and analysis procedures used for the Stream Pollution Trends Monitoring Program (SPoT) and/or USEPA's *A Guidance Manual to Support the Assessment of Contaminated Sediments in Freshwater Ecosystems*, Volumes I through III.

8.2.3.3.2.3. **Sediment Toxicity**: A minimum of one short-term survival and sublethal test shall be performed on sediment collected from each monitoring station.

8.2.3.3.2.3.1. Discharges to Saline/Brackish Water. Acceptable test organisms for short-term survival tests include *Eohaustorius estuaries*, *Leptocheirus plumulosus*, and *Rhepoxynius abronius*. Acceptable tests organisms for sublethal tests include *Neanthes arenaceodentata* and *Mytilus galloprovincialis*.

8.2.3.3.2.3.2. Discharges to Freshwater. Acceptable test organism for both short-term survival and sublethal tests include *Hyalella aztexa* and *Chironomus dilutus*.

8.2.3.3.2.4. **Benthic Community Condition**: Benthic community monitoring is required for discharges to enclosed bays, estuaries, and the Pacific Ocean. Benthic community monitoring is not required for freshwater inland surface waters.

8.2.3.3.2.4.1. Discharges to Enclosed Bays and Estuaries. For discharges to unvegetated subtidal areas, benthic community condition shall be monitored in accordance with section IV.A.g of the Sediment Quality Provisions. For discharges to vegetated subtidal areas (e.g., areas with *Zostera marina*, eelgrass), the proposed benthic community monitoring shall be consistent with section IV.A.j of the Sediment Quality Provisions and utilize the reference site approach to assess benthic communities and impacts to *Zostera marina* as a line of evidence. Assessment of *Zostera marina* must be done in accordance with the Southern California Eelgrass Mitigation Policy. All benthic invertebrates in the screened sample shall be identified to the lowest possible taxon and counted. The benthic condition shall be assessed using the Benthic Response Index (BRI), Index of Biotic Integrity (IBI), Relative Benthic Index (RBI), and River Invertebrate Prediction and Classification System (RIVPACS).

8.2.3.3.2.4.2. Discharges to the Pacific Ocean. Benthic communities shall be monitored in accordance with the most recent field manual developed for (Bight). Analysis of benthic community structure shall include determination of the number of species, the number of individuals per species, the total numerical abundance present, the BRI, the Swartz's 75 percent dominance index, the Shannon-Weiner's diversity index (H), and the Pielou evenness index (J).

8.2.3.3.3. **Spatial Representation**. The Water and/or Sediment Monitoring Plan shall be designed to ensure that the sample stations are spatially representative of the sediment within the water body segment or region of interest. The Water and/or Sediment Monitoring Plan shall include proposed monitoring stations, including reference stations.

8.2.3.3.4. **Existing Data and Information**. The Water and/or Sediment Monitoring Plan design shall take into consideration existing data and information of appropriate quality.

8.2.3.3.5. **Strata**. Identification of appropriate strata shall consider characteristics of the water body including sediment transport, hydrodynamics, depth, salinity, land uses, inputs (both natural and anthropogenic) and other factors that could affect the physical, chemical, or biological condition of the sediment.

8.2.3.3.6. **Index Period**. If applicable, sediment shall be sampled between the months of June through September to correspond with the benthic community index period.

8.2.3.3.7. **Report Completion Schedule**. The Water and/or Sediment Monitoring Plan shall include a schedule for completion of all sample collection and analysis activities and submission of a final Water and/or Sediment Monitoring Report(s) described in section 8.2.6.

8.2.4. **Water and/or Sediment Monitoring Plan Implementation**. The Discharger or monitoring coalition shall implement the Water and/or Sediment Monitoring Plan in accordance with the schedule contained in the Water and/or Sediment Monitoring Plan unless directed otherwise in writing by the San Diego Water Board. Before beginning sample collection activities, the Discharger or water body monitoring coalition shall:

- Notify the San Diego Water Board at least fourteen (14) days in advance of the beginning of sample collection activities; and
- Comply with any conditions set by the San Diego Water Board with respect to sample collection methods such as providing split samples.

8.2.5. **California Environmental Data Exchange Network.** Dischargers required to conduct the water quality and/or sediment monitoring shall ensure that all monitoring results are submitted to the California Environmental Data Exchange Network (CEDEN) no later than 120 days after receipt of the results.

8.2.6. **Water and/or Sediment Monitoring Report.** The Discharger or water body monitoring coalition shall submit a Water and/or Sediment Monitoring Report in accordance with the schedule contained in the Water and/or Sediment Monitoring Plan unless otherwise directed in writing by the San Diego Water Board. The Water and/or Sediment Monitoring Report shall contain the following information:

8.2.6.1. **Analysis.** An evaluation, interpretation, tabulation, and statistical comparison of the water and/or sediment monitoring data, including interpretations and conclusions as to whether applicable receiving water limitations in this Order have been attained at each sample station. Receiving water monitoring data shall also be compared to applicable water quality criteria and historical monitoring results, including a discussion on whether receiving water conditions are improving or degrading.

8.2.6.2. **Sample Location Map.** The locations, type, and number of samples shall be identified and shown on a site map.

8.2.6.3. **California Environmental Data Exchange Network**. A statement certifying that the monitoring results have been uploaded into CEDEN (see section 8.2.5 of this MRP).

9. OTHER MONITORING REQUIREMENTS

9.1. Post Fireworks Display Log

The Discharger shall maintain a written log for each public fireworks display event. The log shall be completed within five (5) days following each public fireworks event and shall be made available to the San Diego Water Board upon request. The log shall be submitted with the Annual Report and contain the following information:

- The name of the organization hosting the fireworks event with the names and license numbers of the pyrotechnic operators actually in charge of the display;
- The date, time, and duration of the public fireworks event;
- The location of the public fireworks event;
- The affected receiving waters;
- Certification that the FBMPP was fully implemented; and
- The amounts of fireworks debris collected and visual monitoring observations noted from after event firing range inspections and any other pertinent information.

9.2. Display of Fireworks Post Event Report Form

The Discharger shall complete the Display of Fireworks Post Event Report Form (Attachment C) for each firework event. Completed reports shall be submitted to the San Diego Water Board no later than thirty (30) calendar days following the end of the month in which the display of fireworks event occurred and shall be submitted with the Annual Report.

9.3. Annual Report

The Discharger shall submit an Annual Report by August 30 each year, covering the previous year (August 1 through July 31), containing the following information:

- A cover letter that includes the following:
  - Clear identification of any violations or a clear statement that there were no violations;
  - Detailed description of any violations, their causes, and corrective actions taken or planned to resolve them and prevent recurrence; and
  - Signature and certification in accordance with section 5.2 of the Standard Provisions (Attachment D).
- A list of fireworks events and their locations held during the year.
- Attachments of completed Post Fireworks Display Log(s), Display of Fireworks Post Event Form(s), and Visual Monitoring Report(s).
- A comprehensive discussion of corrective actions taken or planned, including but not limited to BMP changes implemented during the previous year and changes planned for the following year.

If there were no fireworks displays within the monitoring period, the Discharger is required to submit a statement certifying there was no fireworks displays during the monitoring period.

10. REPORTING REQUIREMENTS

10.1. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

10.2. Self-Monitoring Reports (SMRs)

10.2.1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (https://www.waterboards.ca.gov/water_issues/programs/ciwqs). The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal. The Discharger shall maintain sufficient staffing and resources to ensure it submits SMRs that are complete and timely.

10.2.2. The Discharger shall report the results for all monitoring specified in this MRP under sections 8.1, 8.2 (if applicable), 9.1, 9.2, and 9.3. The Discharger shall submit SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

10.2.3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-1. Monitoring Periods and Reporting Schedule

Report Type	Monitoring Period	SMR Due Date
Annual Report	August 1 – July 31	August 30
Display of Fireworks Post Event Report Form and Visual Monitoring Report	First day of calendar month through last day of calendar month	30 days following the end of the month in which the display of fireworks event occurred[1]
Water and/or Sediment Monitoring Report	As described in the Water and/or Sediment Monitoring Plan	As described in the Water and/or Sediment Monitoring Plan

[1] For example, if a display of fireworks event is on March 1, the Display of Fireworks Post Event Report Form and Visual Monitoring Report is due on April 30. Display of Fireworks Post Event Report Form and Visual Monitoring Report for July 4th events may be submitted with the Annual Report to comply with this due date.

10.2.4. **Reporting Protocols.** The Discharger shall report with each sample result the applicable reported Minimum Level (reported ML, also known as the Reporting Level, or RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR part 136. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

10.2.4.1. Sample results greater than or equal to the ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

10.2.4.2. Sample results less than the ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

10.2.4.3. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

10.2.4.4. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

10.2.5. **Compliance Determination.** This Order requires the use of minimum stipulated BMPs to control and abate the discharge of pollutants from public fireworks events to surface waters in the San Diego Region. Proper implementation of the BMPs will assure the protection of water and sediment quality within the receiving waters. Dischargers enrolled under this Order are expected to comply with all water and sediment quality objectives through the implementation of BMPs. Compliance will be determined by evaluating the proper implementation of the minimum stipulated BMPs and their effectiveness in preventing and minimizing pollutant loading from public fireworks events to surface waters. Compliance will also be evaluated using information obtained under the monitoring and reporting program of this Order.

10.2.6. **Multiple Sample Data.** When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of DNQ or ND, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

10.2.6.1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

10.2.6.2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

10.2.7. The Discharger shall submit SMRs in accordance with the following requirements:

10.2.7.1. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

10.2.7.2. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

10.2.7.3. The Discharger must sign and certify all SMRs in accordance with the signatory requirements of section 5.2 of the Standard Provisions (Attachment D).

10.3. Discharge Monitoring Reports – Not Applicable

10.4. Other Reports – Not Applicable

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section 3.4 of this Order, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) incorporates this Fact Sheet as findings of the San Diego Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in the State of California (State). Only those sections of this Order that are specifically identified as “not applicable” have been determined not to apply to Dischargers under this Order. Sections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

1. DISCHARGE INFORMATION

1.1. Introduction

This Order regulates residual pollutant discharges associated with the public display of fireworks to receiving surface waters of the United States (surface waters) within the jurisdiction of the San Diego Water Board. The San Diego Region covers a large portion of San Diego County, portions of South Orange County, and the southwestern portion of Riverside County based on hydrologic drainage areas. In this Order, the public display of fireworks refers to an entertainment feature where the public or a private group is admitted to or permitted to view the display or discharge of fireworks.

Public displays of fireworks (also referred to as fireworks shows or events) are conducted throughout the year at various locations within the San Diego Region as part of national and community celebrations and other special events. Located within the San Diego Region are entertainment theme parks and a major league baseball stadium that use firework displays during regular activities and special events. Additionally, fireworks displays and pyrotechnics special effects are periodically used in other venues such as business grand openings, special events, school events, sport events, and local fairs. The most significant and widespread use of fireworks displays in the San Diego Region are for annual Fourth of July and New Year’s Eve events. Firework display sites on or adjacent to urban shorelines are often the preferred setting to provide public access and avoid fire hazards associated with terrestrial display sites.

Typical fireworks constituents include, but are not 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. The chemical constituents burn at high temperatures when the firework is detonated which promotes incineration. The chemical constituents within the fireworks are scattered by the burst charge, which separates them from the fireworks casing and internal shell components. Firework combustion residue is 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. Un-ignited pyrotechnic material including duds and misfires can also fall into surface waters.

The receiving water fallout area affected by the fireworks residue can vary depending on wind speed and direction, shell sizes, the angle of mortar placement, the type and height of firework explosions and other environmental factors. Once the firework residue enters a water body, it can be transported to waters and shorelines outside the fallout area due to wind shear and tidal effects. The Clean Water Act (CWA), section 301(a), broadly prohibits the discharge of any pollutant to waters of the United States, except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Fireworks residue waste discharged into surface waters constitutes discharge of a pollutant from a point source within the meaning of the CWA. Therefore, coverage under an NPDES permit is required before residual pollutant discharges associated with the public display of fireworks can be lawfully discharged.

This Order requires implementation of best management practices (BMPs) to ensure the pollutant discharges associated with the public display of fireworks do not cause pollution or nuisance conditions in surface waters within the San Diego Region.

