in order to investigate biofuel p uction. A copy of the task force's written . orization has been included herewith as a supporting document.

Under DOE's own NEPA implementation regulations, Algenol's activities should also be categorically excluded from additional NEPA environmental review. Based on the absence of any significant risk to health, safety or the environment, this pilot project should be treated in a manner similar to those described in Appendix B to 10 CFR Subpart D of Part 1021, including categorical exclusions applicable to site characterization, monitoring and general research, such as B3.6 "Siting/construction/operation/decommissioning of facilities for bench-scale research, conventional laboratory operations, small-scale research and development and pilot projects"; "Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis; small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible.); or B3.12 "Siting, construction (or modification), operation, and decommissioning of microbiological and biomedical diagnostic, treatment and research facilities...".

4. Is the proposed project part of a larger scope of work? ☑ Yes ☐ No If yes, please describe.

Yes, this is a three phase project that requires establishing and meeting specific gate criteria before proceeding to subsequent phases of the project. The subsequent phases of this project are:

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Do you anticipate requesting additional federal funding for subsequent phases of this project?

☑ Yes ☐ No If yes, please describe.

The DOE has awarded Algenol a $25,000,000 grant for the entire project, contingent upon certain cost sharing stipulations and other terms and conditions that will be evaluated throughout the project. Phase 1 will utilize a portion of the overall $25,000,000 and, upon passing through the gate for the subsequent phases, Algenol will request the additional funds consistent with our budget and other project management documents.

5. Does the scope of your project **only** involve one or more of the following:

- ☐ Information gathering such as literature surveys, inventories, audits,
- ☐ Data analysis including computer modeling,
- ☐ Document preparation such as design, feasibility studies, analytical energy supply and demand studies, or
- ☐ Information dissemination, including document mailings, publication, distribution, training, conferences, and informational programs.

Preparer:	Phone:	Email:
Patrick Ahlm	239-498-2000	pat.ahlm@algenolbiofuels.com
Business Contact:	Phone:	Email:
Craig R. Smith, M.D.	239-498-2000	pat.ahlm@algenolbiofuels.com

PART II: Environmental Considerations

Section A Conditions or special areas are present, required, or could be affected by your project:

1. Clearing or Excavation

N/A

2. Dredge and/or Fill.

N/A

3. New or Modified Federal/State Permits And/or Requests for Exemptions

N/A

7. Non-Attainment Areas

N/A

Section B. Would your project use, disturb, or produce any chemicals or biological substances? (i.e., pesticides, industrial process, fuels, lubricants, bacteria)

10. Biological Materials.

☐ Permit Required Quantity: Permit Type:

Specific nature of use:

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Section C. Would your project require or produce any radiological materials?

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R&D Laboratory Environmental Impact Questions

In order to receive Federal financial assistance, proposed projects must be reviewed under the National Environmental Policy Act (NEPA) for potential environmental impacts. For research and development activities, the following questions must be sufficiently answered before the review can be completed. Please add as much detail as possible.

1. Please provide and describe the location of the facility or facilities where lab work will take place.

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an

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EXEMPTION 4

2. What type of <u>safety protocols</u> are in place in the areas where work will take place? Who monitors these? Internally and externally? Are the safety protocols subject to OSHA or other standards? Please describe all safety and environmental protocols and standards related to this project.

Currently lab and facility managers at each location are responsible for implementing and ensuring compliance with safety protocols that have been implemented. Included in the company's hiring plan is an EH&S director who will be tasked with establishing more robust safety procedures as the company expands. Current lab and facility managers have implemented safety protocols in line with OSHA's Laboratory Safety Standards, requirements for preparation of Chemical Hygiene Plans, Hazard Communication Standard, Occupational

Exposure to Hazardous Chemicals in Laboratories Standard and limits on airborne contaminants such as carbon dioxide and ethanol. Safety procedures in place also conform standard operating procedures to OSHA's Process Safety Management standard in order to prevent or minimize the consequences stemming from a release of photobioreactor contents.

3. How are the gases, chemicals, heavy metals, etc., handled, stored and disposed?

There will be no heavy metals used or generated. Gases and chemicals will be handled and stored in accordance with the protocols detailed in question 1. Disposal, when necessary, is handled by a company specializing in laboratory services such as responsible disposal of sensitive materials and waste.

