



An Everyday Essential

**PADRE DAM**  
Municipal Water District

June 20, 2018

Via Email to [sandiego@waterboards.ca.gov](mailto:sandiego@waterboards.ca.gov)

David Gibson  
San Diego Regional Water Quality Control Board  
2375 Northside Drive, Suite 100  
San Diego, CA 92108

Attn: Roger Mitchell

Re: Comment – Tentative Investigative Order R9-2018-0021

Dear Mr. Gibson:

Padre Dam Municipal Water District (“Padre Dam”) appreciates the opportunity to submit these comments on the draft of San Diego Regional Water Quality Control Board Tentative Order R9-2018-0021, *An Order Directing City of San Diego, City of Santee, City of El Cajon, City of La Mesa, the County of San Diego, the Padre Dam Municipal Utility District, Ramona Municipal Water District, San Diego State University, Metropolitan Transit System, and the California Department of Transportation to Submit Technical and Monitoring Reports to Identify and Quantify the Sources and Transport Pathways of Human Fecal Material to the San Diego River Watershed* (“Tentative Order”).

Padre Dam supports the goal of the Tentative Order to identify the sources and pathways of and reduce human fecal material in the San Diego River and its tributaries. Padre Dam also supports the overall intent to establish a collaborative approach to addressing this important water quality issue. As part of its efforts to protect water quality from pathogens associated with human fecal material and Padre Dam’s activities, Padre Dam conducts proactive sewer inspection and preventative maintenance activities including cleaning; CCTV inspection; replacement and rehabilitation of pipe, lift stations, and sewer diversion structures; operator training; maintenance of a comprehensive Sewer System Management Plan which is updated every five years and audited every two years; detailed mapping of wastewater facilities, storm water facilities, and streams; sewer flow studies performed every five years; a calibrated hydraulic model used for operations and capital planning; a Fats, Oils, and Grease compliance program; and regular monitoring and reporting of water recycling facility effluent.

On top of these efforts, the Tentative Order requires Padre Dam to undertake a study or studies of the following potential sources of human fecal material:

- Illegal connections to MS4s
- Illicit discharges to MS4s
- Direct deposition from homeless encampments
- Sewage spills from privately-owned lateral sewer lines
- Exfiltration from publicly-owned sanitary sewer collection systems
- Exfiltration from privately owned lateral sewer lines and privately owned OWTS
- Sanitary sewer overflows from publicly owned sewer collection systems
- Treated effluent from wastewater treatment plants

Although Padre Dam is supportive of the goals expressed in the Tentative Order, it is inappropriate to include Padre Dam in the order when there is insufficient evidence to link Padre Dam's activities to the problem which the order seeks to address. See *In the Matter of the Petition of Chevron Products Company*, Order WQO 2004-0005, SWRCB/OCC File A-1343 (May 20, 2004). As set forth in more detail in this letter, there is no evidence supporting the inclusion of Padre Dam in this Tentative Order. For this reason, Padre Dam respectfully asks to be removed from the Tentative Order. In the alternative, Padre Dam requests that the Tentative Order be modified to comply with the evidentiary requirements of *Chevron*.

### **1. Illegal Connections and Illicit Discharges To MS4s**

It is improper to require Padre Dam to investigate illegal connections and illicit discharges to MS4s. Padre Dam does not own or operate an MS4. Padre Dam lacks authority to conduct any studies or to regulate discharges or connections to any MS4. Because of the way the Tentative Order is drafted, however, all "Dischargers," including Padre Dam, are required to study illicit discharges and illegal connections to MS4s. In accordance with *Chevron*, there is no evidentiary basis for including Padre Dam in the Tentative Order.

### **2. Direct Deposition From Homeless Encampments**

It is improper to require Padre Dam to investigate direct deposition from homeless encampments. Padre Dam does not own or operate any encampments and does not own or control the San Diego River or its tributaries. Further, Padre Dam lacks authority to study or regulate homeless encampments. Because Padre Dam has no authority over homeless encampments, there is no evidentiary basis for including Padre Dam in the Tentative Order.