1.2. Background - NPDES Permit Program

The Federal Water Pollution Control Act, commonly referred to as the CWA, was enacted in 1972. The CWA established the NPDES permit program to regulate the discharge of pollutants from point sources, such as pipes, to waters of the United States. The NPDES program is designed to control toxic discharges, implement water quality standards, and restore and maintain “fishable and swimmable” designated beneficial uses in waters of the United States. Point sources that discharge pollutants to waters of the United States are authorized by obtaining and complying with the terms and conditions of NPDES permit. NPDES permits are effective for fixed terms not to exceed five years. Either the United States Environmental Protection Agency (USEPA) or states with USEPA-approved programs are authorized to issue NPDES permits. California has a USEPA-approved program.

NPDES permits commonly contain numerical effluent limits on the amounts of specified pollutants that may be discharged and specified BMPs designed to minimize water quality impacts. Federal regulations allow the use of other requirements such as BMPs in lieu of numerical effluent limits if the latter are infeasible. These numerical effluent limitations and BMPs or other non-numerical effluent limitations implement both technology-based and water quality-based requirements of the CWA. Technology-based limitations represent the degree of control that can be achieved by point sources using various levels of pollution control technology if necessary to achieve compliance with applicable water quality standards.

Water quality standards, as defined in CWA section 303(c), consist of the beneficial uses of a water body and criteria (referred to as water quality objectives in California) to protect those uses and an anti-degradation policy. The criteria can be

either narrative or numeric. A typical narrative criterion, for example, prohibits "the discharge of toxic pollutants in toxic amounts." Numeric criteria establish pollutant concentrations or levels in water that protect beneficial uses. An example of a numeric saltwater criterion for copper to protect aquatic life is 3.1 micrograms per liter (µg/l) as a monthly average.

The states are primarily responsible for the adoption of water quality standards, although USEPA has oversight and promulgation authority. In California, water quality standards are found in statewide and regional water quality control plans. Water quality control plans contain beneficial use designations, water quality objectives to protect those uses, and a program to implement the objectives. Water quality objectives are the state equivalent of federal criteria under CWA section 303(c).

In California, the California State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards (Regional Water Boards) issue and administer NPDES permits under a USEPA-approved program. To maintain program approval, state and federal laws require that permits ensure consistency with the CWA and implementing USEPA regulations. State statutory authority for the NPDES permit program is found in Chapter 5.5, Division 2 of the California Water Code (Water Code) which ensures consistency with the CWA requirements for state permit programs. The permits must "apply and ensure compliance with" all applicable provisions of the CWA and "with any more stringent effluent standards or limitations necessary to implement water quality control plans." In addition, permits must be issued and administered in accordance with the applicable USEPA permit regulations. The provisions of Chapter 5.5 prevail over other Water Code provisions to the extent of any inconsistency.

1.2.1. **Petition and Litigation of Order No. R9-2011-0022**

On June 10, 2011, the Coastal Environmental Rights Foundation (CERF) petitioned for State Water Board to review the San Diego Water Board's adoption of Order No. R9-2011-0022. The State Water Board ultimately denied CERF's petition in October 2014.

On November 13, 2014, CERF filed a petition for writ of mandate, Case No. 37-2014-00038672-CU-WM-CTL, with the Superior Court for the State of California, County of San Diego, Central Division (Superior Court), challenging Order No. R9-2011-0022. On January 15, 2016, the Superior Court denied CERF's petition for writ of mandate on the basis that CERF failed to meet its burden to demonstrate an abuse of discretion by the San Diego Water Board.

CERF filed a notice of appeal from the Superior Court's judgement. On May 8, 2017, the Court of Appeal, Fourth Appellate Division (Court of Appeal), affirmed the Superior Court's judgment. Specifically, the Court of Appeal held that the San Diego Water Board has wide discretion in developing and imposing monitoring requirements and can rely on visual monitoring in appropriate contexts. The Court of Appeal further held that the San Diego Water Board's utilizations of the Ocean Plan's exception for limited term activities in areas designated Areas of Special Biological Significance (ASBSs) was appropriate as the fireworks events

near areas designated ASBS occur only once per year, the events would not permanently degrade water quality, and the events are subject to proper implementation of BMPs to minimize the discharge of residual pollutants from fireworks events.

1.3. Discharge Description

1.3.1. Firework Categories

Fireworks are a class of low explosive pyrotechnic devices used for aesthetic or entertainment purposes. Firework devices take many forms to produce four primary effects: noise, light, smoke, and floating materials (e.g. confetti). Fireworks may be designed to burn with colored flames and sparks including red, orange, yellow, green, blue, purple, and silver.

Professional pyrotechnic devices used in fireworks displays can be grouped into three general categories: 1) aerial shells (paper and cardboard spheres or cylinders filled with pyrotechnic materials), 2) low-level comet and multi-shot devices such as roman candles, and 3) set piece displays mounted on the ground.

Aerial fireworks typically either provide their own propulsion (e.g. a skyrocket using a solid rocket motor) or are shot into the air in an aerial shell by a mortar using a black powder lifting charge or propellant. Most of the incendiary elements and shell casings burn up in the atmosphere; however, portions of the casings, internal structural components, and chemical residue fall back to the ground or receiving water bodies. The aerial shell typically consists of a cylinder or spherical cartridge, usually constructed of paper, plastic, or cardboard, and may include some plastic or paper internal components used to compartmentalize chemicals within in the shell. The shell casing contains a burst charge, pyrotechnic material that emits prescribed colors when detonated, a fuse and a black powder lift charge. Aerial shells are often combined to make, when detonated, a great variety of sparkling shapes, often variously colored.

Colors in fireworks are usually generated by pyrotechnic stars—usually just called stars—which produce intense light when ignited. Stars contain five basic types of ingredients:

- A fuel which allows the star to burn.
- An oxidizer—a compound which produces (usually) oxygen to support the combustion of the fuel.
- Color-producing chemicals.
- A binder which holds the pellet together.
- A chlorine donor which provides chlorine to strengthen the color of the flame. Sometimes the oxidizer can serve this purpose.

Attached to the bottom of an aerial shell is a lift charge of black powder. The lift charge and shell are placed at the bottom of a mortar buried in earth/sand or affixed to a wooden rack. A fuse attached to the lift charge is ignited with an

electric charge or heat source, the lift charge explodes, and propels the shell through the mortar tube and into the air to a height determined by the amount of powder in the lift charge and the weight of the shell. As the shell travels skyward, a delayed secondary fuse eventually ignites the burst charge within the shell at the peak altitude. The burst charge detonates, igniting and scattering the stars, which may have smaller secondary explosions. Shells can be launched 1 at a time or in a barrage of simultaneous or quick succession launches and are typically designed to detonate between 200 and 1,000 feet above ground level.

Low-level firework devices consist of stars packed linearly within a tube. When ignited, the stars exit the tube in succession producing a fountain effect of single or multi-colored light as the stars incinerate through the course of their flight. Typically, the stars burn rather than explode, thus producing a ball or trail of sparkling light to a prescribed altitude where they simply extinguish. Sometimes the stars may terminate with a small explosion similar to a firecracker. Other low-level devices emit a projected hail of colored sparks or perform erratic low-level flight while emitting a high-pitched whistle. Some emit a pulsing light pattern or crackling or popping sound effects. In general, low-level launch devices and encasements remain on the ground or attached to a fixed structure and can be removed upon completion of the display. Common low-level devices are multi-shot devices, mines, comets, meteors, candles, strobe pots, and gerbs, which are designed to produce effects between 0 and 200 feet above ground level.

Set piece or ground level fireworks are primarily static in nature and remain close to the ground. They are usually attached to a framework that may be crafted in the design of a logo or familiar shape, illuminated by pyrotechnic devices such as flares, sparklers, and strobes. These fireworks typically deploy bright flares and sparkling effects that may also emit limited sound effects such as cracking, popping, or whistling. Set pieces are usually used in concert with low-level effects or an aerial show and sometimes act as a centerpiece for the display. It may have some moving parts, but typically does not launch devices into the air. Set piece displays are typically designed to produce effects between 0 and 50 feet above ground level.

1.3.2. Firework Chemical Constituents

A partial list of chemicals used in fireworks as fuels, oxidizers, binding agents, coloration effects and sound effects are provided in Table F-1 below. The detonation of fireworks over or adjacent to surface waters may result in the discharge of these and other pollutants to surface waters:

Table F-1. Fireworks Chemical Constituents

Symbol	Name	Fireworks Usage
Al	Aluminum	Aluminum is used to produce silver and white flames and sparks. It is a common component of sparklers.

Symbol	Name	Fireworks Usage
Ba	Barium	Barium is used to create green colors in fireworks, and it can also help stabilize other volatile elements.
C	Carbon	Carbon is one of the main components of black powder, which is used as a propellant in fireworks. Carbon provides the fuel for a firework. Common forms include carbon black, sugar, or starch.
Ca	Calcium	Calcium is used to deepen firework colors. Calcium salts produce orange fireworks.
Cl	Chlorine	Chlorine is an important component of many oxidizers in fireworks. Several of the metal salts that produce colors contain chlorine.
Cs	Cesium	Cesium compounds produce indigo color in fireworks.
Cu	Copper	Copper compounds produce blue colors in fireworks.
Fe	Iron	Iron is used to produce sparks. The heat of the metal determines the color of the sparks.
K	Potassium	Potassium compounds help to oxidize firework mixtures. Potassium nitrate, potassium chlorate, and potassium perchlorate are all important oxidizers. The potassium content can impart a violet color to the sparks.
Li	Lithium	Lithium is a metal that is used to impart a red color to fireworks. Lithium carbonate, in particular, is a common colorant.
Mg	Magnesium	Magnesium burns a very bright white, so it is used to add white sparks or improve the overall brilliance of a firework.
Na	Sodium	Sodium imparts a gold or yellow color to fireworks; however, the color is often so bright that it frequently masks other, less intense colors.
O	Oxygen	Fireworks include oxidizers, which are substances that produce oxygen in order for burning to occur. The oxidizers are usually nitrates, chlorates, or perchlorates. Sometimes the same substance is used to provide oxygen and color.
P	Phosphorus	Phosphorus burns spontaneously in air and is also responsible for some glow in the dark effects. It may be a component of a firework's fuel.
S	Sulfur	Sulfur is a component of black powder, and as such, it is found in a firework's propellant/fuel.
Sb	Antimony	Antimony is used to create firework glitter effects.

Symbol	Name	Fireworks Usage
Sr	Strontium	Strontium salts impart a red color to fireworks. Strontium compounds are also important for stabilizing fireworks mixtures.
Ti	Titanium	Titanium metal can be burned as powder or flakes to produce silver sparks.
Zn	Zinc	Zinc is a bluish white metal that is used to create smoke effects for fireworks and other pyrotechnic devices.

Various factors can affect the levels of firework chemical residues in surface waters adjacent to fireworks displays, such as the frequency of firework events, the overall amount of ignited fireworks per event, efficiency of perchlorate oxidation which controls the mass of perchlorate introduced to the environment, wind direction, and velocity which controls the dispersion and fall-out of firework particles. All of these factors associated with the detonation of fireworks have a potential to adversely affect or contribute to degradation of water and sediment quality within the receiving waters.

1.3.3. Perchlorate Considerations

One of the main constituents of concern in firework discharges is perchlorate. The detonation of fireworks can result in the release of perchlorate into the environment and surface waters. Perchlorate is a chemical that is both manufactured and naturally occurring. Most commonly found in the form of perchloric acid and salts, perchlorate is highly soluble, mobile in groundwater and surface water, and persistent in the environment. Most fireworks are believed to contain potassium perchlorate, an inorganic salt that is a strong oxidizer. The manufacturers of fireworks use potassium perchlorate in the compositions that produce colored smokes and bursts. Its presence in the environment has been attributed to past waste handling practices at facilities that manufacture or use perchlorate and materials containing the chemical. It may also be present in the environment as a consequence of using perchlorate-containing products such as solid rocket propellant, flares, fireworks, pyrotechnic devices including fireworks, and explosives. Perchlorate can greatly impact human health by interfering with iodide uptake into the thyroid gland. In adults, the thyroid gland helps regulate the metabolism by releasing hormones, while in children, the thyroid helps in proper development. Although research has found that perchlorate at high levels can limit the uptake of iodide by the thyroid gland, studies have not directly measured the impact of perchlorate on human metabolism and growth.

Perchlorate effects on the thyroid gland are the basis of the 1 µg/L public health goal (PHG) for drinking water established in 2015. A PHG is a level of a contaminant in drinking water that does not pose a significant short-term or long-term health risk. A PHG is not a regulatory requirement. Instead, it is a goal for drinking water that California's public water suppliers and regulators should strive to meet if it is feasible to do so.

