Cost Share

PLEASE READ!!!

A detailed presentation of the cash or cash value of all cost share proposed for the project must be provided in the table below. Identify the source & amount of each item of cost share proposed by the award recipient and each sub-recipient or vendor. Letters of committment must be submitted for all third party cost share (other than award recipient).

Note that "cost-share" is not limited to cash investment. Other items that may be assigned value in a budget as incurred as part of the project budget and necessary to performance of the project, may be considered as cost share, such as: contribution of services or property; donated, purchased or existing equipment; buildings or land; donated, purchased or existing supplies; and/or unrecovered personnel, fringe benefits and indirect costs, etc. For each cost share contribution identified as other than cash, identify the item and describe how the value of the cost share contribution was calculated.

Funds from other Federal sources MAY NOT be counted as cost share. **This prohibition includes FFRDC sub-recipients. Non-Federal sources include private, state or local Government, or any source not originally derived from Federal funds. Documentation of cost sharing commitments must be provided, if not already provided with the original application and they have not changed since its submission.**

Fee or profit will not be paid to the award recipients or subrecipients of financial assistance awards. Additionally, foregone fee or profit by the applicant shall not be considered cost sharing under any resulting award. Reimbursement of actual costs will only include those costs that are allowable and allocable to the project as determined in accordance with the applicable cost principles prescribed in 10 CFR 600.127, 10 CFR 600.222 or 10 CFR 600.317. Also see 10 CFR 600.318 relative to profit or fee.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
ABC Company EXAMPLE ONLY!!!						
		REDACTED EXEMPTION 4				

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
		REDACTED EXEMPTION 4				
		Totals				

Total Project Cost:

Cost Share Percent of Award:

Additional Explanations/Comments (as necessary)

PMC 121.1
(07/2008)

U.S. DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CENTER

PRE-AWARD INFORMATION SHEET

ALL INFORMATION REQUESTED ON THIS FORM MUST BE PROVIDED

Awardee Name:	Solazyme, Inc.
Award Number:	DE-FOA-0000096
Awardee Business Officer:	Jonathan Wolfson
Awardee Project Director:	David Brinkmann

Employer/Taxpayer Identification Number (EIN/TIN):	33-1077078
Data Universal Numbering System (DUNS):	145862012

For assistance in obtaining a DUNS Number, call Dunn & Bradstreet at 1-800-333-0505.
The Applicant should be prepared to provide the following information to Dunn & Bradstreet:
(1) Company name
(2) Company address
(3) Company telephone number
(4) Line of business
(5) Chief executive officer/key manager
(6) Date the company was started
(7) Number of people employed by the company
(8) Company affiliation

Note: Awardee Name, EIN/TIN and DUNS MUST coincide with the Awardee's information recorded in the Central Contract Registry (CCR).

A. TYPE OF BUSINESS - the Awardee is a:

- ☐ For-Profit Organization (Other than Small Business)
  - ☐ Corporation
  - ☐ Partnership
  - ☐ Sole Proprietorship
- ☐ Government
  - ☐ Local Government
  - ☐ State Government
  - ☐ Indian Tribal Government
- ☐ Individual
- ☐ Institution of Higher Education
- ☐ Other NonProfit Organization
- ☒ Small Business
- ☐ Other (specify):

If NonProfit, select one below:

☐ A university or other institution of higher education or an organization of the type described in Section 501(c)(3) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC 501(a)); or

☐ An organization of the type described in Section 501(c)(4) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC 501(a)); or

☐ An organization of the type described in Section 501(c)(6) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC 501(a)); or

☐ A nonprofit scientific or educational organization qualified under a State nonprofit organization statute. (Please identify the statute.); or

☐ Other (specify type):

Is the Applicant a member of the Federal Demonstration Partnership (FDP)? ☐ Yes ☐ No
A listing of FDP members is available at http://www.thefdp.org/FDP_Members.html.

B. INTELLECTUAL PROPERTY

1. WAIVER OF DOE PATENT RIGHTS

This section applies only to large businesses and nonprofits other than 501(c)(3) organizations. All others should leave this subsection blank and proceed to the "Rights in Application Data" subsection that follows. Large businesses and nonprofits other than 501(c)(3) organizations have the right to request, in advance or within 30 days after execution of an award, in accordance with applicable statutes and DOE Patent Waiver Regulation (10 CFR 784), a waiver of all or any part of the rights of the United States in Subject Inventions. Accordingly, please check all that apply:

☐ I intend to request an advance waiver in accordance with 10 CFR 784.
☐ I intend to request an advance waiver on behalf of one or more subrecipients/subcontractors.
☐ I have at least one subrecipient/subcontractor that will request a waiver on its own behalf.
☐ I do not intend to request an advance waiver.

2. RIGHTS IN APPLICATION DATA

For an award based on an application/proposal, the Government will obtain unlimited rights in the technical data contained in the application/proposal, unless the Awardee marks those portions of the technical information which it asserts as "proprietary data" or specifies those portions of such technical data which are not directly related to or will not be utilized in the work to be funded under this award.

Accordingly, please indicate:

☐ No restrictions on Government rights in technical data contained in the application/proposal; or

☒ The application/proposal contains the following identified technical data that is proprietary, or is not directly related to, or will not be utilized in the work to be funded under this award.

Please list specific page numbers, table numbers, etc., and the dated version of the application/proposal to which you refer: See 091222_Solazyme_AttachmentA_PreAwardInfoSheet_PMC121.1_SectionB2.pdf

3. IDENTIFICATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE

Below, please identify any Limited Rights Data or Restricted Computer Software you plan to use to carry out your work under the award. Limited Rights Data means data (other than computer software) developed at private expense that embody trade secrets or are commercial or financial, and confidential or privileged. Restricted Computer Software means computer software developed at private expense and that is a trade secret, is commercial or financial, and confidential or privileged, or is published, copyrighted computer software, to include modifications of the computer software.

Please note that these data do not include data that you will produce under this award. Data that is first produced under this award is treated separately under the data rights clause of this award. This section covers only those data that you bring into this award that were privately funded.

If you plan to use Limited Rights Data or Restricted Computer Software under the award, please describe it in a few sentences or bullets, with sufficient detail that the DOE Project Officer can determine whether DOE will need to have any of it delivered, for example, to validate your results or the data produced under the award. You are not required to list issued patents or published patent applications. You do need to list unpublished patent applications (by title and brief description) and trade secret processes (by non-proprietary title with brief, non-proprietary description). If you have questions regarding the completion of this section, please contact the Contract Specialist handling your award.

Based on the above, please review the requirements in the technical scope of work for this award and indicate, to the best of your knowledge:

☐ No Limited Rights Data will be utilized in the performance of this award.

☒ Limited Rights Data as follows will be utilized in the performance of this award.

Use this block to provide additional information or provide an attachment: See 091221_Solazyme_AttachmentB_PreAwardInfoSheet_PMC121.1_SectionB3.pdf

Based on the above, please review the requirements in the technical scope of work for this award and indicate, to the best of your knowledge:

☒ Awardee Restricted Computer Software will NOT be utilized in the performance of this award.

☐ Awardee Restricted Computer Software as follows will be utilized in the performance of this award.

Use this block to provide additional information or provide an attachment:

C. PROJECT PERFORMANCE SITE and CONGRESSIONAL DISTRICT

List the address and congressional district for the primary site where the work will be performed:

Street Address:	**Cherokee Pharmaeuticals, LLC, 100 Avenue C, P.O. Box 367**
City:	**Riverside**
State:	**PA**
Zip:	**17868**
Congressional District:	10th Congressional District in Pennsylvania

If a portion of the work will be performed at any other site(s), identify those site(s) below, and indicate what portion of the effort will be performed at this/these site(s):

Street Address:	Solazyme, 201 Gateway Boulevard
City:	South San Francisco
State:	CA
Zip:	94080
Congressional District:	12th Congressional District in California

Briefly describe portion of effort for this Site:	Optimization of fermentation parameters at laboratory scale to support integrated pilot operations at SzIBR

Street Address:	UOP, 5200 Underwood Road
City:	Pasadena
State:	TX
Zip:	77507
Congressional District:	22nd Congressional District in Texas

Briefly describe portion of effort for this Site:	Production of renewable diesel from algal oil

Street Address:	REG, 3426 East 28th St N
City:	Newton
State:	IA
Zip:	50208
Congressional District:	3rd Congressional District in Iowa

Briefly describe portion of effort for this Site:	Production of biodiesel from algal oil

D. INVOICING AND PAYMENTS

1. Has the Awardee received any prior DOE awards administered by the Golden Field Office (GO)?

☐ Yes

If yes, please list the most recent award number: _____

☒ No

2. Is the Awardee currently enrolled with the U.S. Department of Treasury / ASAP system (Automated Standard Application for Payment System) under the DOE / Golden Field Office (GO) Agency Locator Code (ALC) and Region Code (#8900-0001-04)?

☐ Yes

Enter Awardee Seven-digit ASAP ID Number: _____

☒ No

3. Please provide the following contact information for ASAP and/or Payments:

   IMPORTANT: If not currently enrolled in the ASAP system under GO's ALC and Region Code, the person identified below will be contacted by the U.S. Department of Treasury with further instruction on completing the ASAP enrollment process.

   ASAP / Payments Contact Person: **Yelena Popova**

   Phone No.: **650-963-5215** Extension: **N/A** E-mail: **ypopova@solazyme.com**

4. Indicate preferred payment method below: (NOTE: this section is reserved for universities, hospitals, other non-profit organizations and state and local governments that are authorized Advance Payment Procedures, unless a specific need is supported. All other entities desiring advance payment should discuss with the DOE Award Administrator.)

   ☐ Payment by Advance is preferred. (SF 272 reporting will be required.)
   ☐ Payment by Reimbursement is preferred. (SF 272 reporting will not be required.)

5. Indicate the name, phone number, and email address of the Designated Responsible Employee for complying with national policies prohibiting discrimination (see 10 CFR 1040.5 and the Certifications and Assurances found at http://management.energy.gov/documents/CERTSASSUR.doc).

Lisa Roslund	**650-963-5211**
Name	Telephone Number
Director, Human Resources	**lroslund@solazyme.com**
Title	Email Address

REPRESENTATION/CERTIFICATION

I represent by my signature below that all the information provided by this form is accurate.

Name: Jonathan Wolfson

Title: Chief Executive Officer

Signature of Authorized Company Official:

Date: December 22, 2009

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424 Version 02

*1. Type of Submission:	*2. Type of Application	* If Revision, select appropriate letter(s)
☐ Preapplication	☒ New	
☒ Application	☐ Continuation	*Other (Specify)
☐ Changed/Corrected Application	☐ Revision	

3. Date Received:	4. Applicant Identifier:

5a. Federal Entity Identifier:	*5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:	7. State Application Identifier:

8. APPLICANT INFORMATION:

*a. Legal Name: Solazyme, Inc.

*b. Employer/Taxpayer Identification Number (EIN/TIN):	*c. Organizational DUNS:
33-1077078	145862012

d. Address:

*Street 1: 561 Eccles Avenue
Street 2:
*City: South San Francisco
County:
*State: California
Province:
*Country: USA
*Zip / Postal Code 94080

e. Organizational Unit:

Department Name:	Division Name:
N/A	N/A

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: *First Name: David
Middle Name:
*Last Name: Brinkmann
Suffix:

Title: Vice President of Manufacturing

Organizational Affiliation:
Solazyme, Inc.