4. What type of safety equipment is in place for the facilities (i.e. fume hoods, alarms, scrubbers, etc...)?

During design and construction of each location was completed with the input of experienced lab managers in order to ensure all necessary safely equipment was installed. Regular EH&S reviews are conducted to examine whether additional safety equipment is necessary. Fire monitors, sprinklers, fire extinguishers, fume hoods where necessary, safety shower/eye wash stations and other standard safety equipment consistent with the safety protocols detailed in question 1 are in place at each location.

5. What permits are in place for the facility for this type of work? Please list.

Algenol has received the necessary approvals from federal agencies, as detailed in question 10 below, for use of our hybrid algae at each location. The Florida facility has been licensed as an aquaculture facility for two years by the state of Florida and recently received authorization. As well, On February 23, 2010 the Transgenic Aquatic Species Task force, a division of the Florida Department of Agriculture and Consumer Services, issued written authority for Algenol to use our hybrid algae for research and development purposes in order to investigate biofuel production.

6. What permits are needed or will be acquired for this type of work? Please list.

All necessary permits have been obtained for the work to be done at each of these locations during phase 1 of the project.

7. How is liquid effluent handled and discharged?

There is no liquid effluent at the Loxahatchee facility, which is operated as a zero discharge facility. Liquid effluent is a non-issue at the Baltimore lab.

8. How is toxic waste handled, stored, and disposed?

Toxic waste will be handled and stored in accordance with the protocols detailed in question 1. Disposal, when necessary, is handled by a company specializing in laboratory services such as responsible disposal of sensitive materials and waste.

9. Will the work being done create any air pollutants? If so please explain how these are regulated, handled, disposed, or mitigated.

There will be no air pollutants produced at the Baltimore facility.

Presently, the Loxahatchee facility does not generate ethanol or any other biofuel from algae, however, Algenol is testing the ability of various algae strains to withstand exposure to ethanol in concentrations that would be observed in commercial production. Ethanol is being added to water in the bioreactors in a ratio of 0.4 gallons of ethanol per 80 gallons of water. During the course of these experiments, some ethanol will be vented to the atmosphere periodically until the cultures are free of ethanol. Following Algenol's calculations, it was concluded that any annual VOC emissions would be far less than the amount allowed by the Generic Facility Exemption at F.A.C. Chapter 62-210.300 Section (3)(b)2 and far below any Federal or State regulations.

10. Are Genetically Modified Organisms (GMOs) being used? If so please describe how these will be transported, stored, handled and disposed? How are these classified by the USDA Animal and Plant Health Inspection Service (APHIS)?

On March 3, 2009 Algenol submitted a letter and other materials to the Biotechnology Regulatory Services of the Animal and Plant Health Inspection Service (APHIS), U.S. Department of Agriculture, with detailed information and descriptions regarding various microorganisms and transformation and the intended use of the same. After reviewing the information, APHIS determined on November 4, 2009 that the specified strains of cyanobacteria are non-pathogenic for plants, animal and humans and are not plant pests under the Plant Protection Act, and therefore are not regulated articles under 7 CFR Part 340. Algenol has also received a permit from APHIS (#09-254-101m) under 7 CFR 340 for interstate movement of our hybrid algae. The hybrid algae will be shipped as pure cultures on an agar-solidified inorganic medium contained within sealed Petri plates or as small volumes (less than 1 L) of pure cultures growing in a liquid inorganic medium within a sealed plastic, shatter-proof vessel. All biological material will be placed inside a leak-proof plastic bag inside of a Styrofoam shipping container within a cardboard box. A copy of the APHIS letter has been submitted with the EF1 as a supporting document.

Algenol voluntarily contacted the Environmental Protection Agency in June 2009 to confirm the status of R&D work under the Toxic Substances Control Act (TSCA) and implementing EPA regulation for microorganisms. After reviewing detailed information provided by Algenol, the EPA confirmed in November 2009 that, based on the containment measures adopted in our R&D activities in compliance with 40 CFR 725.234, there is no need to submit a TSCA application for the research to be conducted under those containment measures, which includes the research at our Florida facility and the planned integrated biorefinery in Freeport, TX.

11. Will prototypes be tested in a separate location, if so, please describe the location and answer questions #1-9?

No

12. Are subcontractors being used for some of the work? If so please answer Questions #1-11 for work being completed by subcontractors.