Monitoring by the California Department of Public Health and operators of public water systems have shown perchlorate to be a widespread drinking water contaminant occurring in several hundred wells, mostly in Southern California. Perchlorate was also found in the Colorado River, an important source of water for drinking and irrigation, where its presence resulted from contamination from ammonium perchlorate manufacturing facilities in Nevada.

Based on all of these considerations, the California Department of Public Health took action in October 2007 to regulate perchlorate as a drinking water contaminant with a maximum contaminant level (MCL) of 6 µg/L.

1.3.4. **Existing Studies on Effects of Fireworks**

The infrequence of fireworks displays at most locations, coupled with the wide dispersion of constituents make detection of residual firework pollutants difficult. In addition, pollution from other sources makes measuring the amount of pollution difficult considering subsequent effects that specifically comes from fireworks. The possible toxicity of any fallout may also be affected by the amount of black powder used, the type of oxidizer used, the colors produced, and the launch method.

A study was conducted on a small lake located at Epcot Center, a theme park at the Walt Disney World Resort in Lake Buena Vista, Florida, between 1982 and 1992, to evaluate the impact of repeat fireworks displays (approximately 2,000 shows over a decade). Sampling of both water-column and sediments was conducted intermittently over the ten-year period. The testing revealed higher than normal concentrations of antimony, barium, and strontium, three common ingredients of fireworks, demonstrating that residual firework pollutants do accumulate over time.

A team led by USEPA's Richard Wilkin conducted research on the use of pyrotechnic devices over bodies of water noting concerns over the effects of environmental perchlorate on human health and wildlife. Sources of perchlorate range from lightning and certain fertilizers to the perchlorate compounds in rocket fuel and explosives. It had been long suspected that community fireworks displays were another source, but few studies had been done on the topic. Wilkin's group has now established fireworks displays as a source of perchlorate contamination by analyzing water in an Oklahoma lake before and after annual Fourth of July fireworks displays in 2004, 2005 and 2006. Within 14 hours after the fireworks, perchlorate levels rose 24 to 1,028 times above background levels. Levels peaked about 24 hours after the display, and then decreased to the pre-fireworks background within 20 to 80 days.

The American Legion Post #432 hosts an annual Fourth of July fair and fireworks display at Shamel County Park in Cambria, California that takes place within the boundaries of the Monterey Bay National Marine Sanctuary (Sanctuary). In 2001, the Sanctuary developed an Environmental Assessment to observe the impacts of fireworks displays. According to the Environmental Assessment, sea lions were observed to evacuate haul-out areas upon initial detonation of fireworks, and return within 4 to 15 hours after the fireworks display end while harbor seals were seen to remain in the water around the haul-out site after initial fireworks

detonation. The Sanctuary, United States Fish and Wildlife Service, and the National Marine Fisheries Service previously determined that fireworks displays, such as the one at Shamel County Park, are not likely to significantly impact the overall populations of endangered or threatened species and have recommended mitigation and conservation measures when authorizing fireworks displays within the Sanctuary to minimize or avoid impacts to marine resources. Marine mammals can be impacted by light, sounds, and debris from exploding fireworks. These impacts are mitigated by limiting the length of each fireworks display, limiting the type of fireworks that could be launched at the beginning of an event, and requiring extensive cleanup following each fireworks event.

1.3.5. **Summary and Analysis of Existing Data**

The public display of fireworks at SeaWorld San Diego (SeaWorld) have historically been performed nightly during summer months. Under SeaWorld's Master Plan, as approved by the California Coastal Commission, SeaWorld may present up to 150 fireworks events per year; however, SeaWorld typically conducted less and significantly reduced the number of fireworks events from 2017 through 2020. SeaWorld performed 7 firework display events in 2017, 12 events in 2018, 17 events in 2019, and 1 event in 2020.

Due to the number of fireworks display events and the potential for water and sediment quality impacts, SeaWorld conducted fireworks-related receiving water monitoring for sediment and water quality since about 2001 in accordance with its individual NPDES permit, NPDES No. CA0107336. On December 17, 2007, the San Diego Water Board made revisions to the individual NPDES permit for SeaWorld San Diego (Order No. R9-2005-0091) to incorporate requirements for the discharge of pollutants associated with the public display of fireworks to Mission Bay. In 2011, SeaWorld enrolled in the previous Order, Order No. R9-2011-0022, *General 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*. Under Order No. R9-2011-0022, SeaWorld was designated as a Category 1 Discharger required to conduct receiving water monitoring. Order No. R9-2011-0022 allowed Category 1 Dischargers to propose the frequency of water quality monitoring and required sediment monitoring at minimum once every three years. Under Order No. R9-2011-0022, SeaWorld conducted receiving water quality and sediment chemistry and toxicity monitoring annually, and benthic community monitoring once every three years.

SeaWorld's fireworks events have occurred at the same location in Mission Bay and would be expected to represent the maximum firework pollutant loading conditions and cumulative effects on a surface water body in the San Diego Region. Accordingly, discharges from SeaWorld's fireworks events likely represent the maximum firework pollutant loading conditions and cumulative effects due to a combination of factors such as 1) the restricted circulation of waters within Mission Bay, 2) the shallow depth of the bay in the vicinity of the fireworks events, and 3) the high frequency of repeat fireworks events throughout

the year at the same location. Other water bodies, however, can exhibit different and unique effects from firework event discharges due to site specific factors.

1.3.5.1. Water Quality

Under its individual NPDES permit, SeaWorld conducted water quality monitoring following two Labor Day events in 2008 and 2009 and one Fourth of July fireworks event in 2009. These 3 events had a larger discharge, with approximately 1,000 pounds of net explosive weight used per event. Water quality sampling following these dates found receiving waters in the fireworks fallout area to exceed both California Toxic Rule (CTR) saltwater criteria and levels documented at the reference sites. Pollutants such as arsenic, copper, mercury, tin, zinc and phosphorous were detected at levels above CTR saltwater criteria or at elevated levels compared to the reference sites. However, only phosphorous exceeded instantaneous water quality criteria.

While dissolved water chemistry during major events showed one exceedance and elevated levels of some pollutants, the dissolved form of pollutants may not be representative of fireworks discharges. The June 2010 *Sea World Aerial Fireworks Displays NPDES Permit Addendum Summary Report* suggests that the lack of exceedances of CTR saltwater criteria may be due to a number of factors, including settling and a short residence time in the water. CTR saltwater criteria for metals is in the dissolved form; however, all NPDES permit effluent limitations for metals are required to be expressed in the 'total recoverable metal' (see 40 CFR section 122.45 and 40 CFR part 136). Based upon the potential nature of the discharge form (particulate) and pertinent federal regulations, the data was also examined for differences in total metals between the fireworks discharge zone and the reference sites. The sampling showed increased total concentrations in the fireworks discharge zone relative to the reference site(s) for aluminum, cadmium, chromium, copper, lead, nickel, selenium, thallium, vanadium, and zinc. This indicates that the dominant form of the discharge is in particulate form. However, the only metals with levels in the discharge zone that were at or above instantaneous dissolved CTR saltwater criteria were copper and zinc.

While the water quality sampling showed elevated levels of pollutants within the fireworks fallout area relative to reference sites, the elevated levels were following large events and typically below applicable water quality criteria. Monitoring of SeaWorld's major fireworks events was typically conducted approximately 12 hours following the event, and for the Fourth of July event, approximately 36 hours following the event. The representativeness of the sampling is likely influenced by a number of factors including the form of the discharge (dissolved or particulate form), tidal magnitude and timing, and salinity. Again, the unknown variability in these factors is reflected within the June 2010 *Sea World Aerial Fireworks Displays NPDES Permit Addendum Summary Report,* which lists factors such as "currents and tidal mixing, the short residence time of fireworks debris in the water, adsorption, settling, and the fact that the majority of the fireworks chemicals are incinerated upon

detonation" as potential contributing factors to the documented results. However, water quality sampling found elevated pollutant levels relative to the reference sites after major events.

Under the previous Order, Order No. R9-2011-0022, water quality sampling was conducted after the conclusion of the summer fireworks events. Water column concentrations of pollutants within the fireworks fallout area and at the reference stations generally decreased from historical maximum concentrations. Perchlorate and bis(2-ethylhexyl) phthalate were typically detected at higher concentrations within the fireworks fallout area compared to the reference stations, but the concentrations were below applicable screening levels. Total metal concentrations were generally higher than dissolved metal concentrations, and both total and dissolved metals concentrations were generally higher within the fireworks fallout area but were within the same order of magnitude as those at the reference stations. Concentrations of total metals in water were generally below the ecological screening levels, and dissolved metals concentrations were generally below both acute and chronic CTR saltwater criteria. Total phosphorus concentrations were typically higher in the fireworks fallout area compared to the reference stations for most sampling events, but the concentrations in the fireworks fallout area and reference stations were within the same order of magnitude.

In summary, with the exception of perchlorate and bis(2-ethylhexyl) phthalate, water quality sampling of regular SeaWorld fireworks events (typically involving the detonation of approximately 170 pounds of net explosive weight) to date showed little evidence of pollutants within the receiving water column at levels above applicable water quality criteria or detected reference site levels. Comparison of instantaneous and average concentrations of dissolved metals in water samples taken after SeaWorld's typical fireworks displays to CTR saltwater criteria generally show that the instantaneous and average dissolved concentrations of metals typically fall below both continuous exposure and maximum exposure concentrations.

1.3.5.2. Sediment Quality

SeaWorld's sediment monitoring in Mission Bay found enrichment of 11 metals within the fireworks zone when compared to one reference site (barium, chromium, cobalt, copper, molybdenum, potassium, selenium, silver, thallium, titanium, and vanadium) and 4 metals (barium, cobalt, copper, and vanadium) when compared to both reference sites. It is important to note that sediment grain size is finer within the fireworks fallout area when compared to the reference stations and the absorptive capacity of finer-grained sediment is greater than coarser-grained sands. Sediment grain size and concentration analysis found correlations for barium, cobalt, chromium, copper, titanium, and vanadium. The data provides an indication of an accumulation of pollutants over time within the fireworks fallout area when compared to the reference sites.

Based on SeaWorld's sediment toxicity and benthic community analysis, any sediment quality conclusions are difficult when comparing the differences found between the reference stations and the fireworks fallout area. Additional monitoring may be necessary to separate possible effects associated with public display of fireworks and effects from other pollutant sources to Mission Bay, such as storm water discharges. The results for the short-term survival sediment toxicity sampling were highly variable spatially and temporally within the fireworks fallout area and temporally within the reference sites. Sediment toxicity test results for both reference sites and the fireworks fallout area ranged from non-toxic to highly toxic. Thus, any difference in short term toxicity was difficult to detect between and among the sites. All sites, including the reference sites, did appear to exhibit decreased survival rates when compared to laboratory control samples. However, not all samples within a site showed toxicity. While the sediment toxicity sampling conducted by SeaWorld utilized a methodology consistent with the previous iteration of the *Water Quality Control Plan for Enclosed Bays and Estuaries of California – Sediment Quality Provisions* (Sediment Quality Provisions), sampling done to determine compliance with Sediment Quality Objectives must include both a short-term survival toxicity test and a sublethal sediment toxicity test. The benthic infauna sampling found the reference sites and fireworks fallout area to have communities with a different species composition. The fireworks fallout sampling area consists of vegetated (*Zostera marina*) soft-bottom subtidal habitat while the reference sites were documented in sampling datasheets to be unvegetated soft-bottom. The differing habitat types made comparison of benthic communities difficult between the reference sites and fireworks fallout area. Thus, detecting or determining any benthic community impacts in the fireworks fallout area was not feasible with the data collected under SeaWorld's individual NPDES permit.

The data collected by SeaWorld under its individual NPDES permit was collected from August 2008 to March 2010. Although the data collected is insufficient for a full determination based upon the Sediment Quality Provisions, the Sediment Quality Objectives Line of Evidence Evaluation Tool (SQO LOE Tool) allows for the input of collected data in order to access the likelihood of biological exposure and effects from each line of evidence. For the data collected by SeaWorld, a number of chemical constituents required by the Sediment Quality Provisions were not collected, and only one of the required two toxicity tests was done. However, the data collected was entered into the SQO LOE Tool and evaluated for toxicity and chemical exposure. The fireworks fallout area could not be evaluated for benthic community condition as the SQO LOE Tool is specific to unvegetated subtidal. A total of six events were sampled by SeaWorld as follows: two spring pre-fireworks events, three major fireworks events, and one minor fireworks event. An additional seven reference sites in Mission Bay were sampled in 2006 and 2007. The total number of samples collected was 19 reference samples and 60 fireworks fallout area samples. Ten samples per event were taken within the fireworks fallout area.