*Telephone Number: 650-780-4777 Fax Number: 650-871-4810

*Email: doe_szibr@solazyme.com

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424 Version 02

***9. Type of Applicant 1: Select Applicant Type:**

R. Small Business

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

*Other (Specify)

***10 Name of Federal Agency:**

U.S. Department of Energy

11. Catalog of Federal Domestic Assistance Number:

81.087

CFDA Title:

Renewable Energy Research and Development

***12 Funding Opportunity Number:**

DE-FOA-0000096

*Title:

Recovery Act - Demonstration of Integrated Biorefinery Operations

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

***15. Descriptive Title of Applicant's Project:**

Solazyme Integrated Biorefinery (SzIBR): Diesel Fuels from Heterotrophic Algae

OMB Number: 4040-0004
Expiration Date: 01/31/2009

Application for Federal Assistance SF-424 Version 02

16. Congressional Districts Of:

*a. Applicant: CA-012

*b. Program/Project: PA-010, CA-048, NE-003, IA-005, TX-022

17. Proposed Project:

*a. Start Date: 01/01/2010

*b. End Date: 03/31/2013

18. Estimated Funding ($):

*a. Federal 21,765,738

*b. Applicant

*c. State

*d. Local

*e. Other

*f. Program Income

*g. TOTAL

REDACTED
EXEMPTION 4

***19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on _____

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☒ c. Program is not covered by E. O. 12372

***20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

☐ Yes ☒ No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U. S. Code, Title 218, Section 1001)

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions

Authorized Representative:

Prefix:

*First Name: Jonathan

Middle Name:

*Last Name: Wolfson

Suffix:

*Title: Chief Executive Officer

*Telephone Number: 650-780-4777

Fax Number: 650-871-4810

* Email: jwolfson@solazyme.com

*Signature of Authorized Representative:

*Date Signed: 1/5/2010

Authorized for Local Reproduction

Standard Form 424 (Revised 10/2005)
Prescribed by OMB Circular A-102

OMB Number: 4040-0004
Expiration Date: 01/31/2009

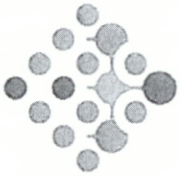
Application for Federal Assistance SF-424 Version 02

***Applicant Federal Debt Delinquency Explanation**

The following should contain an explanation if the Applicant organization is delinquent of any Federal Debt.

Solazyme, Inc. 561 Eccles Avenue S San Francisco CA 94080

650 780 4777
650 989 6700 fax



CONFIDENTIAL

January 6, 2010

Re: **DE-FOA-0000096 - Change in Applicant Cost Share Proposal**

Applicant Name **Solazyme, Inc.**

Project Title: **Solazyme Integrated Biorefinery (SzIBR): Diesel Fuels from Heterotrophic Algae**

Dear Ms. Sterner:

We would like to thank you for selecting Solazyme for negotiation of an award for DE-FOA-0000096. Pursuant to your email of December 18, 2009 and our telephone conference of December 29, 2009, we are writing to confirm that we will fully satisfy the 20% cost share requirement.

REDACTED
EXEMPTION 4

REDACTED
EXEMPTION 4

REDACTED

FOIA EXEMPTION 4

REDACTED

FOIA EXEMPTION 4

BlueFire ETHANOL

The Future of Ethanol

Solazyme, Inc.
561 Eccles Avenue
S. San Francisco, CA 94080

January 14, 2010

Attention: Dr. Tony Day, V.P. R&D

Subject: Letter of Support for Application under DOE-FOA-0000096

Dear Sirs,

I am writing to express BlueFire Ethanol's high level of interest in collaborating with Solazyme Inc. to demonstrate the production of cellulosic algal bio-fuels intended to meet or exceed current specifications and performance requirements for the DOE's transportation fuels through the Demonstration of Integrated Biorefinery Operations program (DOE-FOA-0000096).

BlueFire Ethanol is one of the few viable, world-wide cellulose-to-fermentable sugar companies with demonstrated production experience in creating biofuels from wood wastes, urban trash (post-sorted MSW), rice and wheat straws and other agricultural residues, all of which are in large supply in the United States. BlueFire was established to deploy the p EX4 "Technology") for the conversion of cellulosic waste materials to fermentable sugars and biofuels. BlueFire's goal is to develop and operate high-value carbohydrate-based renewable transportation fuel production facilities to provide a viable alternative to fossil fuels on a world-wide basis. These "biorefineries" will convert widely available, inexpensive, organic materials such as agricultural residues, high-content biomass crops, wood residues, and cellulose in municipal solid wastes into sugars for aglae production, direct chemically created fuels or other fermentable biofuels.

We see the demonstration of Solazyme's heterotrophic (no sunlight required) algae growth on Bluefire cellulosic sugars as a very important step in fulfilling the need for renewable fuels. The potential of your algae tc EX4 replace or augment diesel, gasoline or even jet fuels could enhance the economic feasibility of the overall concept and even advance the timeline for commercial deployment.

BlueFire's technology is extremely versatile, both in its ability to utilize a wide variety of feedstocks and in the end-products that it can produce. This versatility enables BlueFire

to consider a wide variety of feedstocks and locations in which to develop facilities to become the lowest cost producer of either cellulosic sugars or bio-fuels.

Our technical staff has processed samples of feedstocks for Solazyme evaluation in the past and are confident that through a partnership we can become an important team bringing cellulosic derived renewable fuels to the commercial market We are willing to support this Solazyme proposal to DOE

REDACTED
EXEMPTION 4

Furthermore, to the best of its knowledge, Bluefire owns or will have a license to all the intellectual property rights necessary to provide concentrated cellulosic sugars to Solazyme to carry out algal fermentations to produce purified algal oil to be refined into transportation fuels as set out in proposal in response to DE-FOA-0000096. Limited licenses will be granted to Solazyme only to the extent necessary to accomplish the tasks set out in the proposal.

BlueFire looks forward to participating with Solazyme in this exciting opportunity and to this alternate path to supply renewable biofuels to the California market and beyond.

Best regards,

John E Cuzens

John E. Cuzens, P.E.
Sr. V.P. Chief Technology Officer Bluefire Ethanol Inc.

Attachments:
Revised DOE form SF-424A, Budget Information
Revised DOE form PMC123.1 Budget Justification Excel
Revised DOE form PMC123.1 Budget Justification Word

Cc: Matthew Frome, Director Business Development
Richard Klann, Manager Business Development Bluefire Ethanol, Inc.

Hames, Molly

From: Sterner, Christy
Sent: Friday, March 26, 2010 4:46 PM
To: Hames, Molly
Subject: RE: Revisions to Solazyme "Assistance Agreement"

Importance: High

Hi Molly,

I don't believe I have a 'formal' email regarding approval of the P.I. change. We talked about the 'change' early on in the project and I have met David Brinkmann on numerous occasions. David Brinkmann is listed in the application as the P.I. and I have reviewed his qualifications based on the original submittal (I'm not sure why Tony was ever listed as the P.I.). From what I know of the project and the application, David has always been identified as the P.I. Regardless of how this happened, he (David Brinkmann) is highly qualified and should be the P.I. noted on all award documentation.

Please let me know if you have any further questions or need additional documentation.

Best regards,

Christy Sterner
U.S. DOE

Go to http://www.eere.energy.gov/golden/funding.aspx for important news regarding Grants.gov.

-----Original Message-----
From: Hames, Molly
Sent: Friday, March 26, 2010 4:30 PM
To: Sterner, Christy
Subject: FW: Revisions to Solazyme "Assistance Agreement"

Hello Christy,
Please see Melissa's note below. Can you resend Gypsy's email with your approval/disapproval of the PI change from the original 000 award?

Molly Hames
Grants & Agreements Specialist
U.S. Department of Energy
Golden Field Office
1617 Cole Blvd. Golden, CO 80401
Phone: 303-275-4864
Fax: 303-275-4754

-----Original Message-----
From: Wise, Melissa
Sent: Friday, March 26, 2010 4:29 PM
To: Hames, Molly
Subject: RE: Revisions to Solazyme "Assistance Agreement"

Hi Molly,

No, this is not enough. We'll need an e-mail from Christy that basically states she has reviewed the qualifications of David Brinkmann and approves the PI change.

Thanks,
Melissa

Melissa Wise
Grants and Agreements Specialist
U.S. Department of Energy
Golden Field Office

-----Original Message-----
From: Hames, Molly
Sent: Friday, March 26, 2010 4:27 PM
To: Wise, Melissa
Subject: FW: Revisions to Solazyme "Assistance Agreement"

Hello Melissa,
Does the email below work as approval, or does it need to be more formal than this?

Molly Hames
Grants & Agreements Specialist
U.S. Department of Energy
Golden Field Office
1617 Cole Blvd. Golden, CO 80401
Phone: 303-275-4864
Fax: 303-275-4754

-----Original Message-----
From: Sterner, Christy
Sent: Tuesday, January 26, 2010 11:09 AM
To: Hames, Molly
Subject: FW: Revisions to Solazyme "Assistance Agreement"

Hi Molly,

I asked that Gypsy send this information to you. If we have to do a formal amendment to modify the terms and conditions, I figured we can make the changes below as well. I'll talk to Melissa about this as well. Whew!

Thanks for your help!

Best regards,

Christy Sterner
U.S. DOE

Go to http://www.eere.energy.gov/golden/funding.aspx for important news regarding Grants.gov.

-----Original Message-----
From: Gypsy Achong [mailto:gachong@solazyme.com]
Sent: Tuesday, January 26, 2010 10:03 AM
To: Hames, Molly

Cc: Sterner, Christy; Lindeman, Chris
Subject: Revisions to Solazyme "Assistance Agreement"

Dear Molly,

I hope all is well. Christy recommended that I reach out to you with minor revisions to Solazyme's "Assistance Agreement." They are listed below:

Ques. 14. Principal Investigator - Should be David Brinkmann. Currently noted as Anthony Day. The phone number is the same.

On Page 3, Recipient Business Officer – Should be David Brinkmann. E-mail: doe_szibr@solazyme.com. The phone number is the same.

On Page 3, Recipient Principal Investigator – Should be David Brinkmann. E-mail: doe_szibr@solazyme.com. The phone number is the same.

Thanks for your help!

Gypsy

Gypsy Achong

Email: gachong@solazyme.com

Phone: 650 780 4777 x5273

Solazyme, Inc.

561 Eccles Avenue

South San Francisco, CA 94080

The information in this e-mail (including attachments, if any) is considered confidential and is intended only for the recipient(s) listed above. Any review, use, disclosure, distribution or copying of this e-mail is prohibited except by or on behalf of the intended recipient. If you have received this email in error, please notify me immediately by reply email, delete this email, and do not disclose its contents to anyone. Thank you.

PMC 410.1
(07/06)

U.S. DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CENTER

FINANCIAL INFORMATION

PROVIDE ALL INFORMATION REQUESTED ON THIS FORM

Applicant: Solazyme, Inc.

Project Title: **Solazyme Integrated Biorefinery (SzIBR): Diesel Fuels from Heterotrophic Algae**

Announcement/Award No: **DE-FOA-0000096**

1. Have you had prior Federal awards? ☒ Yes ☐ No

2. Have you had an outside audit or an A-133 audit? ☒ Yes ☐ No
If yes, please provide a copy of the A-133 or outside audit (electronic preferred).

