prefer to make them initially.

Thanks for your time and attention to this and please let me know if and how I can help. I look forward to hearing from you.

Best regards,

Christy

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(End of notice).

STATEMENT OF WORK (SOW) (May 2011, BP2 Update)

Solazyme, Inc.

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

1.0 PROJECT BACKGROUND

Solazyme, Inc. has developed innovative and proprietary technologies that use algae to renewably produce clean fuels in standard fermentation facilities. Solazyme has already produced thousands of gallons of algal oil in non-integrated tolling facilities. Furthermore, Solazyme's algal oils have been refined to transportation fuels that meet industry specifications.

Solazyme has demonstrated oil production at laboratory scale utilizing a wide variety of nonfood carbon feedstocks, including miscanthus, bagasse, sugar beet pulp, molasses, municipal green waste, switchgrass, corn stover, and wheat straw.

2.0 PROJECT SCOPE

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

As part of the proposed project, Solazyme shall produce algal oil derived entirely from lignocellulosic feedstocks (switchgrass, corn stover, wheat straw and/or municipal green waste) as well as other feedstocks.

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).

3.0 PROJECT REQUIREMENTS

The specific work tasks shall be identified in Section 4. These tasks, developed to satisfy program/project needs, are essentially the work requirements for Solazyme and its partners.

4.0 TASKS TO BE PERFORMED

Solazyme, Inc. shall complete the following tasks:

BUDGET PERIOD 1: PRELIMINARY ACTIVITIES

A BP-1 Submission (Preparation/Approval/Reporting)

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A.1 Selection Kick-Off Meeting (DOE Core)
A.2 Submission of Award 1 application (DOE Core)
A.3 Acceptance of Award 1 application (DOE Core)
A.4 Release of Award 1 funds (DOE Core)
B Prepare SzIBR manufacturing site:
Solazyme shall submit permit applications, finalize and sign the engineering design contract, procure vendor technical design information for the bulk of the process and utility equipment, complete basic engineering drawings and procure the longest-lead time equipment items, and update the safety plan for the manufacturing site.
B.2.5 EPC (Engineering Design Firm) contract finalized & signed (DOE Core)
C BP-2 Application/Submission/Approval
C.1 Cherokee Facility BP2 application materials preparation
C.2 Peoria Facility BP2 application materials preparation
C.2.2.1 NEPA approval to proceed (DOE CORE)
C.2.4 Update Risk Management Plan (Risk Planning)
C.2.5 Update PMP (Schedule/Cost Planning)
C.3.4 EPCM contract finalized and signed (DOE Core)
C.5 Submission of Award 2 application (DOE Core)
C.6 Reporting BP-1
Solazyme shall submit reports, including monthly standard and quarterly Recovery Act status and financial reports, and annual reports. Reports will be provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein.
C.7.1 Risk mitigation plan validation completed – Award 2 (DOE Core)
C.7.2 CD-2 Approve Performance Baseline (DOE Core)
C.7.3 Acceptance of Award 2 application (DOE Core)

BUDGET PERIOD 2: CONSTRUCTION AND OPERATION

D Funding approval and release activities
D.1 CD-3 Approve Start of Construction (DOE Core)
D.2 Release of Award 2 funds (DOE Core)
E Feedstock sourcing
F Create and qualify pilot-scale SzIBR at manufacturing site:
Solazyme shall
lazyme shall prepare space for equipment as needed, including any required
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on new equipment and conduct start-up/safety inspection.
F.4.2 Define commissioning criteria (DOE Core)
F.6 CD-4: Start of Operation Approval – Initiate Shakedown (DOE Core)
F.7 Perform start-up and commissioning:

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Solazyme shall install automation and conduct start-up of unit operations and water checks. Solazyme shall facilitate an Independent Engineer Report.

F.8 **Shakedown complete (DOE Core)**

F.10 **Integrated process start-up**

Solazyme shall start process flow by unit operations to complete a full integrated cycle.