No

United States Department of Agriculture

Animal and Plant Health Inspection Service

Biotechnology Regulatory Services

4700 River Road
Riverdale, MD
20737

November 4, 2009

Dr. John Coleman
Chief Scientific Officer
Algenol biofuels, Inc.
28100 Bonita Grande Drive
Suite 200
Bonita Springs, FL 34135

Re: APHIS opinion whether cyanobacteria is a regulated article.

Dear Dr. Coleman,

Thank you for your letter of March 3, 2009 in which you requested an opinion as to whether the genetically engineered cyanobacterial strains you are using for biofuel production are considered regulated articles according to the Plant Protection Act.

The Animal and Plant Health Inspection Service (APHIS) regulates the importation, interstate movement and environmental release of certain microoganisms to prevent the introduction into the United States or the dissemination of a plant pest within the United States. Regulations for genetically engineered microorganisms under the Plant Protection Act, are codified at 7 CFR Part 340, "Introduction of Organisms and Products Altered or Produced Through Genetic Engineering Which Are Plant Pests or Which There Is Reason To Believe Are Plant Pest." Under the provisions of these regulations, a genetically engineered organism is deemed a regulated article if it has been genetically engineered from a donor organism, recipient organism, or vector or vector agent listed in Section 340.2 and the listed organism meets the definition of "plant pest", or is an unclassified organism and/or an organism whose classification is unknown, or any product which contains such an organism, or any other organism or product altered or produced through genetic engineering which the Administrator, determines is a plant pest or has reason to believe is a plant pest.

A plant pest is defined in Section 340.1 as "any living stage (including active and dormant forms) of insects, mites, nematodes, slugs, snails, protozoa, or other invertebrate animals, bacteria, fungi, other parasitic plants or reproductive parts thereof, viruses, or any organisms similar to or allied with any of the foregoing; or any infections agents or substances which can directly or indirectly injure of cause disease or damage in or to any plants or parts thereof, or any processed, manufactured, or other products of plants."

APHIS has reviewed the information provided by Algenol and has determined that the specified strains are not plant pests, and therefore are not regulated articles under 7 CFR Part 340. This determination is based on the following:

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The aforementioned strains are non-pathogenic for plants, animals, and humans, and the sequences listed above are not known to confer any pest or pathogen characteristics on the recipient organisms, and, there is no reason for the Administrator to believe they are plant pests.

Permits for the importation, interstate movement, and environmental release are not required by USDA. Please be advised that field testing and/or commercial use of these genetically engineered cyanobacteria may be subject to other applicable regulatory authorities such as the Toxic Substances Control Act (TSCA) administered by the U.S. Environmental Protection Agency.

If you have any questions about our review, please call Dr. Neil Hoffman, Special Assistant to the Deputy Administrator, at (301) 734-6331.

Yours truly

Michael C. Gregoire

Michael Gregoire
Deputy Administrator
Biotechnology Regulatory Services

Florida Department of Agriculture and Consumer Services
CHARLES H. BRONSON, Commissioner
The Capitol • Tallahassee, FL 32399-0800
www.doacs.state.fl.us

Please Respond to:
Division of Aquaculture
1203 Governor's Square Blvd, Ste 501
Tallahassee, Florida 32309-2961

February 23, 2010

Ed Legere
Algenol Biofuels, Inc.
28100 Bonita Grande Drive, Suite 200
Bonita Springs, FL 34135

Dear Mr. Legere:

The Transgenic Aquatic Species Task Force met on January 22nd in the Division's conference room at 10:00 AM to consider transgenic cyanobacteria information provided by Algenol Biofuels. The Task Force requested additional information relative to a facility natural disaster management plan and species fitness. Thank you for attending the meeting and providing the information that they requested.

After receiving and considering the Task Force's recommendation, the Division is issuing this written authority to Algenol Biofuels to culture, for research and development purposes only, a Exemption 4 at your certified facility located near Loxahatchee (Aquaculture Certificate of Registration Number AQ2260035) for the purposes of investigating biofuel production.

Approval for research and development does not imply that the certified facilities are exempt from the provisions of Chapter 597, Florida Aquaculture Policy Act, Florida Statutes, relative to annual registration for an Aquaculture Certificate of Registration and unannounced inspections by Department personnel. This approval is not applicable to any other species or facility. Future efforts beyond research and development, like a pilot production effort, additional species produced, or a new location will require a new application and review by the Division and the Task Force.