INFORMATION FOR DETERMINING COGNIZANT AGENCY/OFFICE

3. Applicant's fiscal year end date is December 31

4a. Identify Cognizant **Federal Agency** (agency providing the preponderance of Federal funding), and provide Agency name, a point of contact, phone number, and e-mail.

Agency: Defense Logistics Agency
Point of Contact: Mr. John Dormer
Phone: 215-737-2284
E-mail: john.dormer@dla.mil

4b. To assist our office in validating Cognizant **Federal Agency** (4a), please provide following information for the 5 highest dollar award value for current Federal contracts, grants or awards (do not include sub-awards). (State Agencies and Universities can skip 4b)

Contract/Award #	Awarding Agency	Awarding Office	Start Date	End Date	Total Value
SP 4701-09-C-0040	DLA	Philadelphia	8/31/09	8/30/10	$8.574M
SP 0600-09-R-0704	DESC	Fort Belvoir, VA	9/1/09	7/30/10	$223K

5a. If applicant has current DOE awards, identify Cognizant **DOE Office** (office providing the preponderance of DOE funding), and provide DOE office name, a point of contact, phone number, and e-mail.

DOE Office:
Point of Contact (Contracting Officer):
Phone:
E-mail:

5b. To assist our office in validating Cognizant **DOE Office** (5a), please provide following information for the 5 highest dollar value awards for current DOE contracts, grants or awards (do not include sub-awards). (State agencies and Universities can skip 5b)

DOE Contract/Award #	DOE Awarding Office	Start Date	End Date	Total Value

FINANCIAL MANAGEMENT SYSTEM

To qualify for Financial Assistance, compliance with 10 CFR 600.121 - Higher Education, Hospitals, and Other Non-Profit Organizations, 10 CFR 600.220(b) - State and Local Governments or 10 CFR 600.311 - For-Profit Organizations is required. Please check applicable boxes below.

☒ The Financial Management System is in compliance with 10 CFR 600.121, 10 CFR 600.220(b), or 10 CFR 600.311.

☐ I do not know if my Financial Management System is in compliance with 10 CFR 600.121, 10 CFR 600.220(b), or 10 CFR 600.311. If this block is checked, complete the survey below.

Accounting System Survey

	Yes	No	NA
1. Is your Accounting System in accordance with Generally Accepted Accounting Principles applicable to the circumstances?	☒	☐	☐
2. Accounting System provides for:			
a. Segregation of direct costs from indirect costs.	☒	☐	☐
b. Identification and accumulation of direct costs by project.	☒	☐	☐
c. A logical and consistent method for the allocation of indirect costs to intermediate and final cost objectives. (Project is final cost objective)	☒	☐	☐
d. Accumulation of costs under general ledger control.	☒	☐	☐
e. A timekeeping system that identifies employees' labor by intermediate and final cost objectives.	☒	☐	☐
f. A labor distribution system that charges direct and indirect labor to appropriate cost objectives.	☒	☐	☐
g. Interim (at least monthly) determination of costs charged to a project through routine posting of books of account.	☒	☐	☐
h. Excluding costs charged to Government projects which are not allowable in terms of FAR 31, Contract Cost Principles and Procedures, or other provisions.	☒	☐	☐
i. Identification of costs by project line item and by units (as if each unit or line item were a separate project) if required by the proposed award.	☒	☐	☐
3. Is the Accounting System designed, and are the records maintained in such a manner that adequate, reliable data are developed for use in developing cost proposals?	☒	☐	☐
4. Is the Accounting System currently in full operation?	☒	☐	☐

PMC123.1 - Budget Justification for SF 424A Budget

Instructions and Summary

Award Number: _____ **Date of Submission:** _____

Award Recipient: Solazyme **Form submitted by:** Abengoa Bioenergy

(May be award recipient or sub-recipient)

Please read the instructions on each page before starting.
If you have any questions, please ask your DOE contact. It will save you time!

On this form, provide detailed support for the estimated project costs identified on the SF-424A form (Budget).

- **The dollar amounts on this page must match the amounts on the associated SF-424A.**
- The award recipient and each sub-recipient with estimated costs of $100,000 or more must complete this form and a SF-424A form.
- The total budget presented on this form and on the SF424A must include both Federal (DOE), and Non-Federal (cost share) portions, thereby reflecting TOTAL PROJECT COSTS proposed.
- **For costs in each Object Class Category on the SF-424A, complete the corresponding worksheet on this form (tab at the bottom of the page).**
- **All costs incurred by the preparer's sub-recipients, vendors, contractors, consultants and Federal Research and Development Centers (FFRDCs), should be entered only in section f. Contractual. All other sections are for the costs of the preparer only.**

SUMMARY OF BUDGET CATEGORY COSTS PROPOSED

(Note: The values in this summary table are from entries made in each budget category sheet.)

CATEGORY	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Total Costs	Project Costs %	Comments (Add comments as needed)
a. Personnel						
b. Fringe Benefits						
c. Travel						
d. Equipment						
e. Supplies						
f. Contractual						
Sub-recipient						
FFRDC						
Vendor						
Total Contractual						
g. Construction						
h. Other Direct Costs						
i. Indirect Charges						
Total Project Costs						

REDACTED
EXEMPTION 4

Additional Explanations/Comments (as necessary)

a. Personnel

PLEASE READ!!!

List costs solely for employees of the entity completing this form (award recipient or sub-recipient). All other personnel costs (of subrecipients or other contractual efforts of the entity preparing this) must be included under f., Contractual. This includes all consultants and FFRDCs.

Identify positions to be supported. Key personnel should be identified by title. All other personnel should be identified either by title or a group category. State the amounts of time (e.g., hours or % of time) to be expended, the composite base pay rate, total direct personnel compensation and identify the rate basis (e.g., actual salary, labor distribution report, technical estimate, state civil service rates, etc.).

Add rows as needed. Formulas/calculations will need to be entered by the preparer of this form. Please enter formulas as shown in the example.

Task # and Title	Position Title	Budget Period 1			Budget Period 2			Budget Period 3			Project Total Hours	Project Total Dollars	Rate Basis
		Time (Hours)	Pay Rate ($/Hr)	Total Budget Period 1	Time (Hours)	Pay Rate ($/Hr)	Total Budget Period 2	Time (Hours)	Pay Rate ($/Hr)	Total Budget Period 3			
1. Generation 2A Receiver Design													
EXAMPLE	Sr. Engineer												
ONLY!!!	Electrical engineers												
	Technician												
1. (Task 1 Title)													
2. (Task 2 Title)													
3. (Task 3 Title)													

REDACTED
EXEMPTION 4

Task # and Title	Position Title	Budget Period 1			Budget Period 2			Budget Period 3			Project Total Hours	Project Total Dollars	Rate Basis
		Time (Hours)	Pay Rate ($/Hr)	Total Budget Period 1	Time (Hours)	Pay Rate ($/Hr)	Total Budget Period 2	Time (Hours)	Pay Rate ($/Hr)	Total Budget Period 3			

b. Fringe Benefits

	Budget Period 1	Budget Period 2	Budget Period 3	Total
Rate applied:			REDACTED EXEMPTION 4	
Total fringe requested:				

A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required if reimbursement for fringe benefits is requested. Please check (X) one of the options below and provide the requested information, if it has not already been provided to the Contracting Officer, OR if it has changed since it was. Calculate the fringe rate and enter the total amount in Section B, line 6.b. ("Fringe Benefits") of form SF-424A.

____ **A fringe benefit rate has been negotiated with, or approved by, a federal government agency. A copy of the latest rate agreement is included with this application, and will be provided electronically to the Contracting Officer for this project.**
(When this option is selected, a presentation of the budget that demonstrates the appliction of the approved rate, to arrive at the proposed fringes benefits dollars should also be provided.)

X **There is not a current, federally approved rate agreement negotiated and available.**
(When this option is checked, the entity preparing this form shall submit a rate proposal in the format provided at the following website, or a format that provides the same level of information and which will support the rates being proposed for use in performance of the proposed project. Go to https://www.eere-pmc.energy.gov/forms.aspx and select PMC 400.2 Sample Rate Proposal.)

Additional explanation/comments (as necessary)

REDACTED
EXEMPTION 4

c. Travel

PLEASE READ!!!

Provide travel detail as requested below, identifying total Foreign and Domestic Travel as separate items. Purpose of travel are items such as professional conference, DOE sponsored meeting, project management meeting, etc. The Basis for Estimating Costs are items such as past trips, current quotations, Federal Travel Regulations, etc.

All listed travel must be necessary for performance of the Statement of Projecct Objectives.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Purpose of travel	No. of Travelers	Depart From (not required for domestic travel)	Destination (not required for domestic travel)	No. of Days	Cost per Traveler	Cost per Trip	Basis for Estimating Costs
Budget Period 1							
Domestic Travel							
EXAMPLE ONLY!!! Visit to PV cell mfr. to set up vendor agreement							
Domestic Travel subtotal							
International Travel							
International Travel subtotal							
Budget Period 1 Total							

REDACTED
EXEMPTION 4

Purpose of travel	No. of Travelers	Depart From (not required for domestic travel)	Destination (not required for domestic travel)	No. of Days	Cost per Traveler	Cost per Trip	Basis for Estimating Costs
Budget Period 2							
Domestic Travel							
Domestic Travel subtotal							
International Travel							
			REDACTED EXEMPTION 4				
International Travel subtotal							
Budget Period 2 Total							
Budget Period 3							
Domestic Travel							
Domestic Travel subtotal							
International Travel							
International Travel subtotal							
Budget Period 3 Total							
PROJECT TOTAL							

Additional Explanations/Comments (as necessary)

d. Equipment

PLEASE READ!!!

Equipment is generally defined as an item with an acquisition cost greater than $5,000 and a useful life expectancy of more than one year. Further definitions can be found at 10 CFR 600 found on the PMC Recipient Resources Forms page at https://www.eere-pmc.energy.gov/Forms.aspx#regs .

List all proposed equipment below, providing a basis of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying its need as it applies to the Statement of Project Objectives. If it is existing equipment, and the value of its contribution to the project budget is being shown as cost share, provide logical support for the estimated value shown. If it is new equipment which will retain a useful life upon completion of the project, provide logical support for the estimated value shown.

For equipment over $50,000 in price, also include a copy of the associated vendor quote or catalog price list.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 1					
EXAMPLE ONLY!!! Thermal shock chamber					
				REDACTED EXEMPTION 4	
Budget Period 1 Total					
Budget Period 2					
				REDACTED EXEMPTION 4	
Budget Period 2 Total					

Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 3					
Budget Period 3 Total					
PROJECT TOTAL					

Additional Explanations/Comments (as necessary)

e. Supplies

PLEASE READ!!!

Supplies are generally defined as an item with an acquisition cost of $5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance. Further definitions can be found at 10 CFR 600 found on the PMC Recipient Resources Forms page at https://www.eere-pmc.energy.gov/Forms.aspx#regs.

