

MONTHLY PROGRESS REPORT FOR CONTRACT NO. 500-00-036

PROJECT 2.1 – ENHANCED LANDFILL GAS PRODUCTION USING BIOREACTORS

REPORT PREPARED BY: COMMONWEALTH ENERGY TEAM

August 2003

Contractor Project Director:	Patrick Lilly (360) 906-0616
Contractor Project Manager:	Bill Kitto (503) 235-5022
Commission Project Manager:	Zhiqin Zhang (916) 654-4063

What we planned to accomplish this period:

On Project 2.1, a primary focus of activity will be developing conceptual design information on the Mid-Valley bioreactor project. Such information is needed for the meeting with the Water Quality Control Board; Santa Ana Region scheduled for late August. This information will be developed and reviewed with various entities involved in the Project and then discussed at a meeting planned to be held in San Bernardino County. This same information will also be valuable for the Project 2.1 TAC and CPR meetings scheduled for September. It is also anticipated that efforts on completing the Waste Characteristic Report will be undertaken, including the incorporation of comments as they are received from the Commission and TAC members.

What we actually accomplished this period:

Task 2.1.1 Characterize Waste to be Placed in Bioreactor:

- In August, activities were completed in support of preparation of the draft Waste Characterization Report. Data received from San Bernardino County landfills was supplemented with data obtained from statewide solid waste sources. The Task 2.1.1.a draft report was completed and submitted to senior team reviewers and the Commonwealth Team for internal review and comment.
- In support of Task 2.1.1 and Task 2.1.3, coordination activity was undertaken for several meetings. This included a meeting held on August 28th in San Bernardino and the subsequent Project 2.1 TAC meeting scheduled for early to mid-September in Sacramento. The meeting held in San Bernardino County involved representatives of the Commission, Regional Water Quality Control Board, San Bernardino County, Burtech, BAS and Associates, and the Commonwealth Team. Team members participated in several other meetings in the course of coordination and planning efforts for the August 28th meeting.

Task 2.1.3 Conceptual Design for First Bioreactor

- Several project documents related to the conceptual design were prepared and distributed prior to the August 28th meeting in San Bernardino. These documents included conceptual layouts and drawings of a bioreactor, which would be installed in the north portion of the existing cell at the Mid-Valley site. Information was presented that addressed the water availability, water distribution, gas collection and other elements of the proposed bioreactor.
- A meeting was held on August 28th in San Bernardino at the offices of the Regional Water Quality Control Board. The conceptual design information described above was presented at the meeting. A key outcome of the meeting was the request of San Bernardino County to look at the San Timoteo landfill site as a potential location for the demonstration bioreactor project, as it appears from the County's perspective to have several potential advantages over the Mid-Valley site. Also, at the meeting the potential availability of water for the bioreactor was discussed and several options were identified. Following the meeting, a site tour of the Mid-Valley and San Timoteo landfill sites was conducted by all members.

How we are doing compared to our plan:

Work is generally proceeding as anticipated. An important challenge is gaining regulatory acceptance of the bioreactor landfill project. As part of this effort, EPA activity to implement an R&D exemption for bioreactors is being closely followed by the CE Team. This regulation will be very important in successfully permitting the bioreactor project. Developments in this area are being closely followed. Also important on this project is the development of an approach involving key stakeholders in San Bernardino County and elsewhere for such a project. Staff from the County, its operator and engineer as well as the Water Quality Control Board, Santa Ana Region, the Energy Commission and various other State and local entities were consulted and contributed valuable input to the development of the project. Clearly, it is very important to keep all key stakeholders involved in the formulation of the project as it moves forward.

Significant problems or changes:

There are no significant fiscal problems to report during this period and work is proceeding within Project budget. Progress and expenditures will result in project being completed on time and within budget.

What we expect to accomplish during the next period:

In September, a primary focus of activity will be responding to questions and issues raised at the meeting on the Mid-Valley bioreactor project held on August 28th. Another important

activity will be the Project 2.1 TAC meeting scheduled to be held on September 10th in Sacramento. Information developed in response to issues arising in the August 28th project team and September 10th TAC meetings will be valuable for the meeting with the RPAC to address the Critical Program Review scheduled for September 24. It is also anticipated that efforts on completing the Waste Characteristic Report will be undertaken, including incorporation of comments as they are received by the CEC and TAC members.

Status of Milestones and Deliverables:

Table 1 below summarizes the status of Project 2.1 task deliverables as of the end of the current reporting period.

Table 1: Summary of Project Status and Deliverables – Project 2.1

Task No.	Description	Start Date		Due Date		Status (%)
		Planned	Actual	Planned	Actual	
2.1.1a	Characterize MSW and Source Separated Organic Waste To Be Placed in Both Bioreactors	04/07/03	1/24/03	08/21/03	08/20/03	95%
2.1.1b	Characterize Food or Animal Wastes to be Placed as Amendment in the Second Bioreactor	04/07/03	1/24/03	On Hold		5%
2.1.2	Identify Amendment Source Locations for the Second Bioreactor	04/07/03		On Hold		
2.1.3a	Prepare Conceptual Design for the First Bioreactor	08/06/03		12/18/03		10%
2.1.6	Coordinate with Renewables Project Advisory Committee/TAC Critical Project Review meeting	04/07/03		04/26/06		

Explanation of any Difference(s) in Schedule:

Task 2.1.1a – Landfill Feedstock Characterization Report – Information needed to complete this report took longer to collect than anticipated, as the primary data to be used was not available in an electronic format. This delay will not affect the overall schedule for the project as that is being affected by the issuance of the R&D exemption

