

GRANT PROGRESS REPORT OUTLINE

GRANTEE: Placer County
GRANT YEAR: 2011
GRANT NUMBER: 11-DG-11052021-160
GRANT PROGRAM: 2011 Hazardous Fuels Woody Biomass Utilization
GRANT EXPIRATION DATE: 12/31/2012

DATES COVERED BY THIS REPORT: April 1, 2012 to June 30, 2012

For each project in the grant narrative, report on the following (electronic format is preferred, but handwritten responses, if clear, will be accepted - please use additional pages if needed.):

Lake Tahoe Region Biomass Energy Facility Technology Integration and Preliminary Design Project

- STATUS

Our project is active will have a slight modification to the schedule according to original timeline due to the delay of the Environmental Impact Report (EIR) by four to six weeks but will still provide all work and our final report by the December 31, 2012 original contract deadline. Wood Rodgers our engineering firm continues to perform the tasks associated with the intermediate site plans and design drawings. TSS is continuing their task of technology integration into the design. A new site layout drawing and a 3D conceptual building design has been prepared. Specific details follow in our progress report.

- WHAT HAS BEEN ACCOMPLISHED SINCE LAST PROGRESS REPORT?

Site Layout Design – The project team has made several changes to the preferred site for this project due to more detailed environmental and technology issues and a new plan has been documented (a PDF is attached). Because we are not likely to choose one vendor we will have multiple design layouts within the building.

Gather Background Information: Continued to collect information regarding the existing on site infrastructure as well as additional preliminary details regarding building requirements for structures within 1000 feet of a landfill. To assist in the preliminary design, specifically, the size of the area in which the bio-energy facility will be located, gasification technology vendors/developers were contacted and queried as to their area size requirements. These vendors/developers were supplied with a draft of the Preliminary Design Site Plan, and discussions were held with them. As part of the development of the next draft of the Site Plan, discussions of potential different sizes of the facility building pad, facility building size; including square footage and height requirements for their specific system configuration and equipment. This information was then supplied to the site plan engineer for consideration and incorporation into Site Plan.

Site Drainage and Water Quality: In conjunction with updating the site layout, site drainage and water quality needs were assessed in greater detail. Preliminary calculations for the existing drainage sheds were performed to support the environmental document with the findings also being incorporated into concept drawings.

Requests for Clarification: Continued to provide response to requests for clarification on specific design elements as requested. Clarifications typically centered on various site limitations,

such as site grades or existing infrastructure, which may have precluded other alternative site layouts during development of the plan.

Support of the Environmental Process: In support of the EIR documentation being prepared by Placer County and Ascent Environmental, our consultants provided pertinent engineering input as required. This support of environmental process ensured that the design intent was properly incorporated into the accompanying EIR for the project.

Redundant Water Well Assessment: An initial assessment in regards to locating a proposed redundant water supply well at the subject facility has been completed. Work included a site reconnaissance of the existing well site area, review of available plans for previous improvements at the Cabin Creek facility, and documentation of our preliminary findings.

Building Design – The project team has developed a preliminary set of design decisions to allow for a first conceptual building design drawing from 3 aspects which has been documented (a PDF is attached). We expect as we get newer information the full internal layout will be developed and possible changes to the overall shape and size may also change.

Visual Simulations: Several updates to earlier visual simulations were performed based on input from the project team. Updates included the addition of greater detail regarding facility vehicles and circulation, anticipated storage materials and quantities, as well as proposed equipment. These will continue to be utilized for visual impact analysis, as well as for public information.

Technical Integration- Continued to collect information from the gasification technology vendors/developers as to their systems building and layout requirements. Multiple layouts will be required.

- WHAT PERCENT OF WORK ASSOCIATED WITH THE GRANT HAS BEEN ACCOMPLISHED TO DATE?

Approximately 30% of the work has been accomplished to date.

- WHAT IS PLANNED FOR THE NEXT PROGRAM REPORT PERIOD (usually 6 month report period)?

Our work plan shows that we will complete the intermediate site plan and 3D conceptual building design drawings including the layout of equipment for multiple technology vendors. We will complete the integration of those technologies into the plans. We will also be preparing the requirements for the air permitting process.

The majority of the design work will be accomplished in the final two quarters of this grant. Final decisions will be made for the upcoming county permit hearings and then detailed design drawings will be developed for possible building permits and construction bids shortly after the completion of this grant work.

A final report will be prepared on the entire project.

- PROBLEMS ENCOUNTERED

A delay in the Environmental Impact Report activity of the project has delayed the design team 30 to 45 days for the projected completion of this grant. We do not anticipate any grant timeline extensions.

- CHANGES PLANNED

Originally we had planned to be complete with all of the design work by September 30, 2012 but due the delay of other project activities (the Environmental Impact Report) we now believe that the design work will need to be extended until November 15th but we still anticipate completion of the project and final report on or before December 31, 2012.

- OTHER COMMENTS:

No further comments.