The results for sediment chemistry showed a moderate number of impacted sediment samples (45 percent) in the fireworks fallout area prior to the beginning of SeaWorld's summer fireworks events. For sediment samples collected during the fireworks season (August and September 2008, July and September 2009), the number of impacted sediment samples increased, with almost 80 percent of samples qualifying as impacted. The number of qualified sediment samples at reference sites remained low during both periods, with pre-events sampling showing 10 percent of sediment samples as impacted. During the SeaWorld fireworks season this number increased slightly to 11 percent.

The results for sediment acute toxicity differed from the sediment chemistry results. The reference sites and the SeaWorld fireworks fallout area had more samples that were considered toxic during pre-event sampling than for samples collected during the fireworks season. Acute toxicity during the fireworks season was low, with less than 10 percent of samples and 0 percent of samples defined as toxic in the SeaWorld fireworks fallout area and reference sites, respectively. Presumably a factor external to the fireworks discharge resulted in acute toxicity in both areas. The June 2010 *SeaWorld Aerial Fireworks Displays NPDES Permit Addendum Summary Report* suggest that storm water runoff may be a possible source of the acute toxicity. This is a likely possibility, as rainfall records show 0.18" and 0.68" of rainfall occurring in March 2009 and 2010, respectively. These rainfall events occurred prior to the pre-event sample collection. While the sampling indicates the fireworks discharge did not cause acute toxicity, no sublethal toxicity testing was conducted. Therefore, sublethal effects from chemical exposure is unknown.

Under Order No. R9-2011-0022, SeaWorld's sediment analysis results were similar to historical results. Concentrations of metals, bis(2-ethylhexyl) phthalate, polychlorinated biphenyls (PCBs), and poly-aromatic hydrocarbons (PAHs) are generally higher within the fireworks fallout area when compared to the reference stations; however, some of these pollutants, such as PCBs, are not chemical constituents in fireworks.

Sediment within SeaWorld's fireworks fallout area was typically found to be non-toxic to low toxic level when compared to the laboratory controls and reference sites for both the lethal and sublethal endpoints. In 2018, one sample within the fireworks fallout area was found to be moderately toxic compared to the laboratory control. Generally, sediment was slightly more toxic within the fireworks fallout area compared to the reference stations within a sampling event.

Benthic infauna analysis results from both the fireworks fallout area and the reference stations were categorized from "reference" to "moderate" benthic disturbance. Generally, the mean number of species and mean abundance were similar within the fireworks fallout area compared to the reference stations. In 2012, mean number of species and mean abundance were higher within the fireworks fallout area compared to the reference stations. The

integrated benthic indicators (an integration of the four benthic indices for each sample) generally indicate a similar benthic community condition at the fireworks fallout area when compared to the Sail Bay reference station.

Once every three years, SeaWorld collected the three lines of evidence required to analyze the sediment data using the SQO LOE Tool (i.e., sediment chemistry, lethal and sublethal toxicity, and benthic infauna). Using SQO LOE Tool, samples within the fireworks fallout area were categorized from “likely impacted” to “unimpacted” and the two reference stations were categorized from “likely unimpacted” to “unimpacted”. In 2012, sediment at all locations in the fireworks fallout area were categorized as “unimpacted”, while the reference stations were categorized as “likely unimpacted”. In 2015, sediment at two locations in the fireworks fallout area were categorized as “likely impacted” and one location was categorized as “likely unimpacted”, while the reference stations were categorized “likely unimpacted” and “unimpacted”. In 2018, all locations within the fireworks fallout area were categorized as “possibly impacted”, while the reference stations were categorized as “unimpacted”. However, the 2018 assessment coincided with an extensive dredge and fill program in Mission Bay that took place from January through October 2018, which likely affected the results. Furthermore, the sediment quality assessment occurred in September 2018, when the number of fireworks displays was considerably lower than previous monitoring events when all three lines of evidence were collected. This indicates that the “possibly impacted” results were unlikely the result of the fireworks displays since fewer impacts were observed when more fireworks displays took place.

As discussed in the Sediment Quality Provisions, none of the individual lines of evidence is sufficiently reliable when used alone to assess sediment quality impacts due to toxic pollutants. Within a given site, individual lines of evidence may underestimate or overestimate the risk to benthic communities and do not indicate causality of specific chemicals. Thus, while sampling documented increased pollutant levels, the monitoring conducted to date is insufficient to discern if there are benthic impacts within the fireworks fallout area are attributable solely to the discharge of residual firework pollutants. However, the increase in pollutant levels within the sediment in the fireworks fallout area shows that the discharge of pollutants associated with larger fireworks events has the reasonable potential to cause or contribute to an exceedance of the narrative sediment quality objectives stated in section 6.2.6 of the Order.

Based on receiving water monitoring data obtained to date, single fireworks events of a smaller size than SeaWorld’s Fourth of July event are unlikely to cause exceedances of applicable water quality criteria in the water column of receiving waters. However, the continuous discharge of pollutants from large fireworks events and the cumulative discharges of smaller events may result in longer-term pollutant accumulation in bay sediments, similar to the enrichment observed in the SeaWorld fireworks fallout area. While sampling in the SeaWorld fireworks fallout area clearly documented an accumulation of metals within the fallout area sediment, the data on cumulative effects is too limited to

discern differences in accumulation between and among events, nor determine rates of accumulation or attenuation.

1.3.5.3. **Net Explosive Weight**

Fireworks net explosive weight varied among Dischargers enrolled under the previous Order, ranging from approximately 100 pounds to greater than 1,000 pounds. In the San Diego Region, SeaWorld conducted the most frequent fireworks events at Mission Bay and the Armed Services YMCA conducts the largest fireworks events at San Diego Bay.

Under Order No. R9-2011-0022, number of firework events per year at SeaWorld ranged from 1 event in 2020 to 88 events in 2012. The firework displays varied in length from approximately 6 minutes to 20 minutes, depending on the number of fireworks ignited during the displays. SeaWorld's typical fireworks display events consist of approximately 200 to 300 fireworks ignited with an estimated net explosive weight of approximately 170 pounds. The maximum residual firework pollutant loading on the receiving water occur on the Fourth of July events when up to 1,467 fireworks are ignited with an estimated net explosive weight of approximately 880 pounds.

The Armed Services YMCA conducts the Big Bay Boom Fourth of July fireworks displays at four locations within San Diego Bay. Collectively, the number of fireworks ignited ranged from approximately 3,500 to 6,000 fireworks and the estimated net explosive weight ranged from 3,000 to 6,130 pounds in total for all four fireworks display locations.

1.3.6. **Related Fireworks Regulations**

1.3.6.1. **Office of the California State Fire Marshall**

California's Fireworks Law, passed in 1938, established the Office of the State Fire Marshal (SFM) as the fireworks classification authority in California. Fireworks are classified through laboratory analysis, field examinations and test firing of items. As part of the program, SFM requires the licensing of all pyrotechnic operators, fireworks manufacturers, importer-exporters, wholesalers, retailers, and public display companies. Pyrotechnic operators, who discharge fireworks at public displays or launch high powered and experimental rockets, must also pass a written examination and provide proof of experience. The State's Explosives Law authorizes the California State Fire Marshal to adopt regulations for the safe use, handling, storage and transportation of fireworks in California. The laws and regulations governing the transportation, use and storage of fireworks in California are contained in:

- State Fireworks Law, California Health and Safety Code, Section 12500 – 12728;
- State Fireworks Regulations, Title 19, California Code of Regulations (CCR), Chapter 6;
- Storage, Title 27, Code of Federal Regulations (CFR) part 55, Sub-part K; and

- Hazardous Materials Transportation, Title 13, CCR.

1.3.6.2. **California State Department of Toxic Substances Control**

In light of the risks to public health and the environment posed by perchlorate releases, the California Legislature adopted the Perchlorate Contamination Prevention Act of 2003, amending Chapter 6.5 of Division 20 of, the Health and Safety Code and requiring the California Department of Toxic Substances Control (DTSC) to adopt regulations specifying BMPs for perchlorate and perchlorate-containing substances. The perchlorate BMP regulations were adopted on December 31, 2005 and are contained in CCR, Title 22. Social Security Division 4.5. Environmental Health Standards for the Management of Hazardous Waste Chapter 33. Best Management Practices for Perchlorate Materials Article 1, § 67384.1 - § 67384.11. These regulations provide at §67384.8 (c). Special Best Management Practices for Flares and Pyrotechnic Perchlorate Materials, that:

"Within twenty-four (24) hours of a public display of fireworks or the use of dangerous fireworks, the pyrotechnics operator, in addition to complying with title 19 of the California Code of Regulations, section 1003, shall, to the extent practical, collect any stars and un-ignited pyrotechnic material found during the required inspection of the entire firing range."

1.3.6.3. **United States Coast Guard**

The United States Coast Guard (USCG), pursuant to 33 CFR 100, implements a Marine Safety Program designed to ensure the safety of vessels and recreational boaters on navigable United States waters during fireworks display events. The USCG issues Marine Event permits to parties sponsoring or hosting public display of fireworks marine events that have the potential to endanger marine safety. An Application for Approval of Marine Event must be submitted to the USCG or approval no later than 135 days prior to the event if the applicant does not meet criteria specified in 33 CFR 100.15 (c), or 60 days prior to the event if the applicant does meet the criteria. After approving plans for the holding of a fireworks display event, the USCG is authorized to promulgate special local regulations as necessary to ensure public safety on navigable waters immediately prior to, during, and immediately after the approved fireworks event. Such regulations may include a restriction on, or control of, the movement of vessels through a specified fireworks display area.

1.3.6.4. **San Diego Air Pollution Control District**

The San Diego Air Pollution Control District (APCD) is the air pollution control agency for all of San Diego County. San Diego Air Pollution Control District Rule 101-Burnng Control was established to require that open burning in San Diego County be conducted in a manner that minimizes emissions and smoke, and is managed consistently with state and federal law. The provisions of Rule 101 specifically exempt fireworks displays and pyrotechnics used for creation of special effects [Sections (b)(1)(iii) and (b)(1)(iv)].

1.3.6.5. **South Coast Air Quality Management District**

The South Coast Air Quality Management District (AQMD) is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino Counties. The AQMD historically has not required permits for equipment associated with fireworks displays at theme park activities or annual celebrations. AQMD Rule 219- Exemptions From Written Permit Requirements, specifically exempts pyrotechnic equipment from written permit requirements. AQMD prohibitory Rule 444 - Open Burning, also provides exemption from rule provisions for various fireworks and pyrotechnics activities. However, AQMD Rules 401 - Visible Emissions, and 402 – Nuisance, do not provide exemption for emissions from fireworks displays or pyrotechnics used in the creation of special effects at theme parks.

1.3.6.6. **United States Department of Transportation**

Prior to transportation into and within the United States, all explosives, including fireworks, must be classed and approved by Department of Transportation (DOT). Federal hazardous materials (hazmat) transportation law (Federal hazmat law; 49 U.S.C., 5101 et seq.) authorizes DOT to issue classification documents in accordance with the Hazardous Materials Regulations (HMR; 49 CFR, parts 100 -185). All fireworks must be in compliance with, and meet the terms and conditions of, the American Pyrotechnic Association (APA) Standard 87-11 (which is incorporated by reference as part of the HMR, or be submitted to a DOT-approved laboratory for examination and classification (see 49 CFR 173.56(b)). If approved, fireworks are assigned an explosives classification number by the Associate Administrator of Hazardous Materials Safety. Approval holders also must comply with the rules set forth by the USCG; United States Customs and Border Protection; Bureau of Alcohol, Tobacco, and Firearms; as well as the Consumer Product Safety Commission.

2. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-2. Facility Information

Discharger	Any person discharging pollutants associated with the public display of fireworks to surface waters in the San Diego Region.
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	C
Watershed	San Diego Region watersheds
Receiving Water	Surface waters in the San Diego Region
Receiving Water Type	Ocean waters, enclosed bays, estuaries, and inland surface waters

2.1. Discharger Eligibility Criteria

Any person who proposes to discharge pollutants from the display of fireworks to surface waters of the United States in the San Diego Region may submit a Notice of Intent (NOI) for coverage under this Order. The NOI may address multiple fireworks events at different locations throughout the San Diego Region. When a fireworks event(s) is hosted by one person but is operated or conducted by another person, it is the host's duty to submit an NOI and obtain coverage under this Order. The San Diego Water Board may require the joint submission of an NOI from both the host and the person operating the fireworks event on a case-by-case basis.

