

EXECUTIVE OFFICER SUMMARY REPORT
May 11, 2011

- ITEM: 7
- SUBJECT: NPDES Permit Reissuance: SeaWorld Parks & Entertainment, Inc., Sea World -San Diego (Tentative Order No. R9-2011-0032, NPDES Permit No. CA0107336) (*Michelle Mata*)
- PURPOSE: To adopt an Order reissuing the NPDES Permit (Tentative Order) for the discharge of up to 9.36 million gallons per day (MGD) of wastewater from exhibit pools and aquaria, intermittent flows during pool draining and cleaning operations, runoff from landscape irrigation, and facility wash down water from SeaWorld San Diego to Mission Bay.
- PUBLIC NOTICE: A public notice of the Tentative Order was published in the San Diego Union Tribune on March 21, 2011. Copies of the Tentative Order were electronically e-mailed on March 21, 2010 to SeaWorld San Diego and to all known interested parties and agencies. Copies were also made available for public review at the San Diego Water Board office and posted on the Board's web site on March 21, 2010.
- DISCUSSION: SeaWorld San Diego (Discharger) will be automatically enrolled under the proposed general NPDES Permit for firework event discharges, Tentative Order No. R9-2011-0022 (General Fireworks Permit), which is being considered for adoption in Item 6 of today's agenda. If adoption of the General Fireworks Permit is postponed, adoption of the Tentative Order pertaining to this Item No. 7 of today's agenda should also be similarly postponed. Under this approach the Discharger's currently expired NPDES permit (Order No. R9-2005-0091) will remain in effect under an administrative extension. This will allow the Discharger to continue fireworks discharges to Mission Bay pursuant to Order No. R9-2005-0091 until such time as it is superseded by the Board's adoption of the General Fireworks Permit or other Order.
- The Discharger's current NPDES Permit, Order No. R9-2005-0091 also establishes requirements for the discharge of up to 9.36 million gallons per day (MGD) of wastewater from exhibit pools and aquaria, intermittent flows during pool draining and

cleaning operations, runoff from landscape irrigation, and facility wash down water to Mission Bay.

The Discharger pumps seawater from Mission Bay through two intake structures, an East and West intake. The West Intake consists of two pumps that pump up to 6.12 MGD of seawater from Mission Bay to either a set of filters for mammal pools or a set of filters for fish exhibits. The East Intake consists of four pumps with a total capacity to pump up to 3.24 MGD of seawater into the Facility. Both intake streams are separate and each contains its own treatment system and outfall. Seawater pumped from Mission Bay is filtered and disinfected with chlorine to produce a suitable habitat for the exhibit mammals tolerant to chlorine. Seawater used in the fish tanks is filtered and disinfected using ozone and ultraviolet (UV) light.

The Facility contains two effluent treatment systems, one located on the east side of the Facility, and one located on the west side of the Facility. During periods of rain, wastewater streams from each side of the Facility combine with storm water runoff originating from storm drains located throughout the site. The wastewater is filtered through 1-inch stainless steel screens prior to entering the treatment systems. Diversion chambers within the treatment systems transfer the water to chlorine contact chambers. Sodium hypochlorite is injected at three pre-chlorination points in each collection system prior to the contact chamber. A final chlorine injection point is located just prior to each contact chamber. Residual chlorine is neutralized prior to discharge to Mission Bay by the injection of sodium sulfite.

The East side treatment system and outfall (Discharge Point No. 001) has a maximum design capacity of 3.24 MGD. The West side treatment system and outfall (Discharge Point No. 002) has a maximum design capacity of 6.12 MGD.

The Facility may discharge a variety of pollutants to Mission Bay attributable to (1) feeds (directly or indirectly as feces), (2) residuals of drugs or chemicals used for maintenance of animal health, and (3) residuals of chemicals used for cleaning, maintaining landscape, or enhancing water quality conditions. Sanitary wastewater from the Facility and filter backwash is discharged to the City of San Diego's sanitary sewer system.

To date, the San Diego Water Board has only received comments from the Discharger (Supporting Document No. 4). Based on the Dischargers comments, the San Diego Water Board will make minor modifications to the Tentative Order. A Response to Comments Document and Errata will be prepared and provided to the San Diego Water Board members in the second agenda mailing.

**SIGNIFICANT
CHANGES:**

The following areas in the Tentative Order differ from the current Order No. R9-2005-0091:

1. Influent monitoring requirements for copper have been added.
2. Effluent monitoring for copper has been increased from semiannual to quarterly.
3. The Tentative Order, as recommended by the State Water Board in the draft Toxicity Policy and USEPA, establishes chronic toxicity effluent limitations and associated monitoring. Chronic toxicity is considered to be a more conservative indicator of toxicity and provides a better indicator of chronic effects to organisms in the receiving water. Accordingly, the monitoring requirements and effluent limitations for acute toxicity have been removed from the Tentative Order. Implementation of toxicity monitoring requirements and effluent limitations is based on a new statistical approach developed by USEPA called the Test of Significant Toxicity (TST).
4. The requirements for firework event discharges have been deleted. The Discharger will be automatically enrolled under the General Fireworks Permit, which is being considered for adoption in Item 6 of today's agenda.

COMPLIANCE:

During the term of Order No. R9-2005-0091 exceedences were observed at Outfall No. 1 (between November 2005 - December 2007) for enterococcus and total coliform and at Outfall No. 2 (between June 2005-November 2008) for ammonia, copper, and total coliform. The Discharger took corrective actions and has demonstrated consistent compliance with the effluent limitations of Order No. R9-2005-0091.

LEGAL ISSUES:

None

SUPPORTING DOCS: 1. Site Map
2. Transmittal Letter for Tentative Order No. R9-2011-0032
3. Tentative Order No. R9-2011-0032
4. Comment Letter from SeaWorld San Diego (April 13, 2011)

RECOMMENDATION: Adoption of Tentative Order No. R9-2011-0032 is recommended.