F.14 **Commissioning – Start of operation (DOE Core)**

G **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.

H **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.

I **Generate concentrated sugars derived from lignocellulosic feedstocks:**

Subcontractors will generate sugars derived from lignocellulosic feedstocks.

J **Integrated process campaign on cellulosic-derived sugars at manufacturing site**

Solazyme will conduct at REDACTED EXEMPTION 4 on parameters.

K **Refine algal oil from SzIBR to standard liquid transportation fuels:**

Solazyme will deliver purified algal oil generated in Task G to subcontractors that will refine the oil to standard liquid transportation fuels, including biodiesel and renewable diesel.

L **Complete commissioning of SzIBR**

L.1 **Facilitate Independent Engineers Performance Test**

L.2 **Completion of Commissioning Criteria (DOE Core)**

M **Project Management BP-2**

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

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5.0 MILESTONES/DELIVERABLES.

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6.0 PERIOD OF PERFORMANCE

Solazyme will begin the award period on 1/29/10 with a 48 month period of execution.

7.0 PLACE OF PERFORMANCE

Work will be accomplished at the following locations.
0001. Solazyme, Inc., 225 Gateway Boulevard, South San Francisco, CA 94080
0002. Solazyme Manufacturing #1, LLC. 900N.E. Adams Street, Peoria, Il 61603
0003. BlueFire Ethanol, Inc., 31 Musick Street, Anaheim, CA 92618
0004. Abengoa Bioenergy Corp., 1414 Road O, York, NE 68467
0005. Renewable Energy Group, Inc., 416 South Bell Street, Ames, IA 50010
0006. UOP, LLC, 5200 Underwood Road, Pasadena, TX, 77501

ABENGOA BIOENERGY
ABENGOA BIOENERGY NEW TECHNOLOGIES

1030 S. Johnson Rd.
Golden, CO 80401

May 5, 2011

Sarah McQuaid, PhD
Associate Director Program Management
Solazyme Inc.
225 Gateway Boulevard
South San Francisco, CA 94080

Dear Dr. McQuaid:

Abengoa Bioenergy New Technology is committed to supporting the Solazyme DOE integrated biorefinery project, SzIBR. We fully expect to be able to supply fermentable sugars from biomass, produced in our York, NE pilot plant, for your use in the production of lipid oils from algae as we indicated in our support letter to Dr. Day back on June 19, 2009.

We look forward to doing what we can to help you be successful in this project.

Sincerely,

Robert J. Wooley, PhD, PE
Director, Process Engineering

From: Sarah McQuaid [smcquaid@solazyme.com]
Sent: Friday, May 13, 2011 3:47 PM
To: Clark, Ivan L.; Crump, William R.
Cc: Sterner, Christy; Lindeman, Chris; Adrian Galvez; Hank Majdeski; Bob Florence; Gayle McKenzie
Subject: FW: E-mail of continued interest in participating with Solazyme in the DOE Pilot Plant program

Dear Ivan, Bill,

Please find below an email from Bluefire Renewables confirming their continued commitment to the SzIBR project, Award # DE-EE0002877. This, along with the letter from Abengoa mailed under separate cover, satisfies EIR2 checklist item F5 regarding cellulosic feedstock supply commitments.

Thank you and have a great weekend,

Sarah

Sarah Larkin McQuaid, Ph.D., P.M.P.,

Assoc. Director Program Management,

Solazyme Inc.

Phone: 650.416.5122

Cell: 619.867.3055

-----Original Message-----
From: John Cuzens [mailto:jcuzens@bfreinc.com]
Sent: Wednesday, May 04, 2011 3:02 PM
To: Sarah McQuaid
Cc: Tracy Palmer
Subject: E-mail of continued interest in participating with Solazyme in the DOE Pilot Plant program

Dear Sarah,

This message is to confirm that BlueFire Renewables Ex 4 are still interested in cooperating with Solazyme to support the DOE Pilot Plant program we bid in 2009.

We have confirmation from that the resources are still available to

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Please let us know when you are available for a conference call to restart the program activities.