2.2. Permit Application

To obtain coverage under this Order, a Discharger must submit a complete application containing the items below to the San Diego Water Board no later than sixty (60) days prior to a fireworks event, unless a shorter deadline has been granted by the San Diego Water Board. The application must contain the following items:

- A completed NOI form (Attachment B) signed in accordance with the signatory requirements of the Standard Provisions in Attachment D, Section 5.2. Signatory and Certification Requirements.;
- Payment of the application fee, equal to the first annual fee, made payable to State Water Resources Control Board or "SWRCB;" and
- A Fireworks Best Management Practices Plan (FBMPP) pursuant to section 5.2.1. of this Order.

The NOI, including, the application fee, and other attachments must be submitted to the following address:

San Diego Water Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

Attn: Fireworks General NPDES Permit
Source Control Regulation Unit
NOTICE OF INTENT

The San Diego Water Board has implemented an Electronic Content Management system to reduce paper use. Please convert all submissions with attachments to a searchable Portable Document Format (PDF) and submit the NOI and associated attachments by email to SanDiego@waterboards.ca.gov, with the subject line titled "Notice of Intent – Fireworks General NPDES Permit". The Discharger must submit a request for an amended Notice of Applicability (NOA) when a fireworks event is proposed at a new location.

2.3. Notice of Applicability

The San Diego Water Board will review the application package for completeness and applicability to this Order. The Discharger is authorized to discharge firework pollutants starting on the effective date specified in the San Diego Water Board's

Notice of Applicability (NOA). Order coverage will be effective when all of the following have occurred:

- The Discharger submitted a complete permit application and the application fee;
- The San Diego Water Board accepted the FBMPP; and
- The San Diego Water Board issued an NOA to the Discharger.

2.4. Dischargers Covered Under Order No. R9-2011-0022

Dischargers subject to Order No. R9-2011-0022 (referred to in this Order as existing Dischargers) will continue coverage under Order No. R9-2011-0022 for up to one year following the effective date of this Order. Existing Dischargers are required to continue to comply with Order No. R9-2011-0022 until their enrollment under this Order has been processed. After May 31, 2023, all Notices of Enrollment issued under Order No. R9-2011-0022 will be administratively terminated by the San Diego Water Board. Existing Dischargers are required to submit a new application to enroll in this Order no later than February 28, 2023, for continued coverage.

2.5. Notice of Exclusion (NOEX)

The San Diego Water Board may issue a Notice of Exclusion (NOEX), which either terminates the permit coverage or requires submittal of an application for an individual permit. An NOEX is a notice that indicates that the Discharger or proposed Discharger is not eligible for coverage under this Order and states the reason why. This justification can include, but is not limited to, necessity to comply with a total maximum daily load or to protect sensitive water bodies.

2.6. Fees

Under this Order, fireworks discharges require no treatment systems to meet the terms and conditions of this Order and pose no significant threat to water quality. As such, these discharges are classified as Category 3 pursuant to the fee schedule. This category is appropriate because firework discharges incorporate BMPs to control potential impacts to beneficial uses, and this Order prohibits firework residual pollutants from causing excursions of water quality objectives. The annual fee associated with this category can be found on the Water Quality Fees webpage under NPDES Permit Fees (https://www.waterboards.ca.gov/resources/fees/water_quality/#npdes).

2.7. Terminating Coverage

To terminate permit coverage, a Discharger must submit a complete and accurate Notice of Termination (NOT) (Attachment I) by email to SanDiego@waterboards.ca.gov, with the subject line titled “Notice of Termination – Fireworks General NPDES Permit”. The Discharger’s coverage under this Order terminates on the termination effective date of the termination letter issued by the San Diego Water Board. Prior to the termination effective date, the Discharger is subject to the terms and conditions of this Order and is responsible for submitting

the annual fee and all reports associated with this Order. Discharger must submit an NOT when one of the following conditions occurs:

- A new host has taken over responsibility of the Discharger's fireworks display activities covered under an existing NOI;
- The Discharger has ceased all discharges from fireworks displays for which it obtained Order coverage and does not expect to discharge during the remainder of this Order term; or
- The Discharger has obtained coverage under an individual permit for all residual firework pollutant discharges to waters of the United States required to be covered by an NPDES permit.

2.7. Transfer of Ownership

Enrollment under this Order is not transferable. The enrolled Discharger must submit an NOT to the San Diego Water Board in the event of a new host has taken over responsibility of the Discharger's fireworks display activities. The new succeeding owner or operator must submit an application for enrollment under this Order and obtain authorization from the San Diego Water Board.

2.8. The discharge of residual firework pollutants to surface waters of the United States in the San Diego Region was previously regulated by Order No. R9-2011-0022, NPDES No CAG999002, adopted on May 11, 2011, expired on May 31, 2016, and administratively extended until the effective date of this Order.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the requirements and authorities described in this section.

3.1. Legal Authorities

This Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the CWA and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing Dischargers to discharge into waters of the United States as described in section 1 of the Order.

3.2. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

3.3. State and Federal Laws, Regulations, Policies, and Plans

3.3.1. **Water Quality Control Plan.** The San Diego Water Board adopted *Water Quality Control Plan for the San Diego Basin* (Basin Plan) on September 8, 1994, (with amendments on or before December 8, 2020) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan.

Requirements in this Order implement the Basin Plan. In addition, the Basin Plan implements State Water Board Resolution 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to surface waters within the San Diego Region include:

Municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), industrial process supply (PROC), ground water recharge (GWR), hydropower generation (POW), contact water recreation (REC1), noncontact water recreation (REC2), commercial and sport fishing (COMM), biological habitats of special significance (BIOL), warm freshwater habitat (WARM), cold freshwater habitat (COLD), wildlife habitat (WILD), estuarine habitats (EST), preservation of rare, threatened or endangered species (RARE), marine habitat (MAR), aquaculture (AQUA), migration of aquatic organisms (MIGR), spawning (SPWN), and shellfish harvesting (SHELL).

3.3.2. **ISWEBE Plan.** On August 7, 2018, the State Water Board adopted *Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Bacteria Provisions* (ISWEBE Plan), which became effective on February 4, 2019. The ISWEBE Plan supersedes any numeric water quality objective for bacteria for the REC-1 beneficial use contained in Basin Plans and establishes new numeric bacteria objective and related implementation provisions. Requirements of this Order implement the bacteria objectives in ISWEBE Plan.

3.3.3. **Sediment Quality Provisions.** The State Water Board adopted the *Water Quality Control Plan for Enclosed Bays and Estuaries of California – Sediment Quality Provisions* (Sediment Quality Provisions) on September 16, 2008, became effective on August 25, 2009, and was amended on April 6, 2011, June 8, 2011, and June 5, 2018. The Bays and Estuaries Plan supersedes other narrative sediment quality objectives and establishes new sediment quality objectives and related implementation provisions for specifically defined sediments in most bays and estuaries. Requirements of this Order implement the sediment quality objectives of the Sediment Quality Provisions.

3.3.4. **California Ocean Plan.** The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, 2009, 2012, 2015, and 2018. The State Water Board adopted the latest amendment on August 7, 2018, the USEPA approved the amendments on March 22, 2019, and it became effective on March 22, 2019. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies the following beneficial uses of ocean waters of the State to be protected: industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish spawning and shellfish harvesting.

3.3.5. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About 40 criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.

3.3.6. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the San Diego Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

3.3.7. **Domestic Water Quality.** In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet maximum contaminant levels implemented by the Basin Plan that are designed to protect human health and ensure that water is safe for domestic use.

3.3.8. **Antidegradation Policy.** Federal regulation 40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16 ("Statement of Policy with Respect to Maintaining High Quality of Waters in California"). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The San Diego Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution 68-16.

3.3.9. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

3.3.10. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the take of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

3.3.11. **Marine Mammals Requirements.** This Order does not authorize any act which results in the take of marine mammals, under the federal Marine Mammal Protection Act (MMPA) (16 U.S.C. §§ 1361-1407) except as authorized by an agency with jurisdiction to protect those species under MMPA. The Discharger is responsible for compliance with all requirements of the MMPA for discharges authorized under this Order.

3.4. Impaired Water Bodies on the CWA section 303(d) List

The federal Clean Water Act requires States to identify and make a list of surface water bodies that are polluted. These water bodies, referred to in law as "water quality limited segments," do not meet water quality standards even after discharges of wastes from point sources have been treated by the minimum required levels of pollution control technology. Wastewater treatment plants, a city's storm drain system, or a boat yard, are a few examples of point sources that discharge wastes to surface waters. States are required to compile the water bodies into a list, referred to as the "Clean Water Act Section 303(d) List of Water Quality Limited Segments" (303(d) List). States must also prioritize the water bodies on the list and develop action plans, called total maximum daily loads (TMDLs) to improve the water quality.

On October 3, 2017, the State Water Board adopted Resolution No. 2017-0059, Approving the Clean Water Act Section 303(d) List for the Los Angeles Region and the Clean Water Act Section 303(d) List Portion of the Proposed 2014 and 2016 California Integrated Report, which included the 303(d) List for the San Diego region. In April 2018, USEPA approved the list of impaired water bodies, prepared by the State Water Board pursuant to CWA section 303(d), which are not expected to meet applicable water quality standards after implementation of technology-based effluent limitations.

Several water bodies in the San Diego Region are listed as impaired on the CWA section 303(d) list of waterbodies for pollutants generated by fireworks listed in Table F-1. The San Diego Water Board has the discretion to require additional measures and monitoring through the NOA to control and monitor pollutants from firework displays that have the potential to add pollutants to the CWA section 303(d) listed water body.

For an updated list of impaired waterbodies, please visit the San Diego Water Board's CWA Section 303(d) Website (https://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/index.shtml)

3.5. Other Plans, Polices and Regulations – Not Applicable

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the CFR: 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

4.1. Discharge Prohibitions

Discharges to surface waters in violation of prohibitions contained in this Order are violations of the CWA and therefore are subject to third party lawsuits. This Order retains discharge prohibitions IV.A through IV.F from Order No. R9-2011-0022. This Order adds the following discharge prohibitions for compliance with the Ocean Plan and TMDLs:

4.1.1. The Discharger must comply with Discharge Prohibitions contained in the Ocean Plan, incorporated into this Order as if fully set forth herein and summarized in Attachment H, as a condition of this Order.

4.1.2. Pursuant to the Total Maximum Daily Load (TMDL) wasteload allocation (WLAs), summarized in Attachment G of this Order, discharges of copper to the Shelter Island Yacht Basin (SIYB) watershed are prohibited. A monitoring result of non-detect using approved analytical laboratory methods and minimum levels for copper is required to comply with this Discharge Prohibition.

4.1.3. Pursuant to the TMDL WLAs, summarized in Attachment G of this Order, discharges of total nitrogen and total phosphorus to Rainbow Creek are prohibited. A monitoring result of non-detect using approved methods and minimum levels for total nitrogen and total phosphorus is deemed to comply with this Discharge Prohibition.

4.1.4. Pursuant to the TMDL WLAs, summarized in Attachment G of this Order, discharges of dissolved copper and zinc to Chollas Creek are prohibited. A monitoring result of non-detect using approved methods and minimum levels for dissolved copper, and zinc is deemed to comply with this Discharge Prohibition.

4.2. Effluent Limitations and Discharge Specifications

4.2.1. Technology-Based Effluent Limitations

Section 301(b) of the CWA and implementing USEPA regulations (40 CFR 122.44) require that permits include conditions meeting the applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs).

USEPA has not developed ELGs for this type of industry nor discharge. Section 402(a)(1) of the CWA and section 125.3 of the CFR authorize the use of best professional judgment to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern.

4.2.2. **Water Quality-Based Effluent Limitations**

Section 301(b) of the CWA and implementing USEPA permit regulations (40 CFR 122.44(d)) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

4.2.3. **Best Management Practices**

This Order authorizes the discharge of residual pollutants associated with public firework displays to surface waters within the San Diego Region. Due to the nature of the discharge, the San Diego Water Board finds that numeric technology- and water quality-based effluent limitations are infeasible for the following reasons:

- This Order regulates discharges of residual pollutants which are firework constituents or breakdown products that are present after the use of the fireworks for display and dispersed. Therefore, the exact residual pollutant levels in the discharge are immeasurable and undefined; and
- Providing effective treatment is impractical, given the numerous short duration, intermittent, and disperse residual firework pollutant releases to surface waters at many different locations.

