LFR ENVIRONMENTAL MANAGEMENT & CONSULTING ENGINEERING

November 18, 2008 002-10180-80

Mr. Jeremy Haas
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123

Subject: Technical Memorandum for Estimation of Marginal Increased Operating Costs for the Denitrification System to be Installed at SFPP, L.P.'s Mission Valley Terminal, 9950 and 9966 San Diego Mission Road, San Diego, California

Dear Mr. Haas:

LFR Inc. (LFR) has prepared this submittal on behalf of SFPP, L.P., an operating partnership of Kinder Morgan Energy Partners, L.P. (Kinder Morgan), describing the estimation of marginal increased operating costs associated with the new denitrification unit being added to the groundwater remediation system at the Mission Valley Terminal (MVT) located at 9950 and 9960 San Diego Mission Road, San Diego, California. This estimate has been developed in relation to Complaint No. R9-2008-0046. The following assumptions were used in developing this estimate:

- The operational cost estimation is based on an average influent nitrate concentration of 2.0 milligrams per liter (mg/L) and an operational flow rate of 300 gallons per minute (gpm). These parameters provide a conservative representation of the 2007 and 2008 influent conditions.
- The cost of electricity is based on an average unit rate of $0.11/kilowatt-hour (kwh), which is representative of the average rate paid by the discharger in 2007 and 2008.
- The cost of chemical reagents (i.e., 50% acetic acid at $4.00/gallon and 75% phosphoric acid at $7.50/gallon) is based on recent unit cost estimates provided by chemical suppliers.
- The system is assumed to have operated on a continuous basis (i.e., 24 hrs per day).

The marginal operating costs are defined as being equivalent to the operating cost of the denitrification system without the operational cost of the previously existing treatment system components. Estimation of the annual costs is summarized as follows:

• Electricity Usage	50,000 kwh/year	0.11/kwh	$5,500
• Chemical Usage - 75% phosphoric acid	0.05 gallon/day	$7.50/gallon	$150

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- Chemical Usage - 50% acetic acid 8.4 gallon/day $4.00/gallon $12,300
- Operational Monitoring (testing and analysis) $200/month $2,400
- The treatment system is already staffed by a full-time operating technician, so no additional labor charges are incurred due to the addition of the denitrification unit.

The annual marginal operating costs for the denitrification unit are estimated to total $20,350, which would be equivalent to average costs of $55.75 per day.

Please contact either of the undersigned at (714) 444-0111 or Scott Martin (Kinder Morgan) at (714) 560-4775 with any questions or comments you may have regarding this matter.

Sincerely,

Marcelo A. Garbiero, P.E.
Senior Project Civil Engineer
California Professional Engineer #072947

Jennifer S. Rothman, P.E.
Principal Civil Engineer
California Professional Engineer #054606

cc: Scott Martin, KMEP
Sean McClain, RWQCB
Nancy E. Van Burgel, Kinder Morgan
Katharine Wagner, Downey Brand

Attachments