List all proposed supplies below, providing a bases of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying the need for the Supplies as they apply to the Statement of Project Objectives. Note that Supply items must be direct costs to the project at this budget category, and not duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 1					
EXAMPLE ONLY!!! Wireless DAS components					
				REDACTED EXEMPTION 4	
Budget Period 1 Total					
Budget Period 2					
				REDACTED EXEMPTION 4	
Budget Period 2 Total					

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 3					
Budget Period 3 Total					
PROJECT TOTAL					

Additional Explanations/Comments (as necessary)

f. Contractual

PLEASE READ!!!

The entity completing this form must provide all costs related to sub-recipients, vendors, contractors, consultants and FFRDC partners in the applicable boxes below.

Sub-recipients (partners, sub-awardees):

For each sub-recipient with total project costs of $100,000 or more, a separate SF-424A budget and PMC123.1 budget justification form must be submitted. These sub-recipient forms may be completed by either the sub-recipients themselves or by the preparer of this form. The budget totals on the sub-recipient's forms must match the sub-recipeint entries below.

The preparer of this form need only provide further support of the completed sub-recipient budget forms as they deem necessary. The support to justify the budgets of sub-recipients with estimated costs less than $100,000 may be in any format, and at a minimum should provide what Statement of Project Objectives task(s) are being performed, the purpose/need for the effort, and a basis of the estimated costs that is considered sufficient for DOE evaluation.

Vendors (includes contractors and consultants):

List all vendors, contractors and consultants supplying commercial supplies or services used to support the project. The support to justify vendor costs (in any amount) should provide the purpose for the products or services and a basis of the estimated costs that is considered sufficient for DOE evaluation.

Federal Research and Development Centers (FFRDCs):

For FFRDC partners, award recipient will provide a Field Work Proposal (if not already provided with the original application), along with the FFRDC labor mix and hours, by category and FFRDC major purchases greater than $25,000, including Quantity, Unit Cost, Basis of Cost, and Justification. The award recipient may allow the FFRDC to provide this information directly to DOE.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! XYZ Corp.					
	REDACTED EXEMPTION 4				

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
	REDACTED EXEMPTION 4				
	Sub-total				

Vendor Name/Organization	Product or Service, Purpose/Need and Basis of Cost (Provide additional support at bottom of page as needed)	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! ABC Corp.					
	REDACTED EXEMPTION 4				

FFRDC Name/Organization	Purpose	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
	REDACTED EXEMPTION 4				

Total Contractual					

AdditionalExplanations/Comments (as necessary)

g. Construction

PLEASE READ!!!

Construction, for the purpose of budgeting, is defined as all types of work done on a particular building, including erecting, altering, or remodeling. Construction conducted by the award recipient is entered on this page. Any construction work that is performed by a vendor or subrecipient to the award recipient should be entered under f. Contractual.

List all proposed construction below, providing a basis of cost such as engineering estimates, prior construction, etc., and briefly justify its need as it applies to the Statement of Project Objectives.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Overall description of construction actiivities:

Example Only!!! - Build wind turbine platform

General Description	Cost	Basis of Cost	Justification of need
Budget Period 1			
Three days of excavation for platform site EXAMPLE ONLY!!!			
		REDACTED EXEMPTION 4	
Budget Period 1 Total			
Budget Period 2			
		REDACTED EXEMPTION 4	
Budget Period 2 Total			

General Description	Cost	Basis of Cost	Justification of need
Budget Period 3			
		REDACTED EXEMPTION 4	
Budget Period 3 Total			
PROJECT TOTAL			

Additional Explanations/Comments (as necessary)

g. Construction

h. Other Direct Costs

PLEASE READ!!!

Other direct costs are direct cost items required for the project which do not fit clearly into other categories, and are not included in the indirect pool for which the indirect rate is being applied to this project. Examples are meeting costs, postage, couriers or express mail, telephone/fax costs, printing costs, etc.

Basis of cost are items such as vendor quotes, prior purchases of similar or like items, published price list, etc.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

General description	Cost	Basis of Cost	Justification of need
Budget Period 1			
EXAMPLE ONLY!!! Grad student tuition			
			REDACTED EXEMPTION 4
Budget Period 1 Total			
Budget Period 2			
		REDACTED EXEMPTION 4	
Budget Period 2 Total			
Budget Period 3			
		REDACTED EXEMPTION 4	
Budget Period 3 Total			
PROJECT TOTAL			

Additional Explanations/Comments (as necessary)

i. Indirect Costs

	Budget Period 1	Budget Period 2	Budget Period 3	Total
Rate applied:		REDACTED EXEMPTION 4		
Total indirect costs requested:				

A federally approved indirect rate agreement, or rate proposed supported and agreed upon by DOE for estimating purposes is required if reimbursement of fringe benfits is requested. Please check (X) one of the options below and provide the requested information if it has not already been provided as requested, or has changed. Calculate the indirect rate dollars and enter the total in the Section B., line 6.j. (Indirect Charges) of form SF 424A.

___ **There is a federally approved indirect rate agreement. A copy is provided with this application and will be provided electronically to the Contracting Officer for this project.**
(When this option is selected, a presentation of the budget that demonstrates the application of the approved rate, to arrive at the proposed indirect charges proposed should also be provided.)

X **There is no current, federally-approved indirect rate agreement.**
(When this option is checked, the entity preparing this form shall submit an indirect cost rate proposal in the format provided at the following website, or in a format that provides the same level of information and which supports the rate(s) being proposed for use in estimating the project. Go to https://www.eere-pmc.energy.gov/forms.aspx and select PMC 400.2 Sample Rate Proposal.)

Additional Explanations/Comments (as necessary)

REDACTED EXEMPTION 4

Cost Share

PLEASE READ!!!

A detailed presentation of the cash or cash value of all cost share proposed for the project must be provided in the table below. Identify the source & amount of each item of cost share proposed by the award recipient and each sub-recipient or vendor. Letters of committment must be submitted for all third party cost share (other than award recipient).

Note that "cost-share" is not limited to cash investment. Other items that may be assigned value in a budget as incurred as part of the project budget and necessary to performance of the project, may be considered as cost share, such as: contribution of services or property; donated, purchased or existing equipment; buildings or land; donated, purchased or existing supplies; and/or unrecovered personnel, fringe benefits and indirect costs, etc. For each cost share contribution identified as other than cash, identify the item and describe how the value of the cost share contribution was calculated.

Funds from other Federal sources MAY NOT be counted as cost share. **This prohibition includes FFRDC sub-recipients. Non-Federal sources include private, state or local Government, or any source not originally derived from Federal funds. Documentation of cost sharing commitments must be provided, if not already provided with the original application and they have not changed since its submission.**

Fee or profit will not be paid to the award recipients or subrecipients of financial assistance awards. Additionally, foregone fee or profit by the applicant shall not be considered cost sharing under any resulting award. Reimbursement of actual costs will only include those costs that are allowable and allocable to the project as determined in accordance with the applicable cost principles prescribed in 10 CFR 600.127, 10 CFR 600.222 or 10 CFR 600.317. Also see 10 CFR 600.318 relative to profit or fee.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
ABC Company EXAMPLE ONLY!!!		REDACTED EXEMPTION 4				

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
		REDACTED EXEMPTION 4				
		Totals				

Total Project Cost

Cost Share Percent of Award:

Additional Explanations/Comments (as necessary)

REDACTED
EXEMPTION 4

STATEMENT OF PROJECT OBJECTIVES

Solazyme, Inc.
Recovery Act: Solazyme Integrated Biorefinery (SzIBR): Diesel Fuels from Heterotrophic Algae

A. PROJECT OBJECTIVES

Solazyme proposes to build, operate and optimize a pilot-scale "**S**ola**z**yme **I**ntegrated **Bio**refinery." SzIBR will demonstrate integrated scale-up of Solazyme's novel heterotrophic algal oil biomanufacturing process, validate the projected commercial-scale economics of producing multiple advanced biofuels, and enable Solazyme to collect the data necessary to complete design of the first commercial-scale facility.

Specific project objectives include:
- Expeditiously commence construction and operations.
- Integrate all process unit operations successfully into a unified biorefinery.
- Validate feasibility of low cost production at commercial scale.
- Demonstrate refining of the algal oil into fully-compliant liquid transportation fuels.
- Accelerate development of high-impact lignocellulosic feedstocks.
- Successfully complete the project on schedule.

B. PROJECT SCOPE

The scope of the proposed project encompasses (i) building, operating and optimizing a pilot-scale integrated biorefinery, (ii) cultivating fuel oil-producing algae, (iii) extracting and purifying oil from the algae, (iv) refining the algal oil to standard liquid transportation fuels, (v) optimizing fermentation parameters at both laboratory and pilot scale, and (vi) gathering data to assist in the design of subsequent demonstration and commercial facilities.

The project advances the goals of the DOE Biomass Program and accelerates the nation's ability to achieve the production targets mandated by the federal Renewable Fuel Standard (RFS).

C. TASKS TO BE PERFORMED

BUDGET PERIOD 1: PRELIMINARY ACTIVITIES

Task A: Complete Award 1 Activities

Task A.1: Selection Kick-Off Meeting (DOE Core)

Task A.2: Risk mitigation plan validation completed – Award 1 (DOE Core)

Task A.3: Complete NEPA process – Period 1

The expected result is a Categorical Exclusion or Finding of No Significant Impact.

Task A.4: Submission of Award 1 application (DOE Core)

Task A.5: Acceptance of Award 1 application (DOE Core)

Task A.6: CD-2 Approve Performance Baseline (DOE Core)

Task A.7: Release of Award 1 funds (DOE Core)

Task B: Complete Award 2 Activities

Task B.1: Risk mitigation plan validation completed – Award 2 (DOE Core)

Task B.2: NEPA approval to proceed (DOE Core)

Task B.3: Prepare manufacturing site:

Solazyme shall finalize and sign EPC contract (DOE Core), complete engineering drawings, submit permit applications, finalize specifications of equipment with vendors, finalize initial feedstock supply agreements, and update the safety plan for the manufacturing site. Upon completion of this Task, Solazyme will have completed all preparatory work at the project site including receipt of the environmental air permit and be ready to begin construction.

Task B.4: Define commissioning criteria (DOE Core)

Task B.5: Prepare research site

Solazyme shall obtain permits (expect none required) and update the safety plan for the research site.

Task B.6: Submit reports

Solazyme shall submit financial reports, including standard and Recovery Act status reports, and technical progress reports. Reports will be provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein.

B.7: Submission of Award 2 application (DOE Core)

B.8: Acceptance of Award 2 application (DOE Core)

B.9: CD-3 Approve Start of Construction (DOE Core)

B.10: Release of Award 2 funds (DOE Core)

BUDGET PERIOD 2: CONSTRUCTION AND OPERATION

Tasks C.1-C.7: Create and qualify pilot-scale SzIBR at manufacturing site

Solazyme shall submit purchase orders for all the necessary oil extraction and recovery equipment downstream of fermentation. Solazyme will clear space for equipment as needed, prepare utility connections and accept delivery of equipment. Solazyme shall also install, startup, test and qualify all equipment, train operators on new equipment and conduct start-up/safety inspection. Upon completion of this Task, the SzIBR facility will be mechanically complete and ready for shakedown.

Task C.8: CD-4: Start of Operation Approval – Initiate Shakedown (DOE Core)

Task C.9.1 – C9.4: Test and qualify facility:

Solazyme shall conduct initial fermentation-only runs to verify operation of the pre-existing fermentation infrastructure at the manufacturing site, as well as complete process flow runs. Upon completion of this Task, the SzIBR facility will be fully operational and ready to conduct

the major project campaigns specified in Task D.