NPDES regulations (40 CFR section 122.44(k)) allow for the use of BMPs to control or abate the discharge of pollutants under certain circumstances. NPDES regulations (40 CFR section 122.44(k)(3) and (k)(4)) provide that BMPs shall be included as permit conditions when numeric effluent limitations are infeasible, or the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

Therefore, this Order does not contain numerical effluent limitations. The primary mechanism for regulating such discharges are through the development and implementation of a FBMPP, as required by section 5.2.1 of this Order. The BMPs required herein constitute best available technology economically achievable and best conventional pollutant control technology and are intended to: 1) minimize the area and duration of adverse effects caused by the discharge of firework pollutants in the firing range and adjacent surface water(s) and 2) allow for restoration of water quality and protection of beneficial uses of the receiving waters to pre-fireworks discharge quality following completion of a public fireworks display event. Proper implementation of BMPs will minimize exposure of the receiving waters to pollutants and assure the protection of water quality and designated beneficial uses within the receiving waters. The BMPs incorporate conditions previously set by the California Coastal Commission and other regulatory agencies to minimize the impacts from public firework displays.

Dischargers enrolled under this Order are expected to comply with all water quality objectives through the implementation of BMPs.

4.3. Final Effluent Limitation Considerations

4.3.1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Consistent with the Order No. R9-2011-0022, this Order does not include effluent limitations. Instead, this Order requires the development and implementation of BMPs in an FMBPP.

4.3.2. Antidegradation Policies

The San Diego Water Board has determined that discharges authorized under this Order will be consistent with applicable antidegradation requirements of State Water Board Resolution No. 68-16, as well as USEPA policy established at 40 CFR 131.12. These provisions require that, at a minimum, existing instream water uses and the level of water quality necessary to protect those existing uses must be maintained. Where the existing water quality is better than the water quality objectives set to protect existing and potential beneficial uses, that quality must be maintained, unless specific findings are made.

4.3.3. Stringency of Requirements for Individual Pollutants

This Order requires the Discharger to develop and implement BMPs to regulate and control the discharge of residual pollutants associated with public fireworks events. The requirements established by this Order are no more stringent than necessary to implement the mandates of the CWA.

4.4. Interim Effluent Limitations – Not Applicable

4.5. Land Discharge Specifications – Not Applicable

4.6. Recycling Specifications – Not Applicable

4.7. Best Management Practices

As discussed in section 4.2 of this Fact Sheet, numeric effluent limitations for the discharge of residual pollutants from fireworks displays are infeasible. Instead, this Order requires Dischargers implement BMPs. Dischargers are required to prepare and implement a FBMPP to prevent or reduce the discharge of pollutants associated with the display of fireworks. The FBMPP is required to address, at a minimum, the following elements:

4.7.1. Whenever practicable and feasible, the Discharger shall consider the use of alternative fireworks produced with new pyrotechnic formulas that replace perchlorate with other oxidizers and propellants that burn cleaner, produce less smoke and reduce pollutants loading to surface waters.

4.7.2. Whenever practicable, feasible, and safe, the Discharger shall 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.

7.7.3. Whenever practicable and feasible, the Discharger shall select fireworks that do not contain plastic outer casings or have non-biodegradable inner components that make up more than five percent of the mass of the shell/device.

4.7.4. Whenever practicable and feasible, the Discharger shall design the firing range, or consider alternative firing ranges, to eliminate or reduce residual firework pollutant discharges to waters of the United States.

4.7.5. As soon as practicable and feasible, and no later than 24 hours following a display of fireworks, the Discharger, in addition to complying with title 19 of the CCR, section 1003, shall, 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).

4.7.6. If the fireworks are launched or ignited on barges or floating platforms, the fireworks and fireworks equipment shall be set-up, discharged and taken down in accordance with the laws and regulations applying to that display by a public display operator licensed by the State. All required permits, licenses and approvals shall be obtained from the authorities having jurisdiction over the fireworks display, and the parties responsible under applicable law and regulation shall comply with the requirements and conditions of those permits. All equipment used to hold and launch the fireworks shall be secured properly in accordance with applicable laws and regulations and is such a way as to minimize the risk that they would fall into the water. Barges and floating platforms shall be inspected for leaks and other potential safety issues. Other than system firing cables and common or grounding wires intended to be recovered after the display, electric igniter wires used to trigger the fireworks shall be secured to minimize the risk that the wires would fall into the water during or after discharge. As soon as practicable, and no later than 24 hours following a public display of fireworks, the decks of each barge or floating platform that contained fireworks shall be raked or swept to gather fireworks debris and prevent it from being deposited into the water. The barges shall be returned to the loading or setup area to be further cleaned and to have the mortars removed.

4.7.7. Immediately following a display of fireworks, all hazardous fireworks waste, (including duds) and pyrotechnics waste resulting from the set-up, firing, and strike of the display, shall be handled and managed in accordance with applicable fireworks and hazardous waste laws and regulations.

4.7.8. All non-hazardous solid waste resulting from the set-up, firing, and strike of the public display, including wires, boxes, and packaging, shall be collected to the extent practicable and properly disposed of.

4.7.9. Fireworks shall be packaged, transported, stored, set-up, and handled in

accordance with 19 CCR Division 1, Chapter 6, Fireworks and 22 CCR Chapter 33, *Best Management Practices for Perchlorate Materials* in order to prevent or minimize firework pollutants from entering surface waters.

4.7.10. Residual firework pollutant discharges shall be located a sufficient distance from areas designated ASBS to assure maintenance of natural water quality conditions in these areas, except as provided in section 7.3.2 of this order, *Special Provisions for Discharges into the La Jolla ASBS and Heisler Park ASBS*.

4.7.11. Residual firework pollutant discharges shall be located a sufficient distance from waters with a TMDL to assure residual firework pollutants doesn't contribute to the pollutant load allocation and impairment of the water body.

4.7.12. All personnel implementing the BMPs shall be properly trained regarding BMP implementation. The Discharger shall identify the personnel to be trained, their responsibilities, and the type of training they are to receive.

4.7.13. As soon as practicable, the Discharger shall collect and document visual observations to assess the effectiveness of the BMPs and update the FBMPP plan accordingly. All FBMPP changes must be submitted to the San Diego Water Board.

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

5.1. Surface Water

At all times, the discharge is required to be in conformance with applicable water quality standards and shall not cause an exceedance above any applicable narrative or numeric water quality objective, including but not limited to all applicable provisions contained in:

5.1.1. The San Diego Water Board's Basin Plan, including beneficial uses, water quality objectives, and implementation plans;

5.1.2. State Water Board plans for water quality control including the:

- *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries* (Thermal Plan), and
- *Water Quality Control Plan Ocean Waters of California* (Ocean Plan), including beneficial uses, water quality objectives, and implementation plans;
- *Water Quality Control Plan for Enclosed Bays and Estuaries of California – Sediment Quality Provisions* (Sediment Quality Provisions), including the narrative objectives for sediment quality.

5.1.3. State Water Board policies for water and sediment quality control including the

- *Water Quality Control Policy for the Enclosed Bays and Estuaries of California*;
- *Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California*; and
- *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (State Water Board Resolution No. 68-16).

5.1.4. Priority pollutant criteria promulgated by USEPA through the:

- National Toxics Rule (NTR), 40 CFR 131.36, (promulgated on December 22, 1992 and amended on May 4, 1995, and November 9, 1999); and
- California Toxics Rule (CTR), 65 Federal Register 31682-31719 (May 18, 2000), adding section 131.38 to 40 CFR.

5.2. Groundwater

Discharges of wastes from fireworks events to land are subject to regulation under the San Diego Water Board's Conditional Waiver No. 10 and are not subject to regulation under this Order. Additional information on the San Diego Water Board Conditional Waivers can be found at the San Diego Water Board website (https://www.waterboards.ca.gov/sandiego/).

6. RATIONALE FOR PROVISIONS

6.1. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42.

Sections 122.41(a)(1) and (b) through (n) of 40 CFR establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) of 40 CFR allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

6.2. Special Provisions

6.2.1. Reopener Provisions

This Order may be re-opened and modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR parts 122, 123, 124, and 125. The San Diego Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations or adoption of new regulations by the State Water Board or San Diego Water Board, including revisions to the Basin Plan.

6.2.2. Special Provisions for Discharges into ASBS

The Ocean Plan explicitly prohibits discharges into an ASBS unless an exception has been granted by the State Water Board. The Ocean Plan does, however, allow the Regional Water Boards to approve waste discharge requirements for

limited term activities in ASBS as described in chapter III.E. of the Ocean Plan subject to the following restrictions:

- Limited term activities may result in temporary and short-term changes in existing water quality;
- Water quality degradation shall be limited to the shortest possible time; and
- The activities may not permanently degrade water quality or result in water quality lower than that necessary to protect existing uses, and all practicable means of minimizing such degradations shall be implemented.

A once per year fireworks event of less than 1,000 pounds net explosive weight that complies with all the provisions specified in this Order and meets the specifications below is not likely to permanently degrade water quality or result in water quality lower than that necessary to protect existing beneficial uses. Proper implementation of the minimum specified BMPs required under this Order will also minimize residual firework pollutant discharges into the ASBS and water quality degradation of the ASBS.

The San Diego Water Board has determined that annual Fourth of July firework events near ASBS are limited term short duration activities and are eligible for approval of waste discharge requirements under Ocean Plan chapter III.E. The San Diego Water Board has the following special conditions in section 7.3.2. of this Order to assure maintenance of natural ocean water quality conditions and protection of beneficial uses in the ASBS while allowing continued discharges of residual firework pollutant discharges to the ASBS at the annual Fourth of July public firework display events. Discharges of residual firework pollutants into areas designated ASBS are subject to the following conditions:

- The residual firework pollutant discharges shall be limited to those resulting from one Fourth of July celebration public fireworks display event per calendar year.
- The net explosive weight of fireworks used in the public fireworks display event shall not exceed 1,000 pounds of pyrotechnic material.
- The Discharger shall minimize the use of aerial “salute” shells or devices and the use of these fireworks during the first five minute of each fireworks display is prohibited.
- The areal extent of the firing range in the ASBS shall be limited to the maximum extent practicable to prevent or reduce residual firework pollutant discharges into the ASBS.
- The residual firework pollutant discharges shall not permanently alter natural water quality conditions in the ASBS receiving waters. Temporary excursions from natural ocean water quality conditions resulting from residual firework pollutant discharges within any portion of the firing range located in the ASBS are permissible if beneficial uses are protected.

- The residual firework pollutant discharges shall comply with all other applicable provisions, including water quality standards, of the Ocean Plan.

Under Order No. R9-2011-0022, there were two annual fireworks events that may have had a fireworks fallout area within an ASBS:

6.2.2.1. La Jolla ASBS

Until 2017, fireworks events were conducted every Fourth of July by the La Jolla Community Fireworks Foundation at the Scripps Park located approximately a quarter mile from the La Jolla ASBS. The fireworks fallout area may have extended into portions of the ASBS. The fireworks events typically ran 20-25 minutes with approximately 250 to 415 pounds of explosives used. In 2017, La Jolla Community Fireworks Foundation ceased all fireworks displays and in 2018, La Jolla Community Fireworks Foundation terminated coverage under Order No. R9-2011-0022. In 2021, La Jolla Community Fireworks re-enrolled in Order No. R9-2011-0022 for the Fourth of July fireworks event 2021; however, the event was not held.

6.2.2.2. Heisler Park ASBS

Firework events have been occurring over the Heisler Park ASBS in Orange County since approximately 2001. The annual Fourth of July event conducted by the City of Laguna Beach typically runs approximately 15 to 20 minutes and during that time approximately 600 to 800 aerial shells are ignited and launched. The aerial shells range in size from 2.5 inches to 5 inches. It is estimated that 600 pounds of pyrotechnic material is discharged into the air over or adjacent to the Heisler Park ASBS during this single event. The City of Laguna Beach estimates that between 20 to 46 percent of the firing range is over land. Beach clean-up is mandatory after the event and additional clean-up is conducted the morning after each event.

6.2.3. **Special Provisions for Threatened and Endangered Species**

This Order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (CESA) (California Fish & Game Code, §§ 2050-2097) or the federal Endangered Species Act (FESA) (16 U.S.C. §§ 1531-1544) except as authorized by an agency with jurisdiction to protect those species under CESA and/or FESA. The Discharger is responsible for compliance with all requirements of the applicable endangered species act for the discharge authorized under this Order.

