

City of Escondido
Supplemental Submittal in Support of Proposed Settlement of
Complaint No. R9-2005-0265

At the September 13, 2006 meeting of the San Diego Regional Water Quality Control Board (“Regional Board”) regarding the proposed settlement of Complaint No. R9-2005-0265 (“Complaint”), some Board members requested additional information regarding the proposed settlement. These issues concern the City’s analysis of the causes for the 2004 exceedances at the Hale Avenue Resource Recovery Facility (“HARRF”) and the facts underlying the discharge of secondary treated effluent in January 2005, as well as certain additional miscellaneous issues. Accordingly, the City of Escondido (the “City”) hereby submits the following information in support of the proposed settlement and to supplement the record in this matter. Although much of this information previously has been submitted to the Regional Board staff in various confidential settlement correspondence related to this matter, the City provides this information to assist the Board and to demonstrate that the proposed settlement is fair and appropriate under the circumstances.

I. 2004 HARRF Exceedances

The main component of the Complaint and the proposed settlement is the effluent exceedances at HARRF in 2004. As fully set forth in the City’s April 2005 Technical Report, a “perfect storm” of extraordinary circumstances resulted in the 2004 exceedances at the at HARRF. A complete copy of the City’s April 2005 Technical Report is being entered into the record on this matter by Regional Board staff.

A. Result of the City’s Investigation

The City contends that the 2004 exceedances were the result a confluence of events beyond its control. First, the City found evidence of illegal discharges to the sewer system that resulted in an upset of the biological processes at the HARRF. On several consecutive Saturdays in April 2004, the City experienced cyclic upsets to the treatment process that became cumulatively worse until the first exceedance of a daily effluent limitation on May 3. Oxygen monitoring at the facility confirms that there were periodic disturbances in dissolved oxygen demand levels that coincided with these weekly upsets. These impacts are consistent with intermittent discharges of toxic materials into the collection system upstream of the facility. Based on inspections of third party facilities conducted as part of the City’s investigation of the upset, the City also discovered evidence of an illegal connection and dumping into the collection system by a third party discharger, The Iron Factory. These suspicions were confirmed by an enhanced monitoring program established by the City after the initial exceedances, where the City found evidence of unusually high levels of several toxic pollutants in the influent.

Second, at the same time as the suspected toxic discharges, the handheld dissolved oxygen meter used by the City malfunctioned. Specifically, the handheld meter was registering levels of dissolved oxygen adequate for the treatment processes even though very

little, if any, oxygen may have been present. Thus, despite the City's weekly calibration of the handheld probe, the meter was defective and was not accurately registering lower level readings. If calibration inaccuracies had been occurring during the plant upset at the lower levels, the operators would have assumed that the dissolved oxygen levels in the basins at the lower levels were higher than the basin probes were indicating and adjusted the basin probes accordingly. Based on such inaccurate readings, the blower output would have been lowered. Such actions may inadvertently have resulted in prolonging the upset.

B. EPA's Involvement

City staff contacted EPA at the direction of the Regional Board, and EPA subsequently initiated a criminal investigation into The Iron Factory's illegal discharges. It is the City's understanding that James Kronus, owner of The Iron Factory, pled guilty to a felony associated with the illegal discharges. Because of the plea agreement, there was no trial on this matter, and the information related to the investigation into this matter has not been made public.

II. January 2005 Wet Weather Discharge of Secondary Treated Effluent

A. Extraordinary Rainfall in Winter 2004-05

The City measured 4.0 inches of rainfall at HARRF in December 2004, 10.5 inches in January 2005, 9.3 inches in February 2005, and 2.1 inches in March 2005. Continuous heavy rainfall over a period of several weeks resulted in the holding ponds becoming full. As the City stated in correspondence to the Regional Board:

The HARRF experienced high influent flows caused by continuous and extreme wet weather. During the January discharge event, the HARRF experienced average influent peak flows between 19.0 - 32.0 MG, with 4.99 - 8.79 MG contributed from Rancho Bernardo. Average peak influent flows during the February event were between 20.5 - 24.2 MG, with 6.15 - 6.81 MGD contributed from Rancho Bernardo. In order to prevent sewage overflow of the Rancho Bernardo Pump Station #77 to Lake Hodges, a drinking water source, the HARRF treated influent flows beyond plant capacity which resulted in several violations.

Moreover, federal and state authorities declared San Diego, Orange, Riverside, and San Bernardino counties disaster areas due to the severe storms beginning December 27, 2004 and continuing through March 2005. The federal declaration is contained in a Federal Emergency Management Agency notice numbered FEMA-1577-DR. This notice originally was issued on February 4, 2005, and an amended notice was issued on March 16, 2005. The state's disaster declaration is referenced in Senate Bill 457, which was state legislation authorizing emergency funds to be used to address the severe conditions caused by this rainfall.

B. January 2005 Discharge of Secondary Treated Effluent Was Justified Under Extraordinary Circumstances

The Complaint is based in part on a January 10-11, 2005 discharge of secondary treated effluent. As explained below, the City's decision to release this treated effluent was based on what it reasonably believed to be the safest and most protective option among poor

choices. As reflected in the proposed settlement, therefore, a discretionary release of a penalty is appropriate under the circumstances.