C.9.5: Shakedown complete (DOE Core)

C.10: Commissioning – Start of commercial operation (DOE Core)

Task D: Operate SzIBR to optimize and demonstrate integrated process

Solazyme shall conduct a series of major campaigns through the entire integrated process flow at SzIBR , collect extensive process data, and optimize the process parameters. The expected outcome is the demonstration of key performance parameters (KPPs) that Solazyme has specified. These KPPs correspond to process productivity, yield, and efficiency metrics required to reach commercial cost objectives (when the process is transferred to a commercial-scale facility).

Solazyme shall facilitate an Independent Engineer Performance Test. The expected outcome is completion of the IEPT tests demonstrating the KPPs while exceeding the minimum feedstock throughput requirements.

Task E: Generate concentrated sugars derived from lignocellulosic feedstocks

Solazyme shall obtain sugar derived from lignocellulosic feedstocks via enzymatic processes and acid hydrolysis from subcontractors. The expected outcome is a quantity sufficient to conduct the work specified in Task D and Task F.

Task F: Optimize fermentation parameters at laboratory scale to support integrated pilot operations at SzIBR

Solazyme shall optimize the fermentation performance at laboratory scale in support of operations at SzIBR. The expected outcome is data that will guide pilot-scale operations.

Task G: Refine algal oil from SzIBR to standard liquid transportation fuels

Solazyme will deliver the purified algal oil generated in Task D to subcontractors that will refine the oil to standard liquid transportation fuels, including biodiesel and renewable diesel. The expected outcome is liquid transportation fuels that fully comply with all applicable standards.

Task H: Submit reports

Solazyme shall submit financial reports, including standard and Recovery Act status reports, annual reports and updated pro formas, as well as the Interim Final Technical Report, including property disposition and IP reports. Reports will be provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein.

STATEMENT OF PROJECT OBJECTIVES

Solazyme, Inc.
Solazyme Integrated Biorefinery (SzIBR): Diesel Fuels from Heterotrophic Algae

A. PROJECT OBJECTIVES

Solazyme proposes to build, operate and optimize a pilot-scale "**Sola**z**y**me **I**ntegrated **Bio**refinery." SzIBR will demonstrate integrated scale-up of Solazyme's novel heterotrophic algal oil biomanufacturing process, validate the projected commercial-scale economics of producing multiple advanced biofuels, and enable Solazyme to collect the data necessary to complete design of the first commercial-scale facility.

Specific project objectives include:

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The scope of the proposed project encompasses (i) building, operating and optimizing a pilot-scale integrated biorefinery, (ii) cultivating fuel oil-producing algae , (iii) extracting and purifying oil from the algae, (iv) refining the algal oil to standard liquid transportation fuels, (v) optimizing fermentation parameters at both laboratory and pilot scale, and (vi) gathering data to assist in the design of subsequent demonstration and commercial facilities.

The project advances the goals of the DOE Biomass Program and accelerates the nation's ability to achieve the production targets mandated by the federal Renewable Fuel Standard (RFS).

C. TASKS TO BE PERFORMED

BUDGET PERIOD 1: PRELIMINARY ACTIVITIES

Task A: Complete Award 1 Activities
Task A.1: Selection Kick-Off Meeting (DOE Core)
Task A.2: Risk mitigation plan validation completed – Award 1 (DOE Core)

Task A.3: Complete NEPA process – Period 1

The expected result is a Categorical Exclusion or Finding of No Significant Impact.

Task A.4: Submission of Award 1 application (DOE Core)

Task A.5: Acceptance of Award 1 application (DOE Core)

Task A.6: CD-2 Approve Performance Baseline (DOE Core)

Task A.7: Release of Award 1 funds (DOE Core)

Task B: Complete Award 2 Activities

Task B.1: Risk mitigation plan validation completed – Award 2 (DOE Core)

Task B.2: NEPA approval to proceed (DOE Core)

Task B.3: Prepare manufacturing site:

Solazyme shall finalize and sign EPC contract (DOE Core), complete engineering drawings, submit permit applications, finalize specifications of equipment with vendors, finalize initial feedstock supply agreements, and update the safety plan for the manufacturing site. Upon completion of this Task, Solazyme will have completed all preparatory work at the project site including receipt of the environmental air permit and be ready to begin construction.

Task B.4: Define commissioning criteria (DOE Core)

Task B.5: Prepare research site

Solazyme shall obtain permits (expect none required) and update the safety plan for the research site.

Task B.6: Submit reports

Solazyme shall submit financial reports, including standard and Recovery Act status reports, and technical progress reports. Reports will be provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein.

B.7: Submission of Award 2 application (DOE Core)

B.8: Acceptance of Award 2 application (DOE Core)

B.9: CD-3 Approve Start of Construction (DOE Core)

B.10: Release of Award 2 funds (DOE Core)

BUDGET PERIOD 2: CONSTRUCTION AND OPERATION

Tasks C.1-C.7: Create and qualify pilot-scale SzIBR at manufacturing site

Solazyme shall submit purchase orders for all the necessary oil extraction and recovery equipment downstream of fermentation. Solazyme will clear space for equipment as needed, prepare utility connections and accept delivery of equipment. Solazyme shall also install, startup, test and qualify all equipment, train operators on new equipment and conduct start-up/safety inspection. Upon completion of this Task, the SzIBR facility will be mechanically complete and ready for shakedown.

Task C.8: CD-4: Start of Operation Approval – Initiate Shakedown (DOE Core)

Task C.9.1 – C9.4: Test and qualify facility:

Solazyme shall conduct initial fermentation-only runs to verify operation of the pre-existing fermentation infrastructure at the manufacturing site, as well as complete process flow runs. Upon completion of this Task, the SzIBR facility will be fully operational and ready to conduct the major project campaigns specified in Task D.

C.9.5: Shakedown complete (DOE Core)

C.10: Commissioning – Start of commercial operation (DOE Core)

Task D: Operate SzIBR to optimize and demonstrate integrated process

Solazyme shall conduct a series of major campaigns through the entire integrated process flow at SzIBR , collect extensive process data, and optimize the process parameters. The expected outcome is the demonstration of key performance parameters (KPPs) that Solazyme has specified. These KPPs correspond to process productivity, yield, and efficiency metrics required to reach commercial cost objectives (when the process is transferred to a commercial-scale facility).

Solazyme shall facilitate an Independent Engineer Performance Test. The expected outcome is completion of the IEPT tests demonstrating the KPPs while exceeding the minimum feedstock throughput requirements.

Task E: Generate concentrated sugars derived from lignocellulosic feedstocks

Solazyme shall obtain sugar derived from lignocellulosic feedstocks via enzymatic processes and acid hydrolysis from subcontractors. The expected outcome is a quantity sufficient to conduct the work specified in Task D and Task F.

Task F: Optimize fermentation parameters at laboratory scale to support integrated pilot operations at SzIBR

Solazyme shall optimize the fermentation performance at laboratory scale in support of operations at SzIBR. The expected outcome is data that will guide pilot-scale operations.

Task G: Refine algal oil from SzIBR to standard liquid transportation fuels

Solazyme will deliver the purified algal oil generated in Task D to subcontractors that will refine the oil to standard liquid transportation fuels, including biodiesel and renewable diesel. The expected outcome is liquid transportation fuels that fully comply with all applicable standards.

Task H: Submit reports

Solazyme shall submit financial reports, including standard and Recovery Act status reports, annual reports and updated pro formas, as well as the Interim Final Technical Report, including property disposition and IP reports. Reports will be provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein.

<u>BUDGET PERIOD 3: EXTENDED OPERATION</u>

Task H: Submit reports

Solazyme shall submit financial reports, the final pro forma, and the Final Technical Report, including final property disposition and final IP reports. Reports will be provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein.

PMC123.1 - Budget Justification for SF 424A Budget

Instructions and Summary

Award Number: DE-FOA-0000096
Award Recipient: Cherokee Pharmaceuticals LLC

Date of Submission: 8/9/2011
Form submitted by: Solazyme
(May be award recipient or sub-recipient)

Please read the instructions on each page before starting.
If you have any questions, please ask your DOE contact. It will save you time!

On this form, provide detailed support for the estimated project costs identified on the SF-424A form (Budget).

- **The dollar amounts on this page must match the amounts on the associated SF-424A.**
- The award recipient and each sub-recipient with estimated costs of $100,000 or more must complete this form and a SF-424A form.
- The total budget presented on this form and on the SF424A must include both Federal (DOE), and Non-Federal (cost share) portions, thereby reflecting TOTAL PROJECT COSTS proposed.
- **For costs in each Object Class Category on the SF-424A, complete the corresponding worksheet on this form (tab at the bottom of the page).**
- **All costs incurred by the preparer's sub-recipients, vendors, contractors, consultants and Federal Research and Development Centers (FFRDCs), should be entered only in section f. Contractual. All other sections are for the costs of the preparer only.**

SUMMARY OF BUDGET CATEGORY COSTS PROPOSED

(Note: The values in this summary table are from entries made in each budget category sheet.)

CATEGORY	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Total Costs	Project Costs %	Comments (Add comments as needed)
a. Personnel						
b. Fringe Benefits						
c. Travel						
d. Equipment						
e. Supplies						
f. Contractual						
Sub-recipient						
FFRDC						
Vendor						
Total Contractual						
g. Construction						
h. Other Direct Costs						
i. Indirect Charges						
Total Project Costs						

REDACTED
EXEMPTION 4

Additional Explanations/Comments (as necessary)

REDACTED
EXEMPTION 4

a. Personnel

PLEASE READ!!!

List costs solely for employees of the entity completing this form (award recipient or sub-recipient). All other personnel costs (of subrecipients or other contractual efforts of the entity preparing this) must be included under f., Contractual. This includes all consultants and FFRDCs.

Identify positions to be supported. Key personnel should be identified by title. All other personnel should be identified either by title or a group category. State the amounts of time (e.g., hours or % of time) to be expended, the composite base pay rate, total direct personnel compensation and identify the rate basis (e.g., actual salary, labor distribution report, technical estimate, state civil service rates, etc.).

Add rows as needed. Formulas/calculations will need to be entered by the preparer of this form. Please enter formulas as shown in the example.

Task # and Title	Position Title	Budget Period 1			Budget Period 2			Budget Period 3			Project Total Hours	Project Total Dollars	Rate Basis
		Time (Hours)	Pay Rate ($/Hr)	Total Budget Period 1	Time (Hours)	Pay Rate ($/Hr)	Total Budget Period 2	Time (Hours)	Pay Rate ($/Hr)	Total Budget Period 3			
1. Generation 2A Receiver Design		10000		$423,000	600								
XAMPLE													
ONLY!!!													

REDACTED
EXEMPTION 4

Additional Explanations/Comments (as necessary)

b. Fringe Benefits

	Budget Period 1	Budget Period 2	Budget Period 3	Total
Rate applied:		REDACTED EXEMPTION 4		
Total fringe requested:				

A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required if reimbursement for fringe benefits is requested. Please check (X) one of the options below and provide the requested information. Calculate the fringe rate and enter the total amount in Section B, line 6.b. ("Fringe Benefits") of form SF-424A.