6.2.4. **Special Provisions for Marine Mammals**

This Order does not authorize any act which results in the take of marine mammals, under the federal Marine Mammal Protection Act (MMPA) (16 U.S.C. §§ 1361-1407) except as authorized by an agency with jurisdiction to protect those species under MMPA. The Discharger is responsible for compliance with all requirements of the applicable endangered species act for the discharge authorized under this Order.

6.2.5. **Special Studies and Additional Monitoring Requirements – Not Applicable**

6.2.6. **Construction, Operation, and Maintenance Specifications – Not Applicable**

6.2.7. **Special Provisions for Publicly-Owned Treatment Works (POTWs) – Not Applicable**

6.2.8. **Other Special Provisions – Not Applicable**

6.2.9. **Compliance Schedules – Not Applicable**

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the San Diego Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP.

7.1. Influent Monitoring – Not Applicable

7.2. Effluent Monitoring – Not Applicable

7.3. Whole Effluent Toxicity Testing Requirements – Not Applicable

7.4. Receiving Water Monitoring

7.4.1. **Visual Monitoring**

All Dischargers enrolled in this Order must conduct visual monitoring. Visual monitoring must occur within and adjacent to the firing range and at the shoreline most likely to accumulate fireworks debris based on wind, current, and tides. When practical and feasible, the Discharger shall conduct visual monitoring within one hour following the end of the fireworks event. The Discharger must conduct visual monitoring in the morning of the day immediately following the fireworks event. Visual observations of the surface water conditions at the designated receiving water must be conducted in such a manner as to enable the observer to describe and report the presence, if any, of floatable fireworks debris. Observations of wind (direction and speed), weather (cloudy, sunny, or rainy), direction of current, tidal conditions (high or low), discoloration, oil and grease, turbidity, and odor must be recorded. Visual monitoring will be used to assess BMP performance allowing the Discharger to update the FBMPP accordingly.

7.4.2. **Water Quality and/or Sediment Monitoring**

Under Order No. R9-2011-0022, water quality and/or sediment monitoring were required for Category 1 Dischargers. SeaWorld was the only Category 1 Discharger enrolled under Order No. R9-2011-0022. However, SeaWorld reduced the number of fireworks display events in recent years and may use drone shows in lieu of fireworks display events in the future. As such, this Order removes the Discharger Categories. The San Diego Water Board may require water quality

and/or sediment monitoring on a case-by-case basis pursuant to this Order and Water Code section 13383. The San Diego Water Board will determine if water quality and/or sediment monitoring is required based on the following considerations:

- Receiving water body characteristics including circulation, depth, assimilative capacity; CWA 303(d) listed impairments, and beneficial uses;
- The frequency of firework events in the receiving water including those at or near the same firework fallout area;
- The estimated firework pollutant loading from an individual or repeated firework event(s) affecting the same water body or segment thereof;
- Accumulative effects from repeat firework events in the same location or other firework events affecting the same water body or segment thereof;
- Proximity of the firework event to existing or proposed State Water Quality Protection Areas, inclusive of Areas of Special Biological Significance (ASBS) or other environmental sensitive receiving waters; or
- Any other relevant water quality factors.

Water quality and/or sediment monitoring would be needed to ensure compliance with receiving water limitations and to ensure that repeated fireworks displays are not impacting beneficial uses. If required, Dischargers are required to submit a Water and/or Sediment Monitoring Plan that includes a Conceptual Model, a Quality Assurance Project Plan, and a Sampling and Analysis Plan. The development of a Conceptual Model will allow the Discharger to determine, and subsequently propose, a sampling frequency and timing that is representative of the discharge. The Water and/or Sediment Monitoring Plan allows the Discharger flexibility in designing a cost effecting monitoring program for evaluating the effects of the discharge. The requirement to submit a Water and/or Sediment Monitoring Plan has been carried over from Order No. R9-2011-0022.

7.4.2.1. **Water Quality Monitoring**

If the San Diego Water Board determines receiving water quality monitoring is required, the Discharger must propose a frequency for water quality monitoring in the Water Monitoring Plan based on the Conceptual Model, but shall be no less than once per permit term. Water chemistry monitoring requirements were developed based on the constituents contained in fireworks and the results obtained from the SeaWorld San Diego monitoring. The required list of pollutants to be monitored is considered a minimum list, and Dischargers may elect to monitor for additional constituents of concern. The water quality monitoring requirements have been carried over from the Order No. R9-2011-0022, except this Order adds monitoring requirements for strontium and antimony, which are components of fireworks.

7.4.2.2. **Sediment Monitoring**

If the San Diego Water Board determines receiving sediment monitoring is required, the Discharger must propose the frequency for sediment monitoring in the Sediment Monitoring Plan based on the Conceptual Model. Order No. R9-2011-0022 required a minimum frequency of one sediment monitoring event (using all lines of evidence) every three years. This Order reduces the minimum sediment monitoring frequency from once every three years to once every five years. This Order includes monitoring for sediment chemistry and toxicity for all water body types. In addition to sediment chemistry and toxicity, benthic community monitoring is required for discharges to enclosed bays, estuaries, and the Pacific Ocean. Benthic community monitoring is not required for inland surface waters.

For discharges to enclosed bays and estuaries, the sediment monitoring requirements under this Order are based on the requirements in the Sediment Quality Provisions. Sediment chemistry sampling has been expanded from the Sediment Quality Provisions to include pollutants the San Diego Water Board determined to be components of fireworks and at elevated levels when reviewing the SeaWorld's monitoring data. The required sediment chemistry list included in the Sediment Quality Provisions consists of some constituents that are not included in fireworks discharges; however, this data will enable proper stressor identification to be conducted if sediments fail to meet Sediment Quality Objectives. Sediment toxicity must be conducted pursuant to the Sediment Quality Provisions, which requires a short-term and sublethal toxicity test. The benthic community assessment has been modified to require monitoring that reflects the benthic habitat subject to the discharge. For unvegetated subtidal habitats the monitoring must be done in accordance with the line of evidence approach described in section IV.A.g of the Sediment Quality Provisions. Where the subtidal habitat is vegetated (Zostera marina, eelgrass), the line of evidence tool under section IV.A.g of the Sediment Quality Provisions does not accurately portray impacts to benthic communities, as the tool was developed specifically for unvegetated subtidal habitat. However, the Sediment Quality Provisions do provide guidance under section IV.A.j for situations when a particular line of evidence may not be suitable. This alternative approach calls for utilization of a reference site for statistical comparison, and is required under the Order. The Order requires the same chemistry and toxicity testing contained in the Sediment Quality Provisions but requires a line of evidence for the benthic community which utilizes invertebrates and pertinent regulatory guidance to protect receiving waters, which for vegetated subtidal includes the Southern California Eelgrass Mitigation Policy from the National Marine Fisheries Service. The benthic community assessment can utilize invertebrates and eelgrass in the line of evidence approach to estimate levels of impacts, consistent with the Sediment Quality Provisions requirements under Section IV.A.j.

For discharges to the Pacific Ocean, the Discharger is required to monitoring in accordance with the methods developed for the Southern California Bight

Regional Monitoring Program conducted by the Southern California Coastal Water Research Project (SCCWRP). The Discharger may be required to monitor for the sediment chemistry parameters listed in the Bight Sediment Quality Assessment Field Operations Manual.

For discharges to inland surface waters, the Discharger is required to propose sediment monitoring and analysis procedures. The Discharger may reference the sediment monitoring procedures used for the Stream Pollution Trends Monitoring Program (SPoT) and/or USEPA's *A Guidance Manual to Support the Assessment of Contaminated Sediments in Freshwater Ecosystems*, Volumes I through III.

7.5. Groundwater – Not Applicable

7.6. Other Monitoring Requirements

7.6.1. Post Fireworks Display Log

The Discharger is required to maintain a written log for each public fireworks display events. The log must be completed within five (5) days following each public fireworks event and must be made available to the San Diego Water Board upon request and submitted with the Annual Report. The Post Fireworks Display Log provides tracking of fireworks display events, surface waters affected, and a certification that the FBMPP was implemented.

7.6.2. Display of Fireworks Post Event Report Form

The Discharger is required to complete and submit the Display of Fireworks Post Event Report Form included in Attachment C no later than thirty (30) days following the end of the month in which a public display of fireworks event occurred and that it must also be submitted with the Annual Report. Completed reports are required to be submitted to the San Diego Water Board in accordance with the schedule in section 10.2.3 of the MRP. The Display of Fireworks Post Event Report Form provides information on the types and quantity of fireworks used, a map of the fireworks area, and the amount of firework debris collected.

7.6.3. Annual Report

The Discharger is required to submit an Annual Report by August 30 each year. Completed reports are required to be submitted to the San Diego Water Board in accordance with the schedule in section 10.2.3 of the MRP. The Annual Report covers the previous year (August 1 through July 31) and provides information on the fireworks events held, identifies compliance with the Order, and discusses corrective actions taken or planned. If there were no fireworks displays within the monitoring period, the Discharger is required to submit a statement certifying there was no fireworks displays during the monitoring period.

7.7. Costs

The San Diego Water Board has considered costs in establishing monitoring and reporting requirements in this Order, although Water Code section 13383 does not require the San Diego Water Board to do so. The San Diego Water Board estimates

that compliance with the monitoring and reporting will cost between $25,000 to $70,000 annually for Dischargers required to conduct water quality and sediment monitoring and less than $500 for Dischargers not required to conduct water quality and sediment monitoring. For the reasons described in section 7.4, the costs to comply with the monitoring and reporting requirements will result only in appropriate data needed to evaluate water quality and other impacts of the discharges and ensure that beneficial uses are protected. In reissuing this Order, the San Diego Water Board has reviewed the need for the monitoring and reporting, ensured that sampling frequency is appropriate, and has not required unnecessary monitoring and reports or imposed overlapping requirements. The requirement that the Discharger submit a proposed Water and/or Sediment Monitoring Plan, if directed by San Diego Water Board, allows the Discharger the opportunity to design monitoring and reporting program that may be accomplished with less expense.

8. PUBLIC PARTICIPATION

The San Diego Water Board has considered the issuance of WDRs that will serve as an NPDES permit for San Diego Water Board. As a step in the WDR adoption process, the San Diego Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process.

8.1. Notification of Interested Parties

The San Diego Water Board notified Dischargers enrolled under Order No. R9-2011-0022, interested agencies, and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided on October 13, 2021, by email to the interested parties and the NPDES email subscription list. Notification was also posted on the San Diego Water Board's website.

The public had access to the agenda and any changes in dates and locations through the San Diego Water Board's website (https://www.waterboards.ca.gov/sandiego/)

8.2. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the San Diego Water Board at 2375 Northside Drive, San Diego, Suite 100, CA 92108 or by email to sandiego@waterboards.ca.gov.

To be fully responded to by staff and considered by the San Diego Water Board, the written comments were due at the San Diego Water Board office by 5:00 p.m. on November 12, 2021.

8.3. Public Hearing

The San Diego Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date:	**February 9, 2022**
Time:	**9:00 AM**
Location:	**San Diego Water Board Meeting Room** **2375 Northside Drive, Suite 100** **San Diego, CA 92108**

Interested persons were invited to attend. At the public hearing, the San Diego Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

8.4. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and CCR, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of this Order at the following address, except that 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:

By mail:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

In Person:

State Water Resources Control Board
Office of Chief Counsel
1001 I Street
Sacramento, California 95814

By email: waterqualitypetitions@waterboards.ca.gov

By fax: (916) 341-5199

For instructions on how to file a water quality petition for review, see the State Water Board's Water Quality Petitions website (https://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml)

8.5. Information and Copying

Report of Waste Discharge (ROWDs), NOIs, monitoring reports, other supporting documents, and comments received are on file and may be inspected at the address by making an appointment with the San Diego Water Board's custodian of records. Copying of documents may be arranged through the San Diego Water Board by calling (619) 516-1990 or by emailing rb9_records@waterboards.ca.gov.

8.6. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the San Diego Water Board, reference this facility, and provide a name, address, and phone number.

8.7. Additional Information

Requests for additional information or questions regarding this order should be directed to Debbie Phan at (619) 521-3359.

