

Final Scientific/Technical Report Content

The final scientific/technical report must include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist in your contract documents:

1. Identify the DOE award number; name of recipient; project title; name of project director/principal investigator; and consortium/teaming members.

Project Title: Flash Foods' Job Creation and Petroleum Independence with E85

Award Number: DE-EE0003053

Recipient: Protec Fuel Management LLC

Project Period: January 28, 2010 – October 1, 2013

Date of Report: 11/21/16

Written by: Steve Walk

Program Manager: Protec Fuel Management LLC / Steve Walk

Principal Investigators: Protec Fuel Management LLC / Steve Walk

DOE Project Team: Kevin Craig (kevin.craig@go.doe.gov); Clayton Rohman (clayton.rohman@go.doe.gov)

DOE Field Project Officer: Kevin Craig

DOE Contract Specialist: Nichole Blackstone

2. Display prominently on the cover of the report any authorized distribution limitation notices, such as patentable material or protected data. Reports delivered without such notices may be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use or reproduction of such reports.

none

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3. Provide an executive summary, which includes a discussion of 1) how the research adds to the understanding of the area investigated; 2) the technical effectiveness and economic feasibility of the methods or techniques investigated or demonstrated; or 3) how the project is

otherwise of benefit to the public. The discussion should be a minimum of one paragraph and written in terms understandable by an educated layman.

Objective of Project

Protec Fuel Management project objectives are to help design, build, provide, promote and supply biofuels for the greater energy independence, national security and domestic economic growth through job creations, infrastructure projects and supply chain business stimulants.

Protec Fuel has teamed up with station owners to convert 5 existing retail fueling stations to include E85 fuel to service existing large number of fleet FFVs and general public FFVs. The stations are located in high flex fuel vehicle locations in the state of GA. Under the project name, "Flash Foods Job Creation and Petroleum Independence with E85," Protec Fuel identified and successfully opened stations strategically located to maximize e85 fueling success for fleets and public. Protec Fuel and industry affiliates and FFV manufacturers are excited about these stations and the opportunities as they will help reduce emissions, increase jobs, economic stimulus benefits, energy independence and petroleum displacement.

- Displace over half million gallons of gasoline fuel each year
- Increase in new jobs created through fuel supply, transport, equipment manufacturing, installation, construction and administration across the country.
- Provide E85 fueling stations for nearby federal and state fleets so as to comply with federal mandates
- Making available E85 stations in large FFV concentration areas for general public

4. Provide a comparison of the actual accomplishments with the goals and objectives of the project. Where applicable, address any comparisons of actual results to programmatic technical barriers and milestones.

Actual accomplishments were consistent with the goals and objectives initially established. 5 fueling stations selling E85 fuel.

5. Summarize project activities for the entire period of funding, including original hypotheses, approaches used, problems encountered and departure from planned methodology, and an assessment of their impact on the project results. Include, if applicable, facts, figures, analyses, and assumptions used during the life of the project to support the conclusions.

Protec Fuel is a specialized company in station conversions, marketing and E85 fuel supply. This specialty will break through other barriers that have stalled other applications and will quickly have an executed project timeline. Because of this, Protec Fuel will manage the entire program and will be directly involved in the station success both short term and long term. Protec Fuel will be the general project manager for the stations and will get the stations converted, however, for long term success, these retailers and Protec Fuel want to be sure that the biofuel fuel is supplied competitively to gasoline or diesel so that it makes it attractive for potential customers.

Several retail station companies have teamed up with Protec Fuel Management to build/convert existing retail fueling stations to include E85 fuel. These shovel-ready projects produced 5

additional E85 dispensers at 5 stations. Under this project grant application, Flash Foods' Job Creation and Petroleum Independence with E85, Protec Fuel has identified and opened 5 E85 dispensers at 5 separate stations, completely "open to the public," strategically located in high flex fuel vehicle locations. Protec Fuel is excited about these stations and the corresponding opportunities, as they will help reduce emissions, increase jobs, immediately impact the economy and promote energy independence through petroleum displacement.

- Reduce emissions by almost 40%
- Increase in new jobs created through fuel supply, transport, equipment manufacturing, installation, construction and administration across the country.
- Provide much needed economic stimulus in respective communities.
- Provide E85 fuel for nearby federal and state fleets so to better attain EPACT mandates.

6. Identify products developed under the award and technology transfer activities, such as
 - a. Publications (list journal name, volume, issue), conference papers, or other public releases of results. If not provided previously, attach or send copies of any public releases to the DOE Project Officer identified in Block 11 of the Notice of Financial Assistance Award;

<http://www.naylornetwork.com/tpm-nwl/articles/?aid=122120&issueID=21871>

OPIS email news alert:

<http://energy.agwired.com/2010/12/17/protec-fuel-opens-first-e85-station-with-imaging/>

Green and Cleaner Fuels:

<http://www.cleanerandgreener.org/transportation/fuels-homepage.html?sobi2Task=sobi2Details&catid=5&sobi2Id=4084>

- b. Web site or other Internet sites that reflect the results of this project;

www.rfa.com

www.growthenergy.com

- c. Networks or collaborations fostered;

Retailers and ethanol associates further promoting alternative fuel applications and biodiesel fueling operations

- d. Technologies/Techniques;

N/A

- e. Inventions/Patent Applications, licensing agreements; and

N/A

f. Other products, such as data or databases, physical collections, audio or video, software or netware, models, educational aid or curricula, instruments or equipment.

N/A

7. For projects involving computer modeling, provide the following information with the final report:

N/A

a. Model description, key assumptions, version, source and intended use;

N/A

b. Performance criteria for the model related to the intended use;

N/A

c. Test results to demonstrate the model performance criteria were met (e.g.,

N/A

code verification/validation, sensitivity analyses, history matching with lab or field data, as appropriate);

N/A

d. Theory behind the model, expressed in non-mathematical terms;

N/A

e. Mathematics to be used, including formulas and calculation methods;

N/A

f. Whether or not the theory and mathematical algorithms were peer reviewed,

and, if so, include a summary of theoretical strengths and weaknesses;

N/A

g. Hardware requirements; and

N/A

h. Documentation (e.g., users guide, model code).

8. Ensure the report does not contain any Protected PII. Protected PII is defined as an individual's first name or first initial and last name in combination with any one or more of types of information, including, but not limited to, social security number, passport number, credit card numbers, clearances, bank numbers, biometrics, date and place of birth, mother's maiden name, criminal, medical and financial records, educational transcripts, etc.