___ **A fringe benefit rate has been negotiated with, or approved by, a federal government agency. A copy of the latest rate agreement is included with this application, and will be provided electronically to the Contracting Officer for this project.**
**In the area designated below, identify the full calculations used to derive the total fringe costs. See further information below.*

X **There is not a current, federally approved rate agreement negotiated and available.**
*When this option is checked, the entity preparing this form shall submit a rate proposal in the format provided at the following website, or a format that provides the same level of information and which will support the rates being proposed for use in performance of the proposed project. Go to https://www.eere-pmc.energy.gov/forms.aspx and select PMC 400.2 Sample Rate Proposal. * In the area designated below, identify the full calculations used to derive the total fringe costs. See further information below.*

Additional explanation/comments (as necessary)

*IMPORTANT: In the space provided below (or as an attachment) provide a complete explanation and the full calculations used to derive the total fringe costs. If the total fringe costs are a cumulative amount of more than one calculation or rate application, the explanation and calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total). The rates and how they are applied should not be averaged to get one fringe cost percentage. NOTE: The fringe benefit rate should be applied to both the Federal Share and Recipient Cost Share.

c. Travel

PLEASE READ!!!

Provide travel detail as requested below, identifying total Foreign and Domestic Travel as separate items. Purpose of travel are items such as professional conference, DOE sponsored meeting, project management meeting, etc. The Basis for Estimating Costs are items such as past trips, current quotations, Federal Travel Regulations, etc.

All listed travel must be necessary for performance of the Statement of Projecct Objectives.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Purpose of travel	No. of Travelers	Depart From (not required for domestic travel)	Destination (not required for domestic travel)	No. of Days	Cost per Traveler	Cost per Trip	Basis for Estimating Costs
Budget Period 1							
Domestic Travel							
EXAMPLE ONLY!!! Visit to PV cell mfr. to set up vendor agreement							
		REDACTED					
		EXEMPTION 4					
Domestic Travel subtotal							
International Travel							
International Travel subtotal							
Budget Period 1 Total							

Purpose of travel	No. of Travelers	Depart From (not required for domestic travel)	Destination (not required for domestic travel)	No. of Days	Cost per Traveler	Cost per Trip	Basis for Estimating Costs
Budget Period 2							
Domestic Travel							
Domestic Travel subtotal							
International Travel							
			REDACTED EXEMPTION 4				
International Travel subtotal							
Budget Period 2 Total							
Budget Period 3							
Domestic Travel							
Domestic Travel subtotal							
International Travel							
International Travel subtotal							
Budget Period 3 Total							
PROJECT TOTAL							

Additional Explanations/Comments (as necessary)

d. Equipment

PLEASE READ!!!

Equipment is generally defined as an item with an acquisition cost greater than $5,000 and a useful life expectancy of more than one year. Further definitions can be found at 10 CFR 600 found on the PMC Recipient Resources Forms page at https://www.eere-pmc.energy.gov/Forms.aspx#regs .

List all proposed equipment below, providing a basis of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying its need as it applies to the Statement of Project Objectives. If it is existing equipment, and the value of its contribution to the project budget is being shown as cost share, provide logical support for the estimated value shown. If it is new equipment which will retain a useful life upon completion of the project, provide logical support for the estimated value shown.

For equipment over $50,000 in price, also include a copy of the associated vendor quote or catalog price list.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 1					
EXAMPLE ONLY!!! Thermal shock chamber					
				REDACTED EXEMPTION 4	
Budget Period 1 Total					
Budget Period 2					
				REDACTED EXEMPTION 4	
Budget Period 2 Total					

Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 3					
				REDACTED EXEMPTION 4	
Budget Period 3 Total					
PROJECT TOTAL					

Additional Explanations/Comments (as necessary)

e. Supplies

PLEASE READ!!!

Supplies are generally defined as an item with an acquisition cost of $5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance. Further definitions can be found at 10 CFR 600 found on the PMC Recipient Resources Forms page at https://www.eere-pmc.energy.gov/Forms.aspx#regs.

List all proposed supplies below, providing a bases of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying the need for the Supplies as they apply to the Statement of Project Objectives. Note that Supply items must be direct costs to the project at this budget category, and not duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 1					
EXAMPLE ONLY!!! Wireless DAS components					
				REDACTED EXEMPTION 4	
Budget Period 1 Total					
Budget Period 2					
				REDACTED EXEMPTION 4	
Budget Period 2 Total					

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 3					
Budget Period 3 Total					
PROJECT TOTAL					

REDACTED
EXEMPTION 4

Additional Explanations/Comments (as necessary)

f. Contractual

PLEASE READ!!!

The entity completing this form must provide all costs related to sub-recipients, vendors, contractors, consultants and FFRDC partners in the applicable boxes below.

Sub-recipients (partners, sub-awardees):

For each sub-recipient with total project costs of $100,000 or more, a separate SF-424A budget and PMC123.1 budget justification form must be submitted. These sub-recipient forms may be completed by either the sub-recipients themselves or by the preparer of this form. The budget totals on the sub-recipient's forms must match the sub-recipeint entries below.

The preparer of this form need only provide further support of the completed sub-recipient budget forms as they deem necessary. The support to justify the budgets of sub-recipients with estimated costs less than $100,000 may be in any format, and at a minimum should provide what Statement of Project Objectives task(s) are being performed, the purpose/need for the effort, and a basis of the estimated costs that is considered sufficient for DOE evaluation.

Vendors (includes contractors and consultants):

List all vendors, contractors and consultants supplying commercial supplies or services used to support the project. The support to justify vendor costs (in any amount) should provide the purpose for the products or services and a basis of the estimated costs that is considered sufficient for DOE evaluation.

Federal Research and Development Centers (FFRDCs):

For FFRDC partners, award recipient will provide a Field Work Proposal (if not already provided with the original application), along with the FFRDC labor mix and hours, by category and FFRDC major purchases greater than $25,000, including Quantity, Unit Cost, Basis of Cost, and Justification. The award recipient may allow the FFRDC to provide this information directly to DOE.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! XYZ Corp.					
	REDACTED EXEMPTION 4				

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
	REDACTED EXEMPTION 4				
	Sub-total				

Vendor Name/Organization	Product or Service, Purpose/Need and Basis of Cost (Provide additional support at bottom of page as needed)	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! ABC Corp.	REDACTED EXEMPTION 4				

FFRDC Name/Organization	Purpose	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
	REDACTED EXEMPTION 4				
Total Contractual					

AdditionalExplanations/Comments (as necessary)

g. Construction

PLEASE READ!!!

Construction, for the purpose of budgeting, is defined as all types of work done on a particular building, including erecting, altering, or remodeling. Construction conducted by the award recipient is entered on this page. Any construction work that is performed by a vendor or subrecipient to the award recipient should be entered under f. Contractual.

List all proposed construction below, providing a basis of cost such as engineering estimates, prior construction, etc., and briefly justify its need as it applies to the Statement of Project Objectives.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Overall description of construction actiivities:

Example Only!!! - Build wind turbine platform

General Description	Cost	Basis of Cost	Justification of need
Budget Period 1			
Three days of excavation for platform site EXAMPLE ONLY!!!			
		REDACTED EXEMPTION 4	
Budget Period 1 Total			
Budget Period 2			
		REDACTED EXEMPTION 4	
Budget Period 2 Total			

General Description	Cost	Basis of Cost	Justification of need
Budget Period 3			
Budget Period 3 Total			
PROJECT TOTAL			

REDACTED
EXEMPTION 4

Additional Explanations/Comments (as necessary)

g. Construction

h. Other Direct Costs

PLEASE READ!!!

Other direct costs are direct cost items required for the project which do not fit clearly into other categories, and are not included in the indirect pool for which the indirect rate is being applied to this project. Examples are meeting costs, postage, couriers or express mail, telephone/fax costs, printing costs, etc.

Basis of cost are items such as vendor quotes, prior purchases of similar or like items, published price list, etc.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

General description	Cost	Basis of Cost	Justification of need
Budget Period 1			
XAMPLE ONLY!!! Grad student tuition			
		REDACTED EXEMPTION 4	
Budget Period 1 Total			
Budget Period 2			
		REDACTED EXEMPTION 4	
Budget Period 2 Total			
Budget Period 3			
Budget Period 3 Total			
PROJECT TOTAL		REDACTED EXEMPTION 4	

Additional Explanations/Comments (as necessary)

PMC123.1 - Budget Justification for SF 424A Budget

i. Indirect Costs

	Budget Period 1	Budget Period 2	Budget Period 3	Total
Rate applied:	REDACTED EXEMPTION 4			
Total indirect costs requested:				

A federally approved indirect rate agreement, or rate proposed supported and agreed upon by DOE for estimating purposes is required if reimbursement of fringe benfits is requested. Please check (X) one of the options below and provide the requested information if it has not already been provided as requested, or has changed. Calculate the indirect rate dollars and enter the total in the Section B., line 6.j. (Indirect Charges) of form SF 424A.

____ **There is a federally approved indirect rate agreement. A copy is provided with this application and will be provided electronically to the Contracting Officer for this project.**
**In the area designated below, identify the full calculations used to derive the total indirect costs. See further information below.*

X **There is no current, federally-approved indirect rate agreement.**
*When this option is checked, the entity preparing this form shall submit an indirect cost rate proposal in the format provided at the following website, or in a format that provides the same level of information and which supports the rate(s) being proposed for use in estimating the project. Go to https://www.eere-pmc.energy.gov/forms.aspx and select PMC 400.2 Sample Rate Proposal. *In the area designated below, identify the full calculations used to derive the total indirect costs. See further information below.*

Additional Explanations/Comments (as necessary)

*IMPORTANT: In the space provided below (or as an attachment) provide a complete explanation and the full calculations used to derive the total indirect costs. If the total indirect costs are a cumulative amount of more than one calculation or rate application, the explanation and calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total). The rates and how they are applied should not be averaged to get one indirect cost percentage. NOTE: The indirect rate should be applied to both the Federal Share and Recipient Cost Share.

Cost Share

PLEASE READ!!!

A detailed presentation of the cash or cash value of all cost share proposed for the project must be provided in the table below. Identify the source & amount of each item of cost share proposed by the award recipient and each sub-recipient or vendor. Letters of committment must be submitted for all third party cost share (other than award recipient).

Note that "cost-share" is not limited to cash investment. Other items that may be assigned value in a budget as incurred as part of the project budget and necessary to performance of the project, may be considered as cost share, such as: contribution of services or property; donated, purchased or existing equipment; buildings or land; donated, purchased or existing supplies; and/or unrecovered personnel, fringe benefits and indirect costs, etc. For each cost share contribution identified as other than cash, identify the item and describe how the value of the cost share contribution was calculated.