### **3. Exfiltration and Sewage Spills From Private Property**

It is improper to require Padre Dam to investigate exfiltration from private sewer laterals and septic systems. Padre Dam does not own the private property on which these laterals are located and does not have authority over private septic systems. Discharges from private property are the responsibility of the private property owner and not of Padre Dam. There is no evidence that any of the private spills referenced in the Tentative Order were caused by or related to the manner in which Padre Dam operates its system. Under *Chevron*, there is no evidentiary basis for including Padre Dam in the Tentative Order.

### **4. Exfiltration and Sewage Spills from Publicly-Owned Collection System**

Finally, it is improper for the Tentative Order to require Padre Dam to investigate exfiltration and sewage spills from the publicly owned collection system. As set forth below, although Padre Dam owns and controls its collection system, there is no evidence that exfiltration or spills from the system are linked in any way to the problem that the Tentative Order seeks to address.

#### **a. Evidence Demonstrates Water Quality Is Protective of Human Health**

The Tentative Order relies, in part, on a Surfer Health Study conducted at Ocean Beach, located at the mouth of the San Diego River, and at Tourmaline Beach as evidence supporting the requirement that Padre Dam investigate exfiltration and sewer spills. See, Finding 10-13. The Surfer Health Study, however, does not support the inclusion of Padre Dam in the Tentative Order.

First, As the Tentative Order itself recognizes, the study results “do not exceed the most recent USEPA guidance for recreational beaches.” Finding 11. This conclusion is based on EPA’s guidance for recreational beaches, which is based on studies, spanning a period of approximately 26 years. Under *Chevron*, it is improper for the Regional Board to ignore or misconstrue reliable standards. Further, the Basin Plan has no objectives for human fecal material, so there is no authority to regulate Padre Dam’s activities based on anything other than fecal coliform or enterococcus. Because the Tentative Order recognizes that water quality is protective of human health and because the Basin Plan lacks authority to regulate on any indicator bacteria than fecal coliform or enterococcus, the Surfer Health Study appears to undermine the very premise and goal of the Tentative Order and is contrary to *Chevron*.

Second, due to the limitations of the Surfer Health Study, the study does not link the increase in illnesses after rainfall events to activities of Padre Dam. In addition to concluding that water quality meets standards protective of human health, the study also notes that it used a system of self-reporting symptoms, stating this “*could bias the association between ocean exposure and illness away from the null if surfers artificially over-reported illness following exposure.*” The survey text discussed measures taken to control this limitation, however stated that these measures “*would not control for systematic bias.*” Therefore, as the study relied on self-reporting techniques, the resulting conclusions have inherent bias, that clearly clouds the credibility of the

conclusions. The Surfer Health Study also took place during a drought, which meant that there were just 10 rainstorms during the study period. The study notes that “*a more balanced distribution between dry and wet weather exposure would have improved the precision of our wet weather exposure associations.*” Thus, in addition to concluding that water quality meets standards protective of human health, it reached this conclusion despite the study design’s bias toward over-reporting human illnesses.

Third, the Surfer Health Study was not designed to distinguish between illnesses associated with human sources of pathogens and naturally occurring sources. Notably, the study recognizes that the study locations were close to avian nesting areas, Dog Beach, and other wildlife activity, making the results inconclusive regarding the source of the pathogens. Thus, the study does not link human illnesses with pathogens in human fecal materials. It is also important to recognize that the human DNA marker HF 183 does not exist for extended periods of time in the natural environment. It is not reasonable to conclude that any HF183 markers identified at the ocean could have come from Padre Dam’s activities.

In light of the evidence demonstrating that water quality is protective of human health and evidence failing to demonstrate any link between the increase in illnesses and human sources of pathogens causing those illnesses, there is no evidentiary link between human health effects and possible exfiltration or spills from Padre Dam’s system. Under these circumstances, and in light of the following evidence, it is contrary to *Chevron* to require Padre Dam to conduct additional investigations into these activities.

**b. Evidence Does Not Support Studies of Exfiltration From Padre Dam’s System**

It is inappropriate to require Padre Dam to study exfiltration from its collection system because exfiltration does not occur during wet weather and, only occurs during dry weather when ground water levels are low. As the Tentative Order notes, human health risks increase following wet weather, but, according to the Surfer Health Study, illnesses remain constant during dry weather. Exfiltration, however, occurs during dry weather, not wet weather. Further, during and up to two weeks after rain events, groundwater levels rise, leading to inflow and infiltration into the system. Thus, sewer exfiltration, being a dry weather phenomenon, is essentially proven, by the study itself, not to contribute to river or beach contamination. *Wastewater Engineering* by Metcalf and Eddy, a standard engineering design book for the wastewater industry, demonstrates that fecal coliform and viruses are non-existent within three feet of the source of underground human fecal material, such as at the bottom of a septic tank leach field. Similarly, sewer exfiltration would be non-existent within a few feet. Exfiltration is a localized condition and, as a result, would not be transported during a subsequent rainfall event. Finding 30 recognizes that there is no data supporting exfiltration from Padre Dam’s system to the San Diego River.

