



September 17, 2007

TO: Waste Management Authority Board
FROM: Karen Smith, Executive Director
BY: Brian Mathews, Senior Program Manager
RE: Composting Facility Development Project

This memo updates the Authority Board on the most recent activities of the compost facility development project and the implementation of the Board's direction regarding the project.

Action by the Board is recommended in this memo.

Background

At the April 2007 meeting of the Authority Board, the Board directed staff to pursue development of the EBMUD proposal and continue discussions with the two transfer development projects proposed for western Alameda County, Delta Compost and Z-Best.

For the eastern Alameda County proposals, at the July 2007 Authority Board meeting, the Board (a) adopted the recommendation to pursue further evaluation of the North Flynn Rd. site and the Jess Ranch property and hold off on pursuing the Altamont Landfill site and the San Joaquin Co site until more is learned about the two preferred sites; and (b) authorized staff to pursue discussions with the Bay Area Air Quality Management District (BAAQMD), Fish and Wildlife Service and/or other regulatory agencies to identify key issues regarding the development of the preferred sites. This memo reports on the activities related to the Board's direction and recommends action.

Discussion: Eastern Alameda County Preferred Site Assessments

Meteorology/Air Quality

On August 2, Karen Smith, Debra Kaufman and Brian Mathews met with the Executive Director of the BAAQMD, Jack Broadbent, and members of his staff, Jean Roggenkamp and Henry Hilken. We discussed general aspects of the Compost Facility Development project evaluation including meteorology, air quality and odor. An outcome of the meeting was a commitment to work cooperatively to develop the analysis of potential impacts and benefits from the project(s).

Since the meeting, Brian Mathews has been in communication with David Vintze, Air Quality Planning Manager, who will oversee the coordination of the various departments within the BAAQMD who may have input on the project.

The first task was to determine if meteorological data for the two preferred sites is available. BAAQMD meteorologists reviewed several sources of modeling data that are available to them. Criteria for a good meteorological data set include: (1) that the set should be gathered within a mile of the proposed location, (2) that the set should consist of at least one year's worth of data, and (3) that the meteorological equipment used should have a history of being properly maintained and calibrated.

No meteorological data is available for the Jess Ranch site. For the North Flynn Rd site, three data sets were considered. The first data set was data collected in a wind study by the ACWMA for consideration of establishing new wind turbines on parcels 4 & 6. The two locations where wind data were collected were greater than one mile from the proposed compost site.

The second data set belongs to Florida Power and Light, which manages wind power resources on the property owned by the Authority. Two meteorological towers are within one mile of the proposed site on North Flynn Rd. However, there is uncertainty as to the completeness and quality characteristics of the data sets. The third data set was collected by the BAAQMD in 2002 as part of a regional air basin study and was gathered within .76 miles of the proposed North Flynn Rd site. However, the data set was gathered 300 feet below the North Flynn Rd. site elevation, data for a large segment of the month of October was missing, and there were geographical features between the North Flynn Rd. site and the meteorological station that could have influenced the wind patterns. A letter from the BAAQMD with their recommendation will be distributed at the meeting.

In consultation with the BAAQMD and Authority legal counsel, we are recommending that the Board authorize staff to proceed with gathering site-specific data at both preferred sites, rather than attempting to proceed based on any of the existing data described above. Gathering site-specific data will involve installation of two meteorological monitoring stations, one at each of the preferred sites, to collect meteorological data for a period of one year. To accomplish this task, we are recommending a sole source agreement with Western Weather Group, a meteorological consulting group with specific experience in collecting meteorological data that meets the specifications of the BAAQMD.

Western Weather Group, on behalf of the Authority, will purchase two meteorological towers and related monitoring equipment. The equipment will be capable of recording wind speed, wind direction, temperature, delta-temperature, solar radiation and rain fall. The systems will be capable of transmitting the data on a periodic basis via cellular phone to Western Weather Group. Western Weather Group will manage the data set and forward it to the Authority and the BAAQMD at regular intervals. Western Weather Group will also provide inspection and maintenance services for the meteorological towers on a schedule the meets with the approval of the BAAQMD. The cost of this task will not exceed \$40,000 for the two sites. The quote for the services is attached as Exhibit A.

In addition, staff anticipates that necessary project costs will include the cost of cellular service for the towers and fencing the towers to provide security for the equipment and to prevent damage to the towers from grazing animals. The cost of the fencing and cellular service will not exceed \$15,000.

