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July 6, 2007

Ms. Deborah Smith
Interim Executive Officer
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Re: Comments on the Tentative Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System Permit (NPDES) – Newhall Ranch Water Reclamation Plant (NPDES Permit No. CA0064556)

Dear Ms. Smith:

On behalf of Heal the Bay, we submit the following comments on the *Tentative WDRs and NPDES Permit for the Newhall Ranch Water Reclamation Plant* (“Tentative Permit” or “Permit”). We appreciate the opportunity to provide these comments.

Heal the Bay has numerous concerns with the Tentative Permit as written. For instance, effluent limits should be included for all priority pollutants, since a complete Reasonable Potential Analysis can not be conducted for new wastewater treatment plants. Also additional baseline monitoring is necessary to assess any impacts from the future discharge. These concerns and others are outlined in further detail below.

I. EFFLUENT LIMITATIONS

The Tentative Permit should include effluent limits for all priority pollutants.

The Tentative Permit includes Water Quality-based Effluent Limitations (“WQBELs”) for twenty-one constituents. During a NPDES permit renewal process, the Regional Board would typically perform a Reasonable Potential Analysis using effluent quality data collected by the discharger during the previous permit cycle. However in this case, there are no effluent data to use in this analysis. Since this is a new facility, there is considerable uncertainty as to the quality of the effluent that will be produced. Thus, the Regional Board should include WQBELs for all CTR priority pollutants, until sufficient effluent quality data are available during the next permit renewal process.

II. TOXICITY

The Tentative Permit should include a daily maximum toxicity trigger.

The Tentative Permit includes a monthly median toxicity trigger of 1.0 TUc. Tentative Permit at 16. Other recently adopted NPDES permits include a monthly median toxicity trigger **and** a daily maximum trigger of 1.0 TUc (i.e. Burbank Water Reclamation Plant NPDES Permit at 36)



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Toxicity testing is the safety net for NPDES permits because permits do not require monitoring or have limits for all constituents that can cause receiving water toxicity. Thus, it is important to have a daily maximum trigger that initiates accelerated testing as well as a monthly median trigger. Regional Board staff should include a daily maximum toxicity trigger of 1.0 TUC in the Tentative Permit.

The Regional Board should include an actual toxicity limit.

The Tentative Permit provides a 1 TUC “trigger” in accordance with State Board Order NO. WQO 2003-0012 which defers the issue of numeric chronic toxicity limits until a later date. The Regional Board should encourage the State Board to develop an appropriate numeric chronic toxicity limit as soon as possible. Too many major NPDES permits have gone forward without numeric effluent limits for chronic toxicity. As you would likely agree, toxicity limits are the safety net for NPDES permits because permits do not require monitoring or have limits for all constituents that can cause receiving water toxicity. An effluent limit of 1 TUC would protect beneficial uses and meets the narrative toxicity objective set forth in the Basin Plan. This is especially important in the case the Santa Clara River, since Reaches 1 and 6 are listed as impaired by toxicity.

III. MONITORING

Sufficient baseline receiving water monitoring should be conducted prior to discharge.

The Tentative Permit states that Newhall Land has been conducting receiving water sampling. What constituents are being monitored and at what frequency is the applicant monitoring the receiving water? Baseline monitoring data is extremely important to understand any impacts to that Santa Clara River that may result from the discharge. Often we find that discharges have occurred for such a long time that this useful baseline data is not available. A new plant gives us the unique opportunity to gather large amounts of baseline data prior to discharge. In addition to priority pollutant monitoring, bioassessment monitoring should occur at least twice before the discharge begins. One bioassessment should take place in the fall 2007, and a second bioassessment monitoring event should take place in spring 2008.

The discharger should conduct influent, effluent and receiving water monitoring for all of the priority pollutants within the first month of discharge.

The Monitoring and Reporting Program includes monitoring at various frequencies. Some parameters are required to be monitored quarterly or on a semi-annual basis. In order to better understand this new discharge in a timely manner, the discharger should conduct monitoring for all parameters listed in Tables 2, 3 and 7a within the first month of discharge.

The Regional Board should require chlorophyll-a monitoring.

The Tentative Permit includes algal biomass monitoring but not chlorophyll-a monitoring. It is important to monitor algal coverage **and** chlorophyll-a to understand if there is truly an impact. Also chlorophyll-a has been shown to be a more sensitive indicator of impairment. (see Attachment 1).



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Further, not including chlorophyll-a monitoring is a major step backwards given that EPA and State Board Members have acknowledged the inadequacy of current methodologies [such as nitrogen monitoring alone] used to assess excess algal growth for the 2006 303(d) List. March 20, 2007 State Board hearing.

The Regional Board should increase bioassessment monitoring frequency to twice per year.

The Tentative Permit states that bioassessment monitoring will take place annually in coordination with interested stakeholders in the Santa Clara River Watershed. Tentative Permit at E-23. Bioassessment monitoring is critical to assess the full impacts of a discharge. For instance, there is a strong linkage between nutrient/excess algal growth impacts and benthic community health. As the literature suggests, nitrogen monitoring alone is not sufficient to characterize nutrient impacts. Conducting bioassessment monitoring will help to assess nutrient impacts from the discharge.