Best Regards,

John Cuzens

--

John E. Cuzens, P.E.

SR. V.P., Chief Technology Officer

Bluefire Renewables, Inc.

949-588-3767 (x306)

949-243-4613 (cp)

949-588-3972 (fax)

31 Musick, Irvine, CA. 92618

HTTP:/bluefireethanol.com

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the addressee indicated in this message (or responsible for delivery of the message to such person), you may not copy or deliver this message to anyone. In such case, you should destroy this message and kindly notify the sender by reply email. Please advise immediately if you or your employer does not consent to Internet email for messages of this kind. Opinions, conclusions and other information in this message that do not relate to the official business of my firm shall be understood as neither given nor endorsed by it.

American Recovery and Reinvestment Act of 2009, P.L. 111-5 (Recovery Act) Additional Budget Justification Information Applications shall provide information which validates that all laborers and mechanics on projects funded directly by or assisted in whole or in part by and through funding appropriated by the Recovery Act are paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by subchapter IV of Chapter 31 of title 40, United States Code (Davis-Bacon Act). For guidance on how to comply with this provision, see http://www.dol.gov/esa/whd/contracts/dbra.htm

To satisfy this requirement, please provide a written affirmation that you will comply with the Davis-Bacon Act, as identified above, along with

Affirmed by

Jonathan Wolfson, CEO

Solazyme Inc.

DE-EE0002877 CONFIDENTIAL Site relocation request

From: Sarah McQuaid [smcquaid@solazyme.com]
Sent: Monday, February 14, 2011 4:26 PM
To: Sterner, Christy; Lindeman, Chris; Craig, Kevin; Wise, Melissa; Hames, Molly; Graber, Kim; Kerwin, Kristin; Rossmeissl, Neil
Cc: Bob Florence; Gayle [illegible] jdeski
Subject: [illegible]
Attachments: [illegible]

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Dear Christy and DOE colleagues,

Please find attached [illegible] DE-EE0002877)

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EXEMPTION 4

our joint call last Thursday, 10 February 2011. As discussed we are concurrently preparing the [illegible] In the meantime please let us know if this document doesn't provide any information which you intended it to contain.

The attached document is marked business confidential and with the contractually mandated protected rights markings. Should any portions of the document be moved into other documents, we would be most grateful for your care in ensuring the markings are included.

Thank you very much for your continued assistance with this project.

Very best regards,

Sarah

Sarah Larkin McQuaid, Ph.D., P.M.P.,

Assoc. Director Program Management,

Solazyme Inc.

Phone: 650.416.5122

Cell: 619.867.3055

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(Deliberative Process)

Recipient:	Solazyme, Inc.			
Grant/Cooperative Agreement No.:		DE-EE0002877		
Project Title:		Recovery Act: Solazyme Integrated Biorefinery (SzIBR): Diesel Fuels from Heterotrophic Algae		
Version:	A		Date:	2/14/2011

Description:	Site Relocation – Description

Introduction:

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U.S. Department of Energy **Golden Field Office**

Memorandum

DATE: March 8, 2011

FROM: Melissa Wise, Contracting Officer

THRU: Kim Graber, Legal Counsel
Christy Sterner, Project Officer

TO: Paul F. Bryan, Program Manager, Biomass Program

SUBJECT:

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EXEMPTION 5
(Deliberative Process)
(Attorney/Client Privilege)

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EXEMPTION 4

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FOIA EXEMPTION 5

(Deliberative Process)

(Attorney/Client Privilege)

REDACTED

FOIA EXEMPTION 5

(Deliberative Process)

REDACTED

FOIA EXEMPTION 5

(Deliberative Process)

March 14, 2011

Ms. Sarah Larkin McQuaid, Ph.D., P.M.P.
Associate Director Program Management
Solazyme, Inc.
225 Gateway Boulevard,
South San Francisco, CA 94080

Dear Dr. McQuaid:

SUBJECT: , Award No. DE-EE0002877, "Recovery Act – Solazyme Integrated Biorefinery (SzIBR): Diesel Fuels from Heterotrophic Algae"

This letter is to notify you that the Department of Energy (DOE) has reviewed the information submitted by Solazyme regarding the ı your request, dated February 14, 2011. DOE approves the

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As a reminder, Solazyme

In addition, Solazyme must submit a revised Statement of Project Objectives, Budget, and Budget Justification to reflect any changes resulting from tl .