At the end of one year of data collection, the Authority will determine the disposition of the monitoring equipment. It may be used to collect data at an alternative compost facility location

proposed to the Authority, placed permanently at one or both of the preferred locations and/or disposed of as surplus property.

Staff recommends the Board approve a sole source agreement with Western Weather Group for the two meteorological towers, one at North Flynn Rd. and the other at Jess Ranch for an amount not to exceed \$40,000, and approve the transfer of \$55,000 from fund balance to the Organics Processing Development project (0179) to fund the agreement, provide cellular service and to install fencing around the two structures.

Biological Survey

In the area of biological resources, it was determined through consultation with Authority counsel that very little would likely be accomplished by contacting the Fish and Wildlife Service and/or Dept of Fish and Game since these agencies typically are unable to respond to conceptual plans.

Therefore, we contacted LSA, a consulting firm which specializes in biological assessments, to assist with a preliminary assessment of the two preferred sites. A preliminary assessment would include a site visit by a botanist and a biologist to both locations, literature review of rules and regulations that could apply and a review of other studies (permits that have been taken out by others in the area). The work would culminate in a report that would identify the possible biological issues at the two preferred sites, and would identify further studies that could be needed to either include or exclude species-of-concern and delineate their habitat. The cost would be between \$5,000 and \$7,500 for each site. LSA has unique experience and expertise for a sole source agreement in that they have prior knowledge of the North Flynn Rd. site, having previously conducted some review as part of the alternatives analysis for the Sunol project EIR and they have the staff resources available to do the work in a timely manner.

Staff recommends the Board approve a sole source contract with LSA to do a preliminary assessment of the two preferred sites for an amount not to exceed \$15,000. Staff recommends that the Board approve transfer of that amount from fund balance to the Organics Processing Development project (0179).

Water Study

In the fall of 2006, Karen Smith and Brian Mathews met with Jill Deuring and Jim Horen of Zone 7. At that meeting it was determined that recycled water from the City of Livermore waste water treatment plant was impractical to consider for the North Flynn Rd. site primarily due to the location of available infrastructure for water delivery and the quality of the recycled water and its suitability for use in composting.

At the June 2007 Authority Board meeting, there was some discussion about the availability of water at the proposed composting locations. The concern expressed by some of the community members present and Board members was that if the projects relied solely on ground water resources (as was being proposed), the facility water needs could exceed the ground water supply and/or over pumping could deplete the ground water resource used by surrounding neighbors, who rely solely on ground water for domestic and agricultural needs.

At the July 2007 Board meeting the Board identified water availability as a focus area for the ACWMA's initial investigation of the two preferred sites. The focus of the study would be to: 1)

determine the onsite availability of water from ground water and run-off, 2) determine if ground water were used would it be adequate in volume and quality to meet the compost facility needs, 3) determine if ground water were used and was in sufficient quantity to meet facility needs, what would be the impact on surrounding wells from this use, 4) if onsite water resources are not adequate, what off-site water sources are reasonably/practically available in the quantity and quality necessary for the facility operations, and 5) what would be the capital cost of developing those resources. The cost of a conducting a water study could range from \$50,000 to \$200,000. It is assumed that to determine item 5 - Capital Costs, preliminary engineering drawing would be needed (approximately 25% complete) for an accurate capital estimate to be developed.

On August 30, Mr. Mathews met again with Zone 7 Planning Manager, Jim Horen, to ask their assistance in preparation of a water study for the two preferred sites. Zone 7 agreed to assist the Authority in the role of third party reviewer of a Request for Proposals, scope of work, and work product.

It is recommended that the Board direct staff to prepare a Request for Proposal, for consultant services to prepare a water study for the two preferred sites. Staff will return to the Board with the Request for Proposals in October for review and release.

Recommendation:

Staff recommends the Alameda County Waste Management Authority Board direct staff, in consultation with Zone 7, to prepare a Request for Proposals for consultant services to prepare a water study for the two preferred sites that will address the issues outlined by this memo.

Staff recommends the Alameda County Waste Management Authority Board adopt the attached resolution (Exhibit B) to enter into contracts with Western Weather Group for \$40,000, and LSA for \$15,000, and approve the transfer of \$70,000 (\$55,000 for contracts and \$15,000 for meteorological data collection support) from fund balance to the Fiscal Year 2007-08 Organics Processing Development Project budget to fund these tasks.

Exhibits: A) Quote from Western Weather Group
 B) Resolution