As set forth above, rainfall levels throughout the 2004-05 wet weather season were among the highest in recorded history and the rains between December 27 and January 10 were declared a natural disaster by both the state and federal governments. By early January, the incoming flows to HARRF were exceeding capacity levels in large part because the City of San Diego was delivering flows well in excess of contract amounts. When the City of Escondido requested that San Diego reduce its flows to HARRF, San Diego claimed that if it did reduce flows, it would have no choice but to spill raw sewage into Lake Hodges. At the same time, the San Elijo Joint Powers Authority ("SEJPA") requested the City reduce its discharges into the San Elijo outfall. The City was again told that if it did not reduce the outfall discharges, SEJPA would have no choice but to release raw sewage.¹ Thus, the City was faced with a classic "Catch-22" dilemma. The City rightly concluded the risks associated with discharging secondary effluent into Escondido Creek were far outweighed by the potential risks to public health and the environment resulting from two large discharges of raw sewage. Accordingly, the City selected the safest option when faced with two bad choices under extraordinary circumstances.

The City's response to this discharge is fully set forth in its February 25, 2005 Technical Report, a copy of which is being entered into the record in this matter by Regional Board staff.

III. Other Issues

The following discussion addresses additional issues raised by Board members or the public at the September 13, 2006 meeting.

A. Capacity Study

At the September 13 meeting, some concern was expressed that the City had reached HARRF's 75% capacity threshold, and was not taking the necessary steps to respond to the potential for future capacity-related permit violations. This is not the case. In September 2005, the City retained Brown and Caldwell to conduct a thorough analysis of capacity issues at HARRF. As is evident from the Brown and Caldwell Scope of Work, which is being submitted as part of the record in this matter by Regional Board staff, this study will be comprehensive and will include a thorough evaluation of wastewater flows and an evaluation of the capacity of both the land and ocean outfalls. The study will also provide recommendations for capacity-related

¹ The information the City received from SEJPA at the time was inaccurate and the City has since learned that SEJPA would have in fact discharged secondary effluent. The City has introduced measures to improve communication with San Diego and SEJPA. Parameters with SEJPA have become more defined, especially in reference to the amount the City can discharge down the outfall (*i.e.*, 20.1 million gallons). Also, the City arranged for a meeting in October 2006 with SEJPA and San Diego to discuss wet weather events. During this meeting, contact personnel names and numbers will be updated and exchanged. The City and SEJPA also have established a virtual private network. As a result, the City can now monitor real-time flows from each facility.

improvements. To date, the study has not found any evidence of “short circuiting” of the aeration basins as suggested by the Regional Board during its investigation. The cost for preparing this study is \$587,000.

B. The City’s Efforts to Reduce I/I and Increase Storage Capacity

As set forth in the City’s February 25, 2005 Technical Report relating to the January 10-11 discharge (which is being entered into the record in this matter by Regional Board staff), the City is in the process of implementing measures to reduce infiltration and inflow and to increase the storage facilities at HARRF. New secondary effluent and recycled water storage tanks at HARRF are being constructed at a cost of over \$6 million. The construction is approximately 50% complete. The design funding was approved in 2004, and construction funding was approved in 2005. The tanks should be ready for use by April 2007.

C. HARRF Upgrades

At the September 13 meeting, Mr. Delano, attorney for the Escondido Creek Conservancy, claimed that the City has completed studies but not made any actual upgrades to HARRF. This is untrue. The following is a non-exhaustive list of projects completed by the City since 1990. To date, the City has expended more than \$44 million on these projects:

Year	Upgrade	Cost
1990	24” Bypass from AB #8 to Sec. Clarifier #7	\$150,000
1993	Aeration Basin upgrade	Undetermined
1993	Filter Press upgrade	Undetermined
1994	Grit Chamber upgrade	\$180,000
1997	Re-lining of EQ Basin	\$85,700
1998	Phase I Modifications	\$15,000,000

Major components

- Primary Clarifier rehab
- Activated Sludge Air Piping
- Aeration Diffuser replacement
- Aeration SCADA control
- Primary Digester
- Biogas Flare
- Polymer System for Dewatering
- RAS piping in pipe gallery with meters

Major Change Orders

- Influent Bar Screen upgrade
- DAFT rehab

Dewatering Centrifuges

2000	Phase II Modifications Major components Grit Removal Secondary Clarifiers (2N) Secondary Effluent Pump Station Chemical Storage Area T-22 Pumps, Filter and UV disinfection Recycle Water Pump Station T-22 Distribution and Stroage RAS/WAS pump station	\$27,000,000
2001	MicroTurbines	\$1,200,000
2004	Aeration Blower Replacement	\$1,200,000
2006	HARRF Storage Tanks (March 2007 completion)	\$6,000,000

D. Odors

Mr. Delano also represented to the Board that odors from HARRF are migrating off-site. The issue raised by Mr. Delano involves the City of San Diego’s sewer line from Rancho Bernardo to HARRF. The City has been working with the City of San Diego to address this issue. The City of San Diego has installed odor control devices, but those devices have not yet fully resolved this issue. Contrary to Mr. Delano’s assertion, HARRF does not have an odor problem.

E. SEPs

While the proposed settlement does not include SEPs, the City has provided \$27,767 to the San Elijo Lagoon Conservancy to help pay the costs of opening the mouth of the Lagoon.

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Based on these factors, as well as the information provided to the Regional Board in the City’s Technical Reports and other communications, the proposed settlement is appropriate under the circumstances, and the City respectfully requests that the settlement be approved.