Should you have any questions, please contact Molly Hames, Grants and Agreements Specialist, at molly.hames@go.doe.gov or 303-275-4864.

Sincerely,

Melissa Wise
Contracting Officer

Department of Energy
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

March 14, 2011

Ms. Sarah Larkin McQuaid, Ph.D., P.M.P.
Associate Director Program Management
Solazyme, Inc.
225 Gateway Boulevard,
South San Francisco, CA 94080

Dear Dr. McQuaid:

SUBJECT: , Award No. DE-EE0002877, "Recovery Act – Solazyme Integrated Biorefinery (SzIBR): Diesel Fuels from Heterotrophic Algae"

This letter is to notify you that the Department of Energy (DOE) has reviewed the information submitted by Solazyme regarding the your request, dated February 14, 2011. DOE approves the

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As a reminder, Solazyme In addition, Solazyme must submit a revised Statement of Project Objectives, Budget, and Budget Justification to reflect any changes resulting from

Should you have any questions, please contact Molly Hames, Grants and Agreements Specialist, at molly.hames@go.doe.gov or 303-275-4864.

Sincerely,

Melissa Wise
Contracting Officer

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Department of Energy
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

February 24, 2011

Ms. Sarah Larkin McQuaid, Ph.D., P.M.P.
Associate Director Program Management
Solazyme, Inc.
561 Eccles Ave.
South San Francisco, CA 94080-1906

Dear Dr. McQuaid:

SUBJECT: , Award No. DE-EE0002877, "Recovery Act – Solazyme Integrated Biorefinery (SzIBR): Diesel Fuels from Heterotrophic Algae"

This letter is in response to REDACTED EXEMPTION 4 , dated February 14, 2011, seeking Department of Energy (DOE) approval At this time, DOE agrees to consider approving the the SzIBR, in accordance with the following procedures and conditions:

1. After careful consideration of the information contained in Solazyme's t, the DOE Project Officer must concur with your request and recommend approval c t. . DOE may request further information from Solazyme detailing the benefits of the REDACTED EXEMPTION 4
2. The DOE Selection Official must concur with the DOE Project Officer's recommendation and approve the
3. The DOE Contracting Officer may then issue an approval letter for the

If DOE can determine with reasonable confidence that Solazyme will be able to fulfill the terms and conditions of the current award, in a timely fashion , then DOE may agree to continue funding the project . DOE is currently reviewing (t, and we expect to issue a decision soon.

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addition, Solazyme must submit a revised Statement of Project Objectives, Budget, and Budget Justification to reflect any changes resulting

Should you have any questions, please contact Molly Hames, Grants and Agreements Specialist, at molly.hames@go.doe.gov or 303-275-4864.

Sincerely,

Melissa Wise

Melissa Wise
Contracting Officer

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Risk Management Plan

Risk Management Plan Index:

1. Risk Management Strategy 1
2. Project Risks and Mitigation 2
3. Preliminary Process Hazard Analysis (PHA) 3

1. Risk Management Strategy

Following is the risk management methodology that will be followed for the Solazyme Integrated Biorefinery (SzIBR) project.

This risk management process has been adapted to be scalable to ensure that the level, type, and visibility of risk management are commensurate with both the risk and the importance of this project.

A. Preliminary Risk Identification – Risks are identified in Table RMP-1.0, listing significant risk factors. Risks will continue to be identified as additional parts of the project management plan are implemented (i.e. project monitoring, project controlling, procurement plan and construction management plan). Additional risks will be identified up to and during Period 1.

