John Minney
17137 Road 37
Madera CA 93636
559-275-5937 559-645-0870
jminney@gmail.com

February 11, 2013 **JOB F12021**

Linda Novick
Harvest Power
430 Main St.
San Francisco, CA 94105-2006

SUBJECT: Groundwater Extraction
Tulare Compost Facility
24487 Road 140
Tulare County, California

Dear Linda:

The facility is a compost yard which has occupied nominally 35 acres zoned agricultural. The facility now operates on that zoning using a Conditional Use Permit for 500 tons per day (tpd) compost. The facility wishes to expand the daily compost tonnage to 1000 tpd but not exceeding 156,000 tons per year. No change to the acreage is proposed. Better equipment allows for more tonnage to be processed on the same acreage. The site has an existing well which fills a 3000 gallon water truck that applies water to the compost for five days a week during normal working hours.

The total number of water truck loads per day for 1000 tpd compost is a maximum of 27 for June through October (5 months, 22 weeks, 5 working days/week, 110 working days). At 3000 gallons per water truck load, the daily gallonage is 3000 x 27 = 81,000 gallons per day; 81,000 gallons per day x 110 working days = 8,910,000 gallons total for June through October.

The total number of loads per day for 1000 tons/day is half the maximum ½(27) = 13.5 for November through May (7 months, 30 weeks, 5 working days/week, 150 working days). At 3000 gallons per load, the daily gallonage is 3000 x 13.5 = 40,500 gallons per day; 40,500 gallons per day x 150 working days = 6,075,000 gallons total for November through May.

The total water usage for the year is 8,910,000 + 6,075,000 = 14,985,000 gallons, which converts to 14,985,000/7.48/43,560= 46 acre-feet. The compost yard is 35 acres. So the water usage is 46/35 = 1.3 feet per acre per year. As crops in this area use up to 3 feet of water per year, I would consider that within a standard agronomic usage for an already agriculturally zoned parcel and consistent with the water usage that would otherwise occur on this parcel if the compost yard did not exist. The compost yard therefore does not draw excessively on the underlying groundwater table.

Please call if you have questions or comments in this regard.

Respectfully submitted,

John M. Minney
CE 32537, GE 602, Well Drilling Contractor C-57/642035

REGISTERED PROFESSIONAL ENGINEER JOHN M MINNEY No. 32537 CIVIL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER JOHN M. MINNEY No. 602 GEOTECHNICAL STATE OF CALIFORNIA

JMM/bf