Under these circumstances, there is no evidentiary basis for requiring Padre Dam to study exfiltration.



**c. Evidence Does Not Support Studies of Sewage Overflows From Padre Dam's System**

It is inappropriate to require Padre Dam to study sewage overflows from its system. Padre Dam's system is already regulated by multiple water quality permits. Sanitary Sewer Overflows ("SSO") are specifically regulated by the *Statewide General WDR for Wastewater Collection Agencies*, State Water Resources Control Board Order No. 2006-0003-DWQ. See also Finding 20. Under the SSO WDR, all spills must be tracked, remediated, recovered as much as possible, reported, and managed in accordance with a sewer system management plan. According to the SSO permit, "implementation of requirements set forth in this Order will ensure the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisances." SSO WDR ¶ 15. Over the last four years, for example, there have been only seven spills, averaging less than 100 gallons each. Minimum flows from these spills entered a receiving water. Further, as Padre Dam's monitoring shows, its authorized discharges comply with all limitations in its permits. The Tentative Order requires additional monitoring of the very activities that Padre Dam already monitors and reports on. It is inappropriate and ineffective to require additional monitoring of these same activities.

**d. Evidence Does Not Support Studies of Treated Effluent From Padre Dam's Wastewater System**

It is inappropriate to require Padre Dam to study the treated effluent discharged from its treatment system. These discharges are already regulated by the Regional Board, Findings 32-34, 48. Under these regulatory permits, Padre Dam's treated effluent and receiving waters are already monitored for indicator bacteria. If monitoring shows an exceedance of indicator bacteria, Padre Dam must develop an action plan to address the cause and operational changes to minimize the impact of these causes. Finding 34. As the Tentative Order recognizes, the disinfection and treatment standards "results in the removal and inactivation of bacteria and pathogens to levels protective of human health[.]" Finding 53. Further, as the Tentative Order recognizes, there is no evidence that the HF183 marker can survive the treatment process. *Ibid.* Requiring additional monitoring for a separate indicator of bacteria, with no evidence it survives the treatment process or is linked with human health effects and with evidence that HF183 cannot survive long under natural conditions. It is inappropriate under these circumstances to require additional studies of Padre Dam's treated effluent.

In the end, the burden, including costs, of these studies and reports must bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. Water Code § 13267. The Tentative Order and Surfer Health Study demonstrate that the costs associated with the activities mandated by the Tentative Order far outweigh any benefits. The Tentative Order requires Padre Dam to undertake extensive but undefined studies, monitoring, and reporting of MS4s, homeless encampments, and sewage spills and exfiltration from public and private sewage facilities, including on-site waste treatment systems. These studies are required with little to no supporting evidence linking Padre Dam to MS4s, homeless encampments, private property, or to the human health effects the Tentative Order seeks to

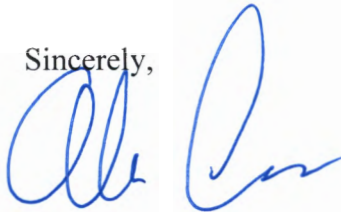
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address. There is, therefore, no relationship between the burdens and costs associated with issuing the Tentative Order to Padre Dam.

For all the reasons set forth above, there is no evidentiary basis supporting the inclusion of Padre Dam in the Tentative Order. Padre Dam respectfully requests to be removed from the Tentative Order. If Padre Dam remains a party to the Tentative Order, at a minimum, the Tentative Order needs to be revised consistently with *Chevron*.

Thank you for considering these comments on the Tentative Order. Please contact me with any questions or concerns.

Sincerely,



G. Allen Carlisle  
General Manager/CEO

ACL:cc

cc: Albert C. Lau, P.E.  
Paula de Sousa, BB&K  
Paul Clarke