Funds from other Federal sources MAY NOT be counted as cost share. **This prohibition includes FFRDC sub-recipients. Non-Federal sources include private, state or local Government, or any source not originally derived from Federal funds. Documentation of cost sharing commitments must be provided, if not already provided with the original application and they have not changed since its submission.**

Fee or profit will not be paid to the award recipients or subrecipients of financial assistance awards. Additionally, foregone fee or profit by the applicant shall not be considered cost sharing under any resulting award. Reimbursement of actual costs will only include those costs that are allowable and allocable to the project as determined in accordance with the applicable cost principles prescribed in 10 CFR 600.127, 10 CFR 600.222 or 10 CFR 600.317. Also see 10 CFR 600.318 relative to profit or fee.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
ABC Company EXAMPLE ONLY!!!		REDACTED EXEMPTION 4				
		Totals				

Total Project Cost: **Cost Share Percent of Award:**

Additional Explanations/Comments (as necessary)

REDACTED EXEMPTION 4

PMC 112.2
(08/27/2009)

U.S. DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CENTER

REQUEST FOR REVIEW

☐ Normal Review ☒ Expedited Review Date: 12/22/2009

Justification for Expedited Review: ARRA Fully Conditional Award Deadline

Award Number: DE-EE0002877 FOA Number, if new award: DE-FOA-0000096

Item(s) For Review:
Fully Conditional Award

Total Project: $ EX 4
Federal Funds: $ 21,765,738

Specialist Listed on Award: Molly Hames Phone: 303-275-4864

Specialist Who Prepared Award: _____ Phone: _____

Note to Specialist: Send 72 Hour Congressional Notification for FOA action reviews, as required.

☑ PEER REVIEW

Comments:

REDACTED
EXEMPTION 5

Signature: Melissa Wise Date: 1/18/2010

☐ CONTRACTING OFFICER REVIEW

☐ Approved ☑ Approved subject to comments below/attached ☐ Not Approved; Comments below/attached

Comments: See attached sheet.

Signature: Melissa Wise Date: 1/18/2010

☐ INDEPENDENT REVIEW

Comments:

Signature: _____ Date: _____

☐ LEGAL REVIEWS – SEE PAGE 2 **(Delete page 2 if not required)**

☐ OAFA BRANCH CHIEF REVIEW

☐ Approved ☐ Approved subject to comments below/attached ☐ Not Approved; Comments below/attached

Comments:

Signature: _____ Date: _____

☐ DIRECTOR FINANCIAL ASSISTANCE REVIEW – SEE PAGE 3 **(Delete page 3, if not required)**

☐ HEAD OF CONTRACTING ACTIVITY REVIEW – SEE PAGE 3 **(Delete page 3, if not required)**

REDACTED

FOIA EXEMPTION 4

Department of Energy
Washington, DC 20585

I certify that the funds stated herein are available for obligation and the work scope is consistent with the intent of Congress.

12/23/09

David J. Smith
Lead Budget Analyst, EE-3B

FED 10-5069 DEC
ARRA FUNDS

MEMORANDUM FOR: Rita Wells, Executive Director for Field Operations
Golden Field Office (GO)

SUBJECT: FY 2010 Biomass Program Approved Funding for Golden Field Office (GO)

In accordance with the approved EERE Biomass Program FY 2010 spend plan, budget authority of $608,598,927 in operating expenses is authorized for obligation and expenditure in accordance with program guidance as indicated below. Any required changes must be approved in writing by the appropriate headquarters program manager and budget execution staff. Field transfers must be coordinated through the Corporate Planning System (CPS). Funding authorized in this letter is not approved for support service contracts; either as a prime or subcontract award. The field AFP recipient of the funds is responsible for reporting all funding obligations and costs to the Project Management Center and headquarters. The field AFP recipient must maintain obligations and cost data at the agreement level and the data must be made available to EERE.

PROGRAM GUIDANCE

Program Activity & Key Activity	B&R Code-Fund Value-Program Code	BA($)
Biomass Program Thermochemical Platform R&D	BM0101010-05794-1004170 (2009)	$33,818,814
Biomass Program Bioconversion Platform R&D for Sugars	BM0101020-05794-1004171 (2009)	$10,692,095
Biomass Program Feedstocks Infrastructure	BM0102030-05794-1004172 (2009)	$33,344,378

Carryover funding in the amount of $77,855,287 is authorized for BM0101010-05794-1004170-Thermochem (2009), BM0101020-05794-1004171-Bioconversion (2009), and BM0102030-05794-1004172-Feedstocks (2009). These funds are made available for Solicitation #20475 - *B3 (b) GFO - Algal and Advanced Fungible Biofuels Consortia (Project 2004020)*. This funding supports a Recovery Act solicitation comprised of two major topic areas. The intended purpose of this FOA is to serve three primary goals of EERE: 1) increase the viability and deployment of renewable energy technologies, thereby 2) spurring the creation of a domestic bio-industry, resulting in 3) a dramatic reduction in dependence on imported oil. Under this FOA, DOE will issue awards to Consortia that synergistically use their unique capabilities to expedite the

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development of biomass-based fuel production pathways. These teaming efforts are expected to involve specific scientific, engineering, system design, analysis, and project management disciplines that can work together effectively to accomplish the stated project objectives. Such partnerships should include an appropriate mix of U.S. industry, academia, and government and/or non-government laboratories, and could include foreign entities with the appropriate skill sets. Additionally, these partnerships will seek to utilize "best-in-class" technical approaches. DOE is not prescribing a specific number of team members, team structure, or mix of organization types. It will be up to the Consortia to determine the appropriate mix of technical partners. The two topic areas are as follows: (1) Algal Biofuel Consortia for research and development to investigate the potential for algae to commercially produce a variety of biofuels, such as renewable gasoline, diesel or jet fuel; and, (2) Advanced Infrastructure Compatible Biofuels Consortia to develop new and innovative approaches for the conversion of biomass to advanced biofuels that are infrastructure compatible, distinct from current technical pathways for producing hydrocarbons from biomass feedstocks. The headquarters technical point of contact is Leslie Pezzullo who can be reached on (202) 586-1514. The field point of contact is Kevin Craig who can be reached on (303) 275-4955.

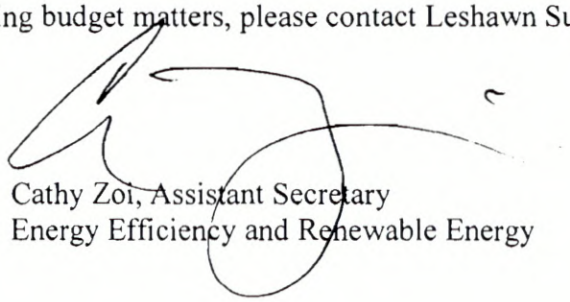
Program Activity & Key Activity	**B&R Code-Fund Value-Program Code**	**BA($)**
Biomass Program Integration of Biorefinery Technologies	BM0102060-05794-1004173 (2009)	$81,134,686

Carryover funding in the amount of $81,134,686 is authorized for BM0102060-05794-1004173-Biorefinery (2009). These funds are made available for Solicitation #20452 - *B2 - WBS 8.5.8.3 Commercial Scale Biorefinery Projects (Project 2004010)*. This funding supports an increased federal funding ceiling for two commercial scale integrated biorefinery projects that were competitively selected and awarded within the last two years, but which have encountered delays due to the state of the economy. This Recovery Act funding will serve to reduce risk of the development and deployment and allow for increased confidence by the lending community to provide debt financing the awardees. This will in turn allow them to meet their cost-share requirements and move these projects more rapidly beyond the initial phases of development into final engineering and construction. Ultimately, this will accelerate the timeline for start up and commissioning, and support the timely meeting to the EISA 2007 RFS targets. The headquarters technical point of contact is Valri Lightner who can be reached on (202) 586-0937. The field point of contact is Kevin Craig who can be reached on (303) 275-4955.

Program Activity & Key Activity	B&R Code-Fund Value-Program Code	BA($)
Biomass Program Integration of Biorefinery Technologies	BM0102060-05794-1004173 (2009)	$449,608,954

Carryover funding in the amount of $449,608,954 is authorized for BM0102060-05794-1004173-Biorefinery (2009). These funds are made available for Solicitation #20451 - *B1 - WBS 8.5.8.1 Integrated Biorefinery Pilot and Demonstration Scale FOA (Project 2004000)*. This funding supports awards associated with a solicitation issued under the Recovery Act, DE-FOA-0000096, for integrated biorefinery projects that have the necessary technical and economic performance data that validates their readiness for the next level of scale-up. These integrated biorefineries will produce, as their primary product, a liquid transportation fuel that supports, depending on topic area, meeting the advanced, renewable or advanced biofuels portion of the Energy Independence and Security Act of 2007 (EISA) Renewable Fuel Standards (RFS) or, depending on topic area, a bioproduct that substitutes for petroleum-based feedstocks and products. The six topic areas involve the design, construction, and/or operation of the following (as generally defined, and with acceptable feedstocks, fuels, and products specified by topic in the FOA): (1) a "pilot-scale" biorefinery to produce an "acceptable biofuel" using an "acceptable feedstock"; (2) a "pilot-scale" biorefinery to produce an "acceptable bioproduct"; (3) a "demonstration-scale" biorefinery to produce an "acceptable biofuel" using an "acceptable feedstock"; (4) a "demonstration-scale" biorefinery to produce an "acceptable bioproduct" using a topic-specific "acceptable feedstock"; (5) a "pilot-scale" biorefinery using a topic-specific "acceptable feedstock" to produce an "acceptable biofuel" using an "acceptable feedstock"; or, (6) a "demonstration-scale" biorefinery to produce an "acceptable biofuel" using an "acceptable feedstock". A pilot-scale biorefinery project has been defined as a facility with a throughput of no less than one (1) dry tone of feedstock per day, and a demonstration-scale biorefinery must be designed and constructed for a throughput of at least fifty (50) dry tones of feedstock per day. The headquarters technical point of contact is Valri Lightner who can be reached on (202) 586-0937. The field point of contact is Kevin Craig who can be reached on (303) 275-4955.

Should you have any questions regarding budget matters, please contact Leshawn Sutton who can be reached on (202) 586-9258.



Cathy Zoi, Assistant Secretary
Energy Efficiency and Renewable Energy

cc: Angela Sigala (GO)
Dolores (Dee) Adams (GO)
Edward Loudin (NETL)
Jami Shepherd (GO)
Jeffrey Steich (NETL)

Jennifer Surdi (GO)
Kevin Craig
Leslie Pezzullo
Marlys Kinsey (GO)
Valri Lightner

ASSISTANCE AGREEMENT

1. Award No.	2. Modification No.	3. Effective Date	4. CFDA No.
DE-EE0002877		01/28/2010	81.087

5. Awarded To	6. Sponsoring Office	7. Period of Performance
SOLAZYME, INC. Attn: MATTHEW FROME 561 ECCLES AVE SOUTH SAN FRANCISCO CA 940801906	Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401	01/28/2010 through 03/31/2013

8. Type of Agreement	9. Authority	10. Purchase Request or Funding Document No.
☐ Grant ☒ Cooperative Agreement ☐ Other	109-58, Energy Policy Act 2009 111-5, Recovery Act 2009	10EE002334

11. Remittance Address	12. Total Amount	13. Funds Obligated
SOLAZYME, INC. Attn: MATTHEW FROME 561 ECCLES AVE SOUTH SAN FRANCISCO CA 940801906	Govt. Share: $21,765,738.00 Cost Share : $5,441,397.00 Total : $27,207,135.00	This action: $21,765,738.00 Total : $21,765,738.00

14. Principal Investigator	15. Program Manager	16. Administrator
Anthony Day 650-780-4777	Carol Christine Sterner Phone: 303-275-4720	Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401-3393

17. Submit Payment Requests To	18. Paying Office	19. Submit Reports To
OR for Golden U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 4517 Oak Ridge TN 37831		

