Dear Mr. Smith:

Thank you for your letter of July 21, 2010 (Letter) and the opportunity to respond to the proposed addendum to the Waste Discharge Requirements for our San Vicente Wastewater Treatment Plant. Staff has reviewed the document and has the following comments on the Tentative Addendum No. 1 to Order No. R9-2009-0005:

1. On page 2, paragraph 6, a, iii, a polyethylene geomembrane (PE) is referred to as the containment layer. The specifications that have been prepared for the proposed brine evaporation pond call for a polyvinyl chloride (PVC) membrane liner for secondary containment.

2. On page 2, paragraph 8, it states that there should be “more frequent monitoring of heavy metals”. Our staff prefers for this to be quantified. Our understanding from speaking with RWQCB staff is that we will need to test once every 5 years and if that test is out of compliance we will need to test monthly until we are back in compliance. We would then go back to the 5 year cycle.

3. On page 4, paragraph 3, b, a freeboard of 6-inches is required at all times for each section of the pond. The outside perimeter wall will provide well beyond the 6-inches of freeboard, but one of the potential operational scenarios is to allow one pond to completely fill and spill into the next pond downhill from the pond being filled. If 6-inches of freeboard is desired for emergency storage capacity, the pond will never have that capacity because the control structures (weirs) will automatically spill into the next pond before ever filling the remaining storage capacity associated with the freeboard. It may be better to quantify the freeboard associated with the perimeter wall for splash action and quantify an emergency volume to be maintained in the overall pond. We would also point out that the RMWD controls the flow rate into the brine ponds. In an emergency scenario, we would stop sending brine to the evaporation ponds and discharge it into the existing brine pond at the treatment plant site to be stored and hauled off site.

4. On page 4, paragraph 3, e, the solids buildup is required to be removed “sufficiently by October 31 of each year”. Our calculations show that solids buildup will take
approximately 4 years before impacting storage capacity. RMWD’s preference is to remove solids “as-needed” to reserve wet weather storage capacity in the brine ponds.

5. On page 9, paragraph 1, a, 3, states that a map of all monitoring points needs to be included in quarterly reports. Our assumption is that this is a map of the observation ports on the leachate collection system, but could be interpreted as being the locations of existing monitoring wells. It is also our understanding that additional monitoring wells will not be required due to the dual containment and collection system constructed with the brine ponds. Attached is a half sized plan of the proposed observation ports on the brine pond.

6. On page 9, paragraph 2, b and page 10, 2, c, the references to HDPE liner should be changed to PVC liner.

7. On page 11, paragraph B, 1, b the daily flow rates during any thirty day period should be 0.80 million gallons per day instead of 0.08 million gallons per day.

If you have any questions with respect to our comments, please feel free to contact me at 760-788-2249 or tstanton@rwmd.org.

Sincerely,

Timothy Stanton, PE
District Engineer

Attachment

Cc: Alice Benson, RMWD Wastewater Operations Manager
    Joe Cortez, RMWD Wastewater Treatment Supervisor
**Design Criteria:**

1. Conforming to regional water quality control board's standards to prevent leaching.
2. Appropriate based on evaporation rate of 45 inches per year.
3. Ponds are equipped with both flap and weir to prevent storm run-off to enter the structure.
4. Basins daily flow rate of 800,000 gallons per day calculated, the estimated evaporation from pond is 1.5 in. or 53,000 gallons per year.

**Volume Calculation:**

- Estimated volume is 88.862 cubic feet. Actual design only. Contractor shall make own determination of all quantities and shall be responsible for construction of the site of the contours and elevations as accurately shown. Any additional cost to the owner.

- Pond liners consisting of 4" thick concrete over 4" minimum sand as primary containment below the sand layer. It is 40 KPS PVC containment to serve as the secondary containment.

**Desgn Details:**

- **1.** Conforming to regional water quality control board's standards to prevent leaching.
- **2.** Estimated quantities are for design purposes only. Contractor shall make own determination of all quantities and shall be responsible for construction of the site of the contours and elevations as accurately shown, at no additional cost to the owner.

**Earthen Quantities:**

- 5166 cubic yards (containing 12% shrinkage factor)
- Fill: 4593 cubic yards
- Export: 0 cubic yards

**NOTES:**

- Quantities are based on the finish grade elevations and existing grade elevations (see data below).
- Estimates are based on the finish grade elevations and existing grade elevations (see data below).

**Construction Access Road:**

- 12' wide, 0.25' grade with maintenance access road (830 LF).
- Maximum access road (830 LF).
- 0.67' high concrete (1 'c,000 psi) at rock wall, 1.33' wide, 0.5% min.
- 4" HDPE pipe at 0.5% min.
- 6' wide observation and water stop spaced at 12 PF.

**Design Grading/Improvement Plan:**

- Scale: 1" = 20'
- Contour monument station RSV 749 per D/P survey control.
- BRINE POND DATA TABLE

**Burrus Regional Water District**

- Location: San Diego, California 92124
- Phone: 858.64), 5000
- Fax: 858.64), 5001
- Website: www.FIBF.com