B. Risk Impact Assessment – For each risk identified, the risk will be assessed in terms of likelihood of occurrence and its effect on project objectives if the event occurs. This information will be used to prioritize the risk and develop a mitigation strategy.

C. Risk Response Planning – Each risk will be reviewed as part of the project review meeting for risk management as outlined in PMP section 1.4 – Communication Plan. The review meetings will determine the options and actions to reduce the likelihood or consequences of impact to the project's objectives. The results of the review meeting will provide an appropriate response for planning the actions to be taken to mitigate the risks.

D. Monitor Risk:

- Systematic reviews are scheduled and outlined in PMP section 1.4 – Communication Plan.
- These reviews will ensure:
  - All of the requirements of the Risk Management Plan are being implemented
  - Assess currently defined risks
  - Evaluate effectiveness of actions taken
  - Status of actions to be taken
  - Validate previous risk assessment (likelihood and impact)
  - Validate previous assumptions
  - State new assumptions

- Identify new risks

E. Control Risk:

- Validate mitigation strategies and alternatives
- Take corrective action when actual events occur
- Assess impact on the project of actions taken ($$, time, resources)
- Identify new risks resulting from risk mitigation actions
- Ensure the Project Execution Plan (including the Risk Management Plan) is maintained
- Ensure change control addresses risks associated with the proposed change. Change control is addressed in great detail in section PMP section **Error! Reference source not found.- Error! Reference source not found.**.
- Revise Risk Response Plan

2. Project Risks and Mitigation

It is anticipated that project milestones and schedules may change as new information is generated and unforeseen operational problems such as equipment delivery delays or breakdowns occur. When these occur, project risks and mitigation will be re-evaluated during regular meetings as outlined in the Communication Plan. Elements of effective risk management include the following:

- Experienced project team.
- Complete and effective design criteria.
- Clear project objectives.
- Clear and effective communications.
- Identify the nature of any uncertainties.
- Effective decision making.
- Effective risk control measures.
- Earned value management.
- Critical path scheduling.
- Management of change.

Significant Risk Factors	WBS	Mitigation Strategies

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Significant Risk Factors	WBS	Mitigation Strategies
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Table RMP 1.0 – Project risk factors and mitigation strategies

NOTE: The proposed project schedule includes four months to gather NEPA documentation and obtain a CX. If an EA or EIS is required, the transition to Period 2 could be delayed without incurring any expense. The separation between Period 1 and Period 2 is a logical break point.

3. Preliminary Process Hazard Analysis (PHA)

Overview

The Construction Management Agent will perform HAZOP analysis using a formally structured method of systematically investigating each piece of equipment in the SzIBR process. This information will be assembled in the most detailed of the four OSHA recommended formats, 29 CFR. 1910.119. The hazard and operability problems will be determined by a study of the Piping and Instrument Diagrams (P&ID's) and the equipment Standard Operating Procedures (SOPs). NFPA guidelines are also utilized where applicable. The analysis is assembled into the following categories:

- Deviation
- Causes
- Consequences
- Safeguards
- Hazard Category
- Recommended Changes

Project personnel with extensive operational and start-up experience will critically analyze the system design for potential problems arising in each component of the plant operation. Possible causes of failure will be identified. Important parameters that can deviate from the intended design conditions and their associated Consequences will then be identified. A Hazard Category will be assigned based on Frequency and Severity. The P&ID, SOP, and NFPA documents will be used to ensure that the proper instrumentation, alarms and interlocks are incorporated as Safeguards into the design to prevent injury, loss of life, significant equipment damage, and production downtime.

Multiple concurrent failures will also be included in the analysis and recommendations appropriate to risk management will be provided.

Cause

The causes are developed first through critical thinking analysis of what can go wrong. This is accomplished by asking the question "what if" there is a:

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Depending on the equipment, some of these may be Deviations or Consequences; however, most are Causes. Since instruments and DCS systems have been developed to include a certain level of self-diagnostic capability, the HazOp is limited to equipment. The intent is to "poke holes" in the design and look for weaknesses.

Deviation

Pertinent parameters are selected, such as flow rate, temperature, pressure, and equipment position. Then the effect of deviations from design conditions of each parameter is examined. A list of key words, such as equipment stops, high temperature, low pressure or high flow rate is selected for use in describing each potential deviation.

Consequences

The Consequences list an event or chain of events associated with the deviation. Consequences are listed as if there were no safeguards in place. The consequence could be as simple as plugging a spout or as complex as ; The consequences are listed to assist in determining the Severity of the problem.

Hazard Category

The Hazard Category is a number and a letter that corresponds to the Severity and Frequency of a deviation.

Severity

1 – Catastrophic	Over $10,000 in equipment damage and 24 hrs in downtime
2 – Critical	$1000 – 10,000 in equipment damage and less than 24 hrs downtime
3 – Marginal	Minimal expense or less than 4 hrs downtime
4 – Negligible	Minimal expense or interruption

Frequency

A – Frequent	More than once a month
B – Probable	Once in 1-3 months
C – Occasional	Once in 3 – 12 months
D – Remote	Less than once a year
E – Improbable	Rarely ever occurs

For example, in most parts or the country, it is common to lose power 3 or 4 times a year. Therefore, Loss of Power automatically gets a "C" designation for frequency.

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Safeguards

Safeguards are reactive measures that are taken to prevent the possible Consequences. It is important to note that the Safeguards do not address the Deviation or Cause. For example, motorized equipment will stop when there is a power failure. There is nothing that can be done to prevent the power failure; however, reactive measures can be put in place to prevent the Consequences from spiraling into a catastrophic failure.

As a general guideline, if the Hazard Category is a 1,2 and A, B, C, then instrumentation and alarms/interlocks should be put in place to prevent the loss.

Standard Operating Procedures (SOPs)

In order to complete a HAZOP, SOPs are required of all complex process equipment including all the controls included with each package and a written description of the control logic of each control system. Complex equipment includes

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The process equipment SOPs are required in order to perform a HAZOP analysis because the HAZOP team has to know if the risk of each possible process deviation is managed properly or if additional controls or procedures are required to insure the safety and operability of operation.

The data contained in every page (pages 1 to 3) of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data herein to the extent provided in the award. This restriction does not limit the U.S. government's right to use or disclose data obtained without restriction from any source, including the applicant.

Every line on this page contains proprietary information that Solazyme, Inc. requests not be released to persons outside the U.S. Government, except for purposes of review and evaluation.

IP Statements and Support Documentation

IP Statements

Solazyme owns all the intellectual property necessary to accomplish the tasks set out in this proposal. Some intellectual property rights owned by Solazyme have been nonexclusively licensed to two major international energy companies and a consumer products company. The nonexclusive licenses do not in any way restrict Solazyme's ability to carry out the proposed project nor do they in any way restrict Solazyme's rights to commercialize the technology. There are no intellectual property rights that have been licensed from another party.

Solazyme's Partners have confirmed the following:

"To the best of its knowledge, UOP LLC owns or will have a license to all the intellectual property rights necessary to convert Solazyme's purified algal oil into renewable diesel as set out in proposal in response to DE-FOA-0000096. Limited licenses will be granted to Solazyme only to the extent necessary to use the resulting fuel."

"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."

"To the best of its knowledge, The Renewable Energy Group owns or will have a license to all the intellectual property rights necessary to convert Solazyme purified algal oil into FAME biodiesel as set out in proposal in response to DE-FOA-0000096. Limited licenses will be granted to Solazyme only to the extent necessary to use the resulting Fuel."

"To its knowledge, Abengoa Bioenergy New Technologies has all the intellectual property rights necessary to provide concentrated cellulosic sugars to Solazyme. Limited licenses will be granted to Solazyme only to the extent necessary to carry out algal fermentations to produce purified algal oil to be refined into transportation fuels as set out in this proposal."