20. Accounting and Appropriation Data

Biomass - IBR ARRA

21. Research Title and/or Description of Project

RECOVERY ACT - SOLAZYME INTEGRATED BIOREFINERY (SZIBR): DIESEL FUELS FROM HETEROTROPHIC ALGAE

For the Recipient		For the United States of America	
22. Signature of Person Authorized to Sign		25. Signature of Grants/Agreements Officer Melissa Wise	
23. Name and Title	24. Date Signed	26. Name of Officer Melissa Y. Wise	27. Date Signed 01/20/2010

Working Copy

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	DUNS Number: 145862012 "Electronic signature or signatures as used in this document means a method of signing an electronic message that-- (A) Identifies and authenticates a particular person as the source of the electronic message; (B) Indicates such person's approval of the information contained in the electronic message; and, (C) Submission via FedConnect constitutes electronically signed documents." 1. This is a conditional award, comprised of this Assistance Agreement and the Special Terms and Conditions. Upon successful completion of negotiations, this award will be modified to lift its conditional status, to revise the Special Terms and Conditions, and to add additional attachments, such as Attachment 1, Intellectual Property Provisions; Attachment 2, Statement of Project Objectives; Attachment 3, Federal Assistance Reporting Requirements; and Attachment 4, Budget Information - Non Construction Programs. 2. The award was prepared using the proposed budget information in the Recipient¿s application. The Special Terms and Conditions, Provision 1 of the award states DOE will not release the funding obligated by this award until the Awardee submits a full application and subsequently requested supplemental information, the Contracting Officer reviews and approves the Awardee's application and supplemental information, and completion of negotiations. Performance against this award is, therefore, at the Recipient¿s own risk, and payments for costs incurred for the Recipient¿s project will not be made until completion of negotiations. 3. The administrative office for this award is 03601. The administrative office (administrative contracting activity) code is needed by the recipient for reporting to FederalReporting.gov concerning awards made with funding from the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act). Recipients must report to FederalReporting.gov by the 10th day of each quarter. Continued ...				

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-EE0002877	PAGE 3 OF 3

NAME OF OFFEROR OR CONTRACTOR
SOLAZYME, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	4. A representative of the DOE office will contact the Recipient to request additional and/or revised information needed to supplement and clarify the Recipient's application, to complete the negotiations of an amended award. DOE Award Administrator: Molly Hames E-mail: molly.hames@go.doe.gov Phone: 303-275-4864 DOE Project Officer: Christy Sterner E-mail: christy.sterner@go.doe.gov Phone: 303-275-4720 Recipient Business Officer: Anthony Day E-mail: tday@solazyme.com Phone: 650-780-4777 Recipient Principal Investigator: Anthony Day E-mail: tday@solazyme.com Phone: 650-780-4777 ASAP: NO Extent Competed: COMPETED Davis-Bacon Act: YES Delivery Location Code: 03601 Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401-3393 Payment: OR for Golden U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 4517 Oak Ridge TN 37831 Fund: 05794 Appr Year: 2009 Allottee: 31 Report Entity: 200835 Object Class: 41000 Program: 1004173 Project: 2004000 WFO: 0000000 Local Use: 0000000 TAS Agency: 89 TAS Account: 0331				

From: DiFranco, Carlo on behalf of GO D&B Rpt Requests
Sent: Wednesday, December 16, 2009 3:11 PM
To: Hames, Molly
Subject: RE: D&B Report - Solazyme, Inc. (DE-EE0002877)
Attachments: Solazyme Inc._145862012.doc

No worries...

Your requested D&B report is now available for viewing in the PMC.

Let me know if you have any questions.

Regards,

Carlo DiFranco
Procurement Assistant
Navarro Research and Engineering Inc.
US Dept. of Energy - Golden Field Office
PH: 303 275 4719

-----Original Message-----
From: Hames, Molly
Sent: Wednesday, December 16, 2009 2:06 PM
To: GO D&B Rpt Requests
Subject: D&B Report - Solazyme, Inc. (DE-EE0002877)

Hello,
I would like to request a D&B Risk Assessment Report for the company Solazyme, Inc.

Sorry on the previous two requests I forgot to put the company name on the end of the file document.

Thanks,

Molly Hames
Grants & Agreements Specialist
U.S. Department of Energy
Golden Field Office
1617 Cole Blvd. Golden, CO 80401
Phone: 303-275-4864
Fax: 303-275-4754

PMC 460.2
(09/06)

U.S. DEPARTMENT OF ENERGY – RISK ASSESSMENT

SECTION I – To be completed by the Specialist and forwarded to D&B Coordinator

Name of Requestor:	Molly Hames	**Date of Request:**	12/16/2009
Awardee Name:	Solazyme, Inc.	**Award No.**	DE-EE0002877
Street Address:	561 Eccles Avenue	**Project Title**	Solazyme Integrated Biorefinery (SzIBR): Diesel Fuels from Heterotrophic Algae
City/State/ZIP:	South San Fransisco, CA, 94080-1906	**DUNS Number:**	14-586-2012
Business Contact:	Anthony Day	**Phone Number:**	650-780-4777

☐ The Recipient has been selected for Award. Please pull a Dun & Bradstreet (D&B) Business Information Report (BIR). This report should be requested on all For Profit and Non-Profit Recipients with awards > $100K (DOE) (excluding Educational Institutions, Tribal Nations, or State and Local Governments). *This form should be used for new awards, renewals and continuations.*

☒ The Recipient is a Small Business entity and a D&B BIR report was pulled which identified a 4 rating. Please pull D&B Small Business Risk Account Scoring Report. The PMC460.3 "Authorization For Consumer Report Information" is properly signed and attached.

☐ The Recipient has requested reassessment due to changed situation. Date of initial report was: _____. A new PMC460.3 "Authorization For Consumer Report Information" is properly signed and attached. *(Note: A reassessment may be requested no sooner than 6 months after initial D&B report date)*

SECTION II -To be completed by D&B Coordinator

Type of D&B Report Pulled

☒ Business Information Report (BIR)

☐ Small Business Scoring Report (SBRASR) (PMC460.3 required)

Proper Authorization Verified Initial:_____

Report Pulled By:

Name: **Carlo DiFranco**

Date: **12/16/2009**

Electronic File Name: **PMC Shared Docs/Risk Assess/DB Reports/SOLAZYME, INC_121619.doc**

Comments:

D&B SCORE:_____ **SECTION III - To Be Completed by FOA/Congressional Directed Project Specialist**

The Specialist will make a risk assessment recommendation based on the following criteria.

All Recipients: Recipient is **not At Risk** if the last digit of the BIR Score is a 1, 2, or 3,

Other than Small Business: Recipient is **At Risk** if the last digit of the BIR Score is a 4, or there is no score and instead is a letter code or --

Small Business: If last digit of the BIR Score is 4, request a SBRASR report. If the SBRASR score is between 0 and 15, Recipient is **At Risk**.
If the SBRASR score is between 16 and 30, Recipient is **At Risk**, but may not require as high of a level of monitoring.
If the SBRASR score is greater than 30, Recipient is **not At Risk**.
If there is an unexpected event or material item discovered which will impact the assessment, further analysis may be required. (i.e. information received in conversation with the recipient)

Awardee Risk Determination

☐ At Risk (Include the **"At Risk"** provision in the Terms and Conditions of the Award. Follow-up is required if any Action Items are checked below)

☐ Not At Risk (No Further Action Required)

Action Items/Recommendations:

☐ Awardee requires on-going monitoring: Activate D&B Customer Watch Alert Monitoring Service and forward the results to the Specialist.
☐ CP Analysis required on additional information received (i.e. Financial Statements, SBRASR Reports)*
☐ Other:_____

Comments:

Assessment Completed by:_____ Date:_____
[Enter Name, Title]

Specialists: Forward this form, or the results (including Recipient Name, DUNS, Award No., and Y/N At-Risk Determination), to the D&B Coordinator, who will update the Tracking Log and activate the D&B Customer Watch, if applicable. Place this form in the Award File, along with the first page of the D&B Report containing the score. *The Specialist shall initiate a PMC 420.3 form if CP analysis is required (GO only).

December 4, 2009

Mr. Anthony Day
Solazyme, Inc.
561 Eccles Avenue
South San Francisco, CA 94080

Dear Mr. Anthony Day:

SUBJECT: Biomass Funding Opportunity Announcement DE-FOA-0000096, Recovery Act - Demonstration of Integrated Biorefinery Operations

Evaluation of your application received in response to the subject Funding Opportunity Announcement has been completed. After a careful review, I am pleased to inform you that your application has been selected for negotiations leading to an award.

In order to expedite the negotiation process, further information is needed to clarify and supplement your application. Please submit the following information to Molly Hames, Specialist, by January 4, 2010, if the information was not previously provided, or if any information has changed.

1. Complete each of the following required forms, which are available on the Project Management Center website at https://www.eere-pmc.energy.gov/Forms.aspx

    a. Application for Federal Assistance, SF 424;
    b. Budget Information – Non Construction Programs, SF 424A or SF 424 (R&R);
    c. Financial Assistance Pre-Award Information Sheet, PMC 121.1
    NOTE: Complete the PMC 121.1 form first and promptly email it under separate cover to me at the email address listed below;
    d. Financial Information, PMC 410.1;
    e. Representation of Limited Rights Data and Restricted Computer Software;
    f. Environmental Checklist, EF1. (This form should be completed on line at https://www.eere-pmc.energy.gov/nepa.asp)
    g. Statement of Project Objectives;
    h. Commitment Letters from Third Parties Contributing to Cost Sharing;
    i. Copy of your approved Indirect Rate Agreement or a Rate Proposal, following the guidelines in the PMC 400.2 form.

During fiscal year 2008, this office will implement a new electronic, paperless procurement system called STRIPES. Upon implementation of STRIPES, ALL organizations currently doing or wanting to do business with this office MUST BE registered with the Central Contractor Registration (CCR) and with FedConnect. As a result, it is imperative that you read and react to information provided in the document entitled "CCR and FedConnect Registrations" on the above referenced PMC website.

The Financial Assistance Regulations, found at https://www.eere-pmc.energy.gov/forms.aspx , and the OMB Circulars, found at http://www.whitehouse.gov/OMB/circulars/index.html will assist you in understanding your requirements as an award Recipient

You may incur pre-award costs 90 calendar days prior to award without prior approval or more than 90 calendar days with the prior approval of DOE. All pre-award costs are incurred at your risk (i.e., DOE is under no obligation to reimburse such costs if for any reason you do not receive an award or if the award is less than anticipated and inadequate to cover such costs). All costs must be allowable in accordance with the applicable cost principles.

In order to expedite the negotiation process, further information is needed to clarify and supplement your application. Please submit the following information to Molly Hames, Specialist, by January 4, 2010, if the information was not previously provided, or if any information has changed.

All projects receiving financial assistance from DOE must be reviewed under NEPA, for potential environmental impacts of the project. Funding for an award is contingent upon successfully completing the negotiations and obtaining the NEPA determination. You are restricted from taking any action using federal funds or your cost share funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE providing either a NEPA clearance or a final NEPA decision regarding the project.

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

This letter constitutes your debriefing for this Funding Opportunity Announcement.

On behalf of the Department of Energy, I would like to express a sincere appreciation of your interest and participation in developing the US bioindustry and look forward to initiating this worthwhile project.

Sincerely,

Fred Gerdeman

Fred Gerdeman
Merit Review Committee Chairperson