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EXEMPTION 4

If you should have any additional questions, please feel free to contact me at (850) 488-4033.

Sincerely,

R. Sherman Wilhelm, Director
Division of Aquaculture

cc: Transgenic Aquatic Species Task Force

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(01/08)

R&D Laboratory Environmental Impact Questions

In order to receive Federal financial assistance, proposed projects must be reviewed under the National Environmental Policy Act (NEPA) for potential environmental impacts. For research and development activities, the following questions must be sufficiently answered before the review can be completed. Please add as much detail as possible.

1. Please provide and describe the location of the facility or facilities where lab work will take place.

Membrane Technology and Research (MTR), Inc.
1360 Willow Road
Menlo Park, CA 94025

2. What type of safety protocols are in place in the areas where work will take place? Who monitors these? Internally and externally? Are the safety protocols subject to OSHA or other standards? Please describe all safety and environmental protocols and standards related to this project.

The work to be performed by MTR consists of process design and process engineering. No experimental laboratory work will be performed.

3. How are the gases, chemicals, heavy metals, etc., handled, stored and disposed?

Not Applicable.

4. What type of safety equipment is in place for the facilities (i.e. fume hoods, alarms, scrubbers, etc...)?

Not Applicable.

5. What permits are in place for the facility for this type of work? Please list.

Not Applicable.

6. What permits are needed or will be acquired for this type of work? Please list.

None.

7. How is liquid effluent handled and discharged?

Not Applicable.

8. How is toxic waste handled, stored, and disposed?

Not Applicable.

9. Will the work being done create any air pollutants? If so please explain how these are regulated, handled, disposed, or mitigated.

No.

10. Are Genetically Modified Organisms (GMOs) being used? If so please describe how these will be transported, stored, handled and disposed? How are these classified by the USDA Animal and Plant Health Inspection Service (APHIS)?

No.

11. Will prototypes be tested in a separate location, if so, please describe the location and answer questions #1-9?

No.

12. Are subcontractors being used for some of the work? If so please answer Questions #1-11 for work being completed by subcontractors.

No.

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(01/08)

R&D Laboratory Environmental Impact Questions

In order to receive Federal financial assistance, proposed projects must be reviewed under the National Environmental Policy Act (NEPA) for potential environmental impacts. For research and development activities, the following questions must be sufficiently answered before the review can be completed. Please add as much detail as possible.

1. Please provide and describe the location of the facility or facilities where lab work will take place.

Work at the Georgia Institute of Technology (GIT) will take place in laboratories in the School of Chemical and Biomolecular Engineering (ChBE).

2. What type of safety protocols are in place in the areas where work will take place? Who monitors these? Internally and externally? Are the safety protocols subject to OSHA or other standards? Please describe all safety and environmental protocols and standards related to this project.

Safety protocols and practices are governed by the policies of GIT and administered in this case by the ChBE. Safety programs are reviewed periodically by among others the Accreditation Board for Engineering and Technolgoy (ABET). Safety protocols are subject to OSHA standards.

3. How are the gases, chemicals, heavy metals, etc., handled, stored and disposed?

The projects involve the handling of gases and, to some extent, chemicals. The handling of those materials is governed by GIT approved safety practices consistent with OSHA standards.

4. What type of safety equipment is in place for the facilities (i.e. fume hoods, alarms, scrubbers, etc...)?

The laboratories are equipped with fume hoods, alarms, eye wash stations, etc where appropriate.

5. What permits are in place for the facility for this type of work? Please list.

Standard permitting for academic research. No special permitting for the Algenol project is required.

6. What permits <u>are needed or will be acquired</u> for this type of work? Please list.

No special permits required.

7. How is liquid effluent handled and discharged?

All waste liquids are handled and discharged according to approved GIT procedures.

8. How is toxic waste handled, stored, and disposed?

No toxic waste is involved in the Algenol work.

9. Will the work being done create any air pollutants? If so please explain how these are regulated, handled, disposed, or mitigated.

No.

10. Are Genetically Modified Organisms (GMOs) being used? If so please describe how these will be transported, stored, handled and disposed? How are these classified by the USDA Animal and Plant Health Inspection Service (APHIS)?