However, bioassessment monitoring should take place on a more frequent basis than is required in the Tentative Permit. In order to capture seasonal variability, we suggest that monitoring occur at least twice per year – ideally in the spring and fall -- to capture conditions before the rainy season and after the rainy season. Since there is year-round discharge from treatment plants upstream of the Newhall plant, fall collection should not be a problem. The discharger should calculate an IBI score from the bioassessment monitoring data. Also, the Regional Board should require that bioassessment monitoring begin immediately (i.e. fall 2008), regardless of the status of the watershed-wide monitoring program. The discharger's bioassessment program can always be modified once the stakeholders develop a watershed-wide program.

Receiving water monitoring should be expanded to include at least four monitoring locations.

The Tentative Permit includes a receiving water monitoring program with one downstream and one upstream monitoring location. Tentative Permit at E-6. Two receiving water monitoring locations are inadequate to assess discharge impacts, especially for a new discharge where there is considerable uncertainty regarding effluent quality and for a receiving water with extraordinary natural resource values. The receiving water monitoring program should be more robust. The Regional Board should require a minimum of two upstream and two downstream monitoring locations. One downstream site should be several miles downstream from the plant and below the western most edge of the Newhall Ranch housing development. Monitoring several miles downstream of a wastewater facility is not unusual. For instance, Las Virgenes Municipal Water District monitors several miles downstream of their Tapia Water Reclamation Facility discharge. Also, when Phases II and III are initiated the Regional Board should increase the number of receiving water locations.



IV. SPILL REPORTING

The Regional Board should make several clarifications to the Spill Reporting Requirements.

The Spill Reporting Requirements state that monitoring of a spill is required "...if feasible, accessible, and safe." This language is used several times in the spill monitoring requirements. How does the Regional Board define "feasible" and "accessible"? This determination should not be entirely left up to the discharger's discretion.

Also, the statement "The Discharger shall obtain a grab sample [if feasible, accessible, and safe] for spills, overflows or bypasses of any volume that flowed to receiving waters or entered a shallow ground water aquifer, and all spills, overflows and bypasses of 1,000 gallons or more that have the potential public exposure," is contradictory. Please clarify this sentence. Heal the Bay recommends that a grab sample be collected for any volume of sewage spilled. In addition, how is "the potential for public exposure" defined? As we have witnessed with other sewage spills in the Los Angeles region, public health has been compromised on numerous occasions because the contractor/operator who caused the spill had too much discretion. All spills must be reported.

V. MICELLANEOUS

- Regional Board staff uses the 50th percentile of receiving water pH and temperature data to calculate the monthly average ammonia limitation and the 90th percentile of pH data to calculate the daily maximum ammonia effluent limitation. This calculation method is not fully protective. In fact, the Tentative Permit concedes that only "...half the time the limit would be expected to be overly protective." Tentative Permit at F-24. In other words, the limit would be under protective approximately half of the time. Further, the Tentative Permit states that the daily maximum limit will be "...under protective ten percent of the time." Tentative Permit at F-24. The effluent limits should be protective of all species – never under protective.
- Mass emission limitations are based on the Phase I plant design flow rate of 2 mgd. Tentative Permit at F-23. This is not protective of receiving waters. The Regional Board should use the average effluent discharge flow, as this number represents the actual flow volume. By utilizing the design flow, the Regional Board is allowing much higher mass emissions than is merited based on plant operation.
- The Tentative Permit's Fact Sheet states that the Nitrite-N effluent limit is 0.9 mg/L, in accordance with the Santa Clara River Nitrogen Compounds TMDL. However, Table 7 provides an effluent limitation of 1.0 mg/L. Tentative Permit at 14. The 0.9 mg/L effluent limit is appropriate, as it corresponds to the TMDL's waste load allocation. Thus, this discrepancy should be corrected.
- The Tentative Permit outlines the 303(d) listings for the Santa Clara River. Toxaphene appears to be missing from the list for the Santa Clara River Estuary. Also it is important



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to note that Santa Clara River Reach 3 is on the 303(d) “Being Addressed” list for an ammonia impairment.

- The Tentative Permit states that the treatment process will include partial reverse osmosis. Tentative Permit at 5. What percentage of the discharge will be treated using reverse osmosis? What are the end-uses planned for this advanced-treated water? What is the management plan for the brine that is generated in the reverse osmosis treatment process? These questions should be answered in the Tentative Permit findings.
- The first column and last row of Table 2 is cut-off. Currently, it states the parameter is “Remaining EPA priority pollutants excluding.” Tentative Permit at E-7. What does this exclude?

In conclusion, we find numerous issues with the Tentative Permit as currently written. Of particular concern is the lack of effluent limits for all priority pollutants. The Santa Clara River is arguably the most important riparian resource in the Los Angeles Region. It provides crucial aquatic ecosystem functions in the region, including groundwater recharge and riparian habitat for endangered and rare species. The Regional Board should make modifications to the Tentative Permit as outlined above, in order to adequately protect water quality in the Santa Clara River Watershed.

If you have any questions or would like to discuss any of these comments, please feel free to contact us at (310) 451-1500. Thank you for your consideration of these comments.

Sincerely,

Kirsten James, MESM
Staff Scientist

Mark Gold, D. Env.
Executive Director