

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

PROJECT 2.1 – ENHANCED LANDFILL GAS PRODUCTION USING BIOREACTORS

REPORT PREPARED BY: COMMONWEALTH ENERGY TEAM

November 2004

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**What we planned to accomplish this period:**

Limited activities were expected for November. The only activity remaining to be completed on this project was the review of the findings and results of the Project, as they relate to future bioreactor projects. This effort, identified during the project wrap-up meeting, will be conducted as the primary component of the Project's Measurement and Evaluation activity.

**What we actually accomplished this period:**

Limited activities were completed this period as the Project Wrap-Up Meeting under task 2.1.6 was held on October 15<sup>th</sup> in Sacramento. This meeting marked completion of the task involving coordination activity with the Technical Advisory Committee. Activities on individual tasks are summarized below.

Task 2.1.1 Characterize Waste to be Placed in Bioreactor:

- As the *Waste Characterization Report* was previously submitted, no activity on this task was undertaken in November. Data from this effort were reviewed and used to facilitate the completion of the Project 1.1, Task 1.1.10 *Prioritization Report* and other Project 2.1 activities

Task 2.1.3.a Conceptual Design for First Bioreactor

- No activity on this task was completed in November, as the draft report was submitted in April.

Task 2.1.3.b Construction and Test Plans for First Bioreactor

- No activity on this task was completed in November, as the draft report was submitted to the Commission in July.

*Task 2.1.6. Coordinate with Project Technical Advisory Committee*

- Very limited activity was undertaken on this task in November. In October a presentation was given to the Technical Advisory Committee at the Project Wrap-Up Meeting that was held on October 15<sup>th</sup> in Sacramento. The meeting included an overview of the project, reasons for closing the project, and a summary of accomplishments and lessons learned. Particular emphasis was placed on permitting and also on what could be done in the future to support the bioreactor technology. Discussions were also conducted on a variety of topics, including how future projects could build on what had been learned on this project as well as the Yolo County bioreactor project. Activities on this task summarized interactions with the RPAC and TAC, from the initial meetings in 2003 through July 2004 when the decision was made to not proceed with the project.

**How we are doing compared to our plan:**

Work ceased on this project due to the decision to not proceed with the bioreactor elements of the liner extension project at Mid-Valley in July 2004. Work had been moving forward with a schedule for the bioreactor being able to accept waste in January or 2005. However, when work ceased it was decided that the main project effort would be completed after a lessons learned/project wrap up meeting was held. As stated previously, that meeting, involving the Technical Advisory Committee, was held on October 15<sup>th</sup>.

**Significant problems or changes:**

The County needed to proceed with the construction of the Unit 3 liner extension project so that construction of the liner extension would occur starting the summer of 2004. This was needed so that waste could be placed in the Mid-Valley Unit 3 cell in early 2005. Because the County could not delay the decision to proceed with the liner extension project, the bioreactor project was stopped without including the bioreactor elements.

**What we expect to accomplish during the next period:**

Limited activities are expected for December. The only activity remaining to be completed on this project is the review of the findings and results of the Project, as they relate to future bioreactor projects. This effort, identified during the Project Wrap-Up Meeting, will be conducted as the key element of the Measurement and Evaluation activity of this project prior to completion of the overall Commonwealth Program.