No

11. Will prototypes be tested in a separate location, if so, please describe the location and answer questions #1-9?

No

12. Are subcontractors being used for some of the work? If so please answer Questions #1-11 for work being completed by subcontractors.

Yes, the program involves a subcontract to the University of Colorado, Chemical Engineering Department. Safety aspects of that work are very similar to the work at GIT and will be handled in a similar manner to GIT.

PMC 121 1
(07/2008)

U.S. DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CENTER

PRE-AWARD INFORMATION SHEET

Awardee Name:	Algenol Biofuels Inc.
Award Number:	
Awardee Business Officer:	Katie McFadden
Awardee Project Director:	Craig R. Smith, M.D.

Employer/Taxpayer Identification Number (EIN/TIN):	REDACTED EXEMPTION 4
Data Universal Numbering System (DUNS):	800399904

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

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:

The data contained on pages 6-10 of the Project Narrative; pages 3-6 and 12-13 of Environmental Questionnaire; pages 1-10, 16-18 and 20 of the Business and Commercialization Plan; and pages 2-4 of the IP Statement and all information contained the files named Lifecycle Energy and Greenhouse Gas Emissions, SF424A, Budget, Subaward Budget Files, Process Flow Diagram, Project Management Plant and Project Executive Plan 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.

All existing data on our process, procedures and know-how embody trade secrets, commercial and financial data that are confidential and privileged.

Paragraphs in this application's respective files that are preceded by an asterisk (*) contain proprietary information that Algenol Biofuels requests not be released to persons outside the Government, except for the purposes of review and evaluation.

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:

All existing data on our process, procedures and know-how embody trade secrets, commercial and financial data that are confidential and privileged.

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:
Attached please find the Process Flow Diagram that was included the application. The Supervisory Control and Data Acquisition system is described on pages 28-35. As well, the Vapor Compression Steam Stripper control system is described on pages 14-23. These systems are privileged and confidential restricted computer software.

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:	2301 N Brazosport Blvd. APB 2436
City:	Freeport
State:	TX
Zip:	77541
Congressional District:	TX-14th

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:	16121 Lee Road
City:	Ft. Myers
State:	FL
Zip:	33912
Congressional District:	FL-14th

Briefly describe portion of effort for this Site:	Algenol is in the process of consolidating already established research and development activities at this location. Research and development activities detailed in our application will be located at this facility.

Street Address:	2805 B Road
City:	Loxahatchee
State:	Florida
Zip:	33470
Congressional District:	FL-16th

Briefly describe portion of effort for this Site:	The process development unit detailed in the application will be located at this site.

Street Address:	1700 Union AVE, Suite A
City:	Baltimore
State:	Maryland
Zip:	21211
Congressional District:	MD-3rd

Briefly describe portion of effort for this Site:	On-going research and development activities detailed in the application will continue to be conducted at this site.

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: Katie McFadden

   Phone No.: (239) 498-2000 Extension: _____ E-mail: Katie.mcfadden@algenolbiofuels.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).

Craig R. Smith, M.D.	(239) 498-2000
Name	Telephone Number
Chief Operating Officer	**Craig.smith@algenolbiofuels.com**
Title	Email Address

REPRESENTATION/CERTIFICATION

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

Name:	Craig R. Smith, M.D.
Title:	Chief Operating Officer
Signature of Authorized Company Official:	Craig R. Smith, MD
Date:	1/4/10

Applicant Name___ Algenol Biofuels Inc. _____

Announcement Number_____ DE-FOA-000009____

Representation of Limited Rights Data and Restricted Computer Software

(a) Any data delivered under an award resulting from this announcement is subject to the Rights in Data – General or the Rights in Data – Programs Covered Under Special Data Statutes clause (See Intellectual Property Provisions at http://www.gc.energy.gov/financial_assistance_awards.htm). Under these clauses, the Recipient may withhold from delivery data that qualify as limited rights data or restricted computer software. As an aid in determining the Government's need to include Alternate I and/or Alternate II in these clauses, which allow for delivery of limited rights data and/or restricted computer software, the applicant must complete paragraph (b) below to either state that none of the data involved in the proposed work effort qualify as limited rights data or restricted computer software, or identify, to the extent feasible, which of the data qualifies as limited rights data or restricted computer software. Any identification of limited rights data or restricted computer software in this application is not determinative of the status of such data should an award be made.