ATTACHMENT G – APPLICABLE TOTAL MAXIMUM DAILY LOADS

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) has adopted Total Maximum Daily Loads (TMDLs) and subsequently approved by the California State Water Resources Control Board (State Water Board) and the United States Environmental Protection Agency (USEPA) under Clean Water Act (CWA) section 303(c), which are applicable to discharges under this Order. The following discusses the applicability of adopted TMDLs within the San Diego Region:

- Total Maximum Daily Load for Dissolved Copper in Shelter Island Yacht Basin
- Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed
- Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek

Fireworks events are not a source of pollutants contributing to the following TMDLs:

- Total Maximum Daily Load for Diazinon in Chollas Creek Watershed
- Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay
- Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)
- Total Maximum Daily Load for Sedimentation in Los Penasquitos Lagoon

1. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin

1.1. Applicability

1.1.1. TMDL Basin Plan Amendment: Resolution No. R9-2005-0019

1.1.2. TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 9, 2005
State Water Board Approval Date:	September 22, 2005
Office of Administrative Law Approval Date:	December 2, 2005
USEPA Approval Date:	February 8, 2006

1.1.3. TMDL Effective Date: December 2, 2005

1.1.4. Watershed Management Area: San Diego Bay

1.1.5. Water Body: Shelter Island Yacht Basin

1.2. Final TMDL Compliance Requirements

Resolution No. R9-2005-0019 establishes wasteload allocations (WLAs) for the discharge of copper into Shelter Island Yacht Basin (SIYB). Identified Dischargers of copper loading include the San Diego Unified Port District, SIYB marina owner/operators, persons owning boats moored in SIYB, SIYB underwater hull cleaners, and the City of San Diego municipal separate storm sewer system (MS4). The TMDL does not provide WLAs or reserved assimilative capacity for additional

point sources. Consistent with the requirements of Resolution No. R9-2005-0019, this Order prohibits the discharge of copper to SIYB in section 4.8 of this Order.

2. Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed

2.1. Applicability

2.1.1. TMDL Basin Plan Amendment: Resolution No. R9-2005-0036

2.1.2. TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 9, 2005
State Water Board Approval Date:	November 16, 2005
Office of Administrative Law Approval Date:	February 1, 2006
USEPA Approval Date:	March 22, 2006

2.1.3. TMDL Effective Date: February 1, 2006

2.1.4. Watershed Management Area: Santa Margarita River

2.1.5. Water Body: Rainbow Creek

2.2. Final TMDL Compliance Requirements

Resolution No. R9-2005-0036 establishes WLAs and load allocations (LAs) for the discharge of total nitrogen and total phosphorus into Rainbow Creek. Identified dischargers of total nitrogen and total phosphorus loading include Caltrans, County of San Diego, and other nonpoint dischargers.

The TMDL provides WLAs of 2 percent of the total annual TMDL for both total nitrogen and total phosphorus for additional point sources, however the TMDL Implementation Action Plan does not provide for the assignment of WLAs to unidentified point source discharges, effectively resulting in the prohibition of discharges of total nitrogen and total phosphorus into Rainbow Creek in section 4 of this Order.

3. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek

3.1. Applicability

3.1.1. TMDL Basin Plan Amendment: Resolution No. R9-2007-0043

3.1.2. TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 13, 2007
State Water Board Approval Date:	July 15, 2008
Office of Administrative Law Approval Date:	October 22, 2008
USEPA Approval Date:	December 18, 2008

3.1.3. TMDL Effective Date: October 22, 2008

3.1.4. Watershed Management Area: San Diego Bay

3.1.5. Water Body: Chollas Creek

3.2. Final TMDL Compliance Requirements

Resolution No. R9-2007-0043 establishes WLAs for the discharge of copper, lead and zinc to Chollas Creek from point sources. Specifically, Resolution No. R9-2007-0043 states, "Actions to meet the WLAs in discharges to Chollas Creek will be required in WDRs that regulate MS4 discharges, industrial facility and construction activity storm water discharges, and groundwater extraction discharges in the Chollas Creek watershed." The TMDL does not provide WLAs or reserved assimilative capacity for additional point sources. Consistent with the requirements of Resolution No. R9-2007-0043, this Order prohibits the discharge of copper, lead, and zinc to Chollas Creek in section 4 of this Order.

4. Total Maximum Daily Load for Diazinon in Chollas Creek Watershed

4.1. Applicability

4.1.1. TMDL Basin Plan Amendment: Resolution No. R9-2002-0123

4.1.2. TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	August 14, 2002
State Water Board Approval Date:	July 16, 2003
Office of Administrative Law Approval Date:	September 11, 2003
USEPA Approval Date:	November 3, 2003

4.1.3. TMDL Effective Date: September 11, 2003

4.1.4. Watershed Management Area: San Diego Bay

4.1.5. Water Body: Chollas Creek

4.2. Final TMDL Compliance Requirements

Resolution No. R9-2002-0123 establishes WLAs for the discharge of diazinon to Chollas Creek from MS4 systems for the City of San Diego, City of Lemon Grove, City of La Mesa, San Diego Unified Port District, County of San Diego, and CalTrans. Resolution No. R9-2002-0123 does not establish an applicable WLA for the discharge of pollutants from fireworks events, effectively resulting in a prohibition to discharge diazinon to Chollas Creek. Diazinon is not a chemical used in fireworks displays. As such, fireworks are not a source of diazinon and will comply with the TMDL's prohibition to discharge diazinon to Chollas Creek.

5. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay

5.1. Applicability

5.1.1. TMDL Basin Plan Amendment: Resolution No. R9-2008-0027

5.1.2. TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 11, 2008
State Water Board Approval Date:	June 16, 2009
Office of Administrative Law Approval Date:	September 15, 2009
USEPA Approval Date:	October 26, 2009

5.1.3. TMDL Effective Date: September 15, 2009

5.1.4. Watershed Management Areas: South Orange County and San Diego Bay

5.1.5. Water Bodies: Baby Beach and Shelter Island Shoreline Park

5.2. Final TMDL Compliance Requirements

Resolution No. R9-2008-0027 establishes WLAs for the discharge of indicator bacteria to Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay. The identified point sources are limited to MS4s. Thus, the available WLA remaining for point sources is zero. Fireworks displays are not a source of indicator bacteria. As such, discharges of pollutants from fireworks events will comply with the TMDL's prohibition to discharge bacteria.

6. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)

6.1. Applicability

6.1.1. TMDL Basin Plan Amendment: Resolution No. R9-2010-0001

6.1.2. TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 10, 2010
State Water Board Approval Date:	December 14, 2010
Office of Administrative Law Approval Date:	April 4, 2011
USEPA Approval Date:	June 22, 2011

6.1.3. TMDL Effective Date: April 4, 2011

6.1.4. Watershed Management Areas: See Table Below

6.1.5. Water Bodies: See Table Below

6.2. Final TMDL Compliance Requirements

Resolution No. R9-2010-0001 establishes WLAs and LAs for the discharge of indicator bacteria to twenty beaches and creeks in the San Diego Region. The TMDL identifies Phase I and Phase II MS4s, Caltrans, publicly-owned treatment works (and associated collection systems), and CAFOs. Section 7(h)(2)(A)(vi) of Attachment A to Resolution No. R9-2010-0001 states that unidentified point sources have not been assigned WLAs, which is equivalent to being assigned a WLA of zero, and that no discharge of bacteria are expected or allowed from unidentified point sources under the wet or dry weather TMDLs. Fireworks displays are not a source of indicator bacteria. As such, discharges of pollutants from fireworks events will comply with the TMDL's prohibition to discharge bacteria.

7. Total Maximum Daily Load for Sedimentation in Los Penasquitos Lagoon

7.1. Applicability

7.1.1. TMDL Basin Plan Amendment: Resolution No. R9-2012-0033

7.1.2. TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 13, 2012
State Water Board Approval Date:	January 21, 2014
Office of Administrative Law Approval Date:	July 14, 2014
USEPA Approval Date:	October 30, 2014

7.1.3. TMDL Effective Date: July14, 2014

7.1.4. Watershed Management Areas: Penasquitos

7.1.5. Water Bodies: Los Penasquitos Lagoon

7.2. Final TMDL Compliance Requirements

Resolution No. R9-2012-0033 establishes WLAs and LAs for the discharge of sediment to Los Penasquitos Lagoon. Fireworks displays are not a source of sediment. As such, discharges of pollutants from fireworks events will comply with the TMDL's prohibition on discharging sediment

ATTACHMENT H – DISCHARGE PROHIBITIONS

1. *Water Quality Control Plan for the San Diego Basin* (Basin Plan) Discharge Prohibitions

1.1. The discharge of waste to waters of the State in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in Water Code section 13050, is prohibited.

1.2. The discharge of waste to land, except as authorized by Waste Discharge Requirements (WDRs) of the terms described in Water Code section 13264 is prohibited.

1.3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by a National Pollutant Discharge Elimination System (NPDES) permit or a dredged or fill material permit (subject to the exemption described in Water Code section 13376) is prohibited.

1.4. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless the San Diego Water Board issues an NPDES permit authorizing such a discharge; the proposed discharge has been approved by the State Water Board Division of Drinking Water (DDW); and the operating agency of the impacted reservoir; and the Discharger has an approved fail-safe long-term disposal alternative.

1.5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the San Diego Water Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.

1.6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the San Diego Water Board.

1.7. The dumping, deposition, or discharge of waste directly into waters of the State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the San Diego Water Board.

1.8. Any discharge to a storm water conveyance system that is not composed entirely of storm water is prohibited unless authorized by the San Diego Water Board. [The federal regulations, 40 CFR 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40 CFR 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to an NPDES permit and discharges resulting from firefighting activities.] [Section 122.26 amended at 56 FR 56553, November 5, 1991; 57 FR 11412, April 2, 1992].

1.9. The unauthorized discharge of treated or untreated sewage to waters of the State or to a storm water conveyance system is prohibited.

1.10. The discharge of industrial wastes to conventional septic tank/ subsurface disposal systems, except as authorized by the terms described in Water Code section 13264, is prohibited.

1.11. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the State is prohibited.

1.12. The discharge of any radiological, chemical, or biological warfare agent into waters of the State is prohibited.

1.13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the San Diego Water Board.

1.14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the State or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.

2. *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) Discharge Prohibitions

2.1. The Discharge of any radiological chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.

2.2. Waste shall not be discharged to designated Areas of Special Biological Significance except as provided in chapter III.E. of the Ocean Plan.

2.3. Pipeline discharge of sludge to the ocean is prohibited by federal law; the discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digester supernatant directly to the ocean, or to a waste stream that discharges to the ocean without further treatment, is prohibited.

2.4. The by-passing of untreated wastes containing concentrations of pollutants in excess of those of Table 3 or Table 4 [of the Ocean Plan] to the ocean is prohibited, except as allowed by Federal Standard Provisions I.G and I.H (Attachment D).

2.5. The discharge of trash to surface waters of the State or the deposition of trash where it may be discharged into surface waters of the State is prohibited.

ATTACHMENT I – NOTICE OF TERMINATION

To terminate coverage under Order No. R9-2022-0002 (Order), the Discharger must submit a complete and accurate Notice of Termination (NOT). The Discharger's coverage under the Order terminates on the termination effective date specified in the coverage termination letter issued by the San Diego Water Board. Prior to the termination effective date, the Discharger is subject to the terms and conditions of the Order and is responsible for submitting the annual fee and all reports associated with the Order.

THE FOLLOWING INFORMATION MUST BE COMPLETED:

I. GENERAL INFORMATION

Order Number:	R9-2022-0002
WDID Number:	

II. CURRENT DISCHARGER INFORMATION

Discharger Name:			
Mailing Address:			
City:	County:	State:	ZIP:
Contact Person Name and Title:			
Contact Person Email:		Contact Person Phone:	

III. BASIS FOR TERMINATION

Coverage under Order No. R9-2022-0002, National Pollutant Discharge Elimination System (NPDES) No. CAG999002 is no longer necessary due to the following reason:

☐ Effective _____(Date), a new host has taken over responsibility of the Discharger's fireworks display activities covered under an existing NOI (submit a revised NOI with updated Discharger information and certification);

☐ Effective_____ (Date), the Discharger has ceased all discharges of residual firework pollutants for which it obtained this Order coverage and does not expect to discharge during the remainder of this Order term; or

☐ Effective _____ (Date), the Discharger has obtained coverage under an individual NPDES permit for all residual firework pollutant discharges to water of the U.S required to be covered by an NPDES permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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.

_____
Printed Name

_____ _____
Signature of Discharger Date

The NOT shall be submitted to the San Diego Water Board by email to SanDiego@waterboards.ca.gov, with the subject line titled "Notice of Termination – Fireworks General NPDES Permit" or by mail to the following address:

San Diego Water Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

Attn: Fireworks General NPDES Permit
Source Control Regulation Unit
NOTICE OF TERMINATION