**Status of Milestones and Deliverables:**

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

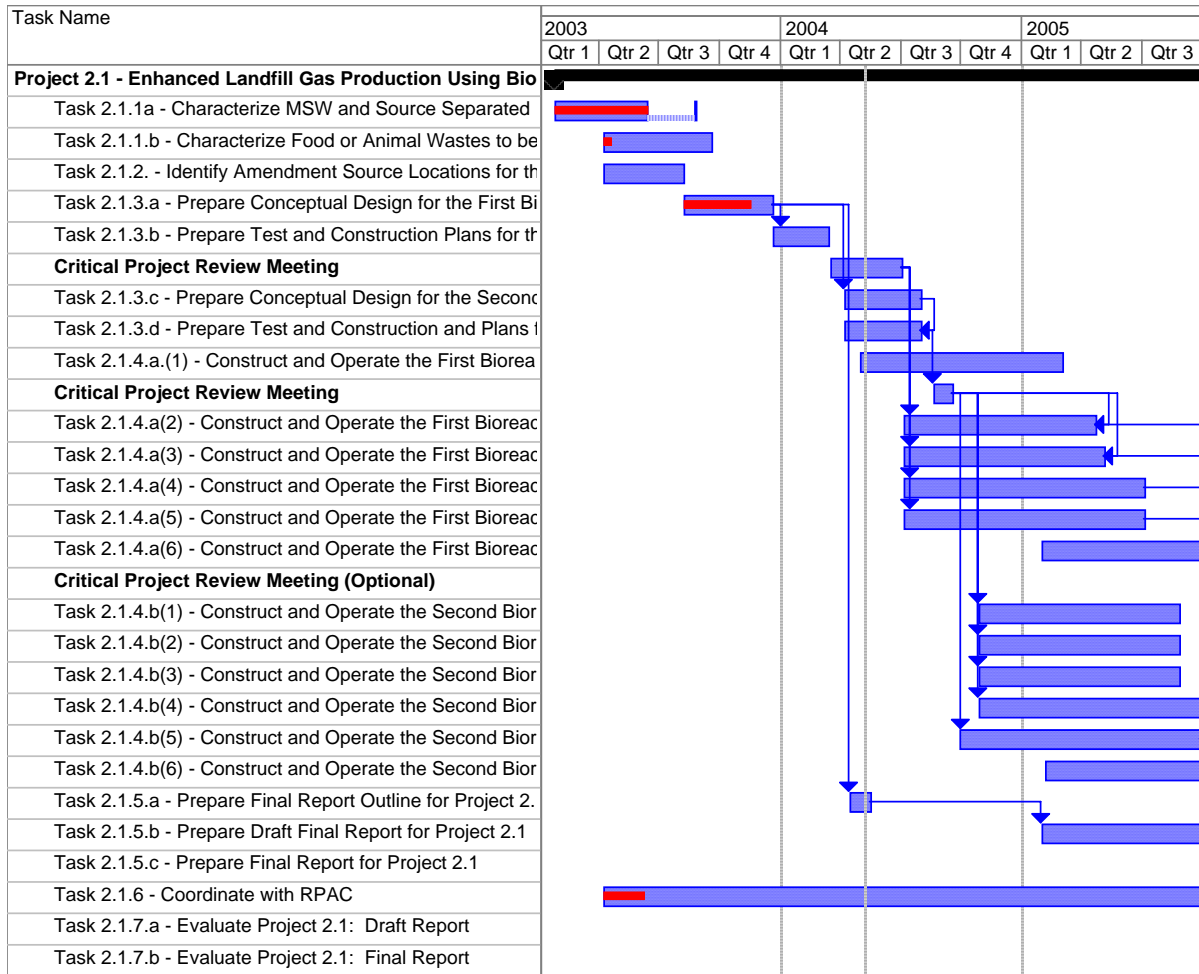
**Table 1: Summary of Project Status and Deliverables – Project 2.1**

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	01/10/02	1/24/03	05/31/02 08/21/03	DR: 08/20/03	100%
2.1.1b	Characterize Food or Animal Wastes to be Placed as Amendment in the Second Bioreactor	03/25/02		On Hold		
2.1.2	Identify Amendment Source Locations for the Second Bioreactor	05/26/02		On Hold		
2.1.3a	Prepare Conceptual Design for the First Bioreactor	09/28/02	1/20/04	12/18/03	4/22/04	100%
2.1.3.b	Prepare Construction and Test Plans for First Bioreactor	12/11/03	2/20/04	3/6/04	7/20/04	100%
2.1.6	Coordinate with RPAC/TAC	01/10/02	3/15/03	04/26/06	10/15/04	100%

*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 did not affect the overall schedule for the project as the County’s schedule for extending the liner was not affected by the delay in this report. The County schedule for the liner extension was the critical path item for this project.

**Overall Schedule for Project 2.1:**



**Overview of Fiscal Status:**

Table 2 below summarizes the fiscal status of Project 2.1 by task/deliverable as of the end of the current reporting period.

**Table 2: Fiscal Status By Task – Project 2.1**

Task Number	Budget	Invoiced To-Date <sup>1</sup>	Fiscal Status *
2.1.1 a	\$52,117	\$52,117	Completed
2.1.3 a	\$243,000	\$0	OT
2.1.3.b	\$92,334	\$0	OT
2.1.6	\$22,512	\$0	OT

\*Fiscal Status – Please indicate if you are “On Track” (OT), OverBudget (OB), or UnderBudget (UB)

<sup>1</sup> Invoiced To-Date indicates the total amount invoiced prior to 10% retention being withheld