(b) The applicant has reviewed the proposed work effort and the requirements for the delivery of data or software and states:

☐ None of the data proposed for fulfilling such requirements qualifies as limited rights data or restricted computer software.

☒ Data proposed for fulfilling such requirements qualify as limited rights data or restricted computer software and are identified as follows:

The data contained on pages 6-10 of the Project Narrative; pages 3-6 and 12-13 of Environmental Questionnaire; pages 1-10, 16-18 and 20 of the Business and Commercialization Plan; and pages 2-4 of the IP Statement and all information contained the files named Lifecycle Energy and Greenhouse Gas Emissions, SF424A, Budget, Subaward Budget Files, Process Flow Diagram, Project Management Plant and Project Executive Plan 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.

All existing data on our process, procedures and know-how embody trade secrets, commercial and financial data that are confidential and privileged.

Paragraphs in the application's respective files that are preceded by an asterisk (*) contain proprietary information that Algenol Biofuels requests not be released to persons outside the Government, except for the purposes of review and evaluation.

Note: "limited rights data" and "restricted computer software" are defined in provision "Rights in Data – General."

PMC 120.1
(2/08)

U.S. DEPARTMENT OF ENERGY
GOLDEN FIELD OFFICE

FINANCIAL ASSISTANCE COMBINED COST/TECHNICAL EVALUATION AND NEGOTIATION MEMORANDUM

SECTION I - GENERAL INFORMATION

This technical evaluation/negotiation memorandum will be prepared jointly by the assigned DOE/Golden OCPM AND OAFA personnel, to document the specific action being evaluated and supported. Each office is responsible for certain sections of this document. The assigned OCPM and OAFA personnel responsible for the action will both sign this document upon its completion, demonstrating their agreement on its contents.

1. Recipient: Algenol Biofuels Inc.

2. Grant/Cooperative Agreement No.: EE0002867 Modification No. 001
   Requisition No: 10EE003109
   Project Title: Recovery Act: Integrated Pilot-Scale Biorefinery for Producing Ethanol from Hybrid Algae

3. Type of Action: ☐ New Award ☐ Renewal ☐ Continuation ☒ Revision

Description of this Action: (NOTE: Indicate what is addressed by this Action only):

The purpose of this action is to lift the conditions for Budget Period 1 for the Algenol Biofuels project entitled, "Recovery Act: Pilot-Scale Integrated Biorefinery for Producing Ethanol from Hybrid Algae" (DE-EE0002867). Specifically, this action approves the scope, budget, and schedule associated with all Phase 1, or Budget Period 1,
Exemption 4

4. Award type, as determined at Procurement Strategy Meeting (for new awards): ☐ Grant ☒ Cooperative Agreement
   If Cooperative Agreement, provide the specifics of the Substantial Involvement. (Note: This language will be used in the Substantial Involvement provision of the award.):

1. Government Insight

   In order to adequately monitor project progress and provide technical direction and/or redirection to the Recipient, DOE must be provided an adequate level of insight into various Recipient activities. Government Insight activities by DOE include attendance at Recipient meetings, reviews and tests, as well as access for DOE's consultants to perform independent evaluations of Recipient's plans and processes. Recipient shall notify the DOE Project Officer of meetings, reviews, and tests in sufficient time to permit DOE participation, and provide all appropriate documentation for DOE review.

2. Specific activities to be conducted by DOE:

   a. Risk Evaluation – DOE will review the Recipient's initial Risk Mitigation Plan (RMP) for quality and completeness. DOE will also monitor updates to the RMP and actions taken by the Recipient during the performance of its award to mitigate risks and improve the probability of successful execution of the integrated Biorefinery project. At DOE's discretion, additional independent risk analyses of the project by DOE consultants may be requested.

   b. Independent Engineering Assessments – DOE will engage a private, independent engineering (IE) firm to assist in assessing the progress of the project and provide timely and accurate reports to DOE. The Recipient will ensure that the IE has access to any and all relevant documentation sufficient to allow the IE

to provide independent evaluations to DOE on the progress of the project. Such documentation includes but is not limited to the following:

- Drawings and specifications
- Construction and Execution plans
- Resource loaded schedules
- Design functions and requirements for the site final design review
- Risk management plans
- Value management and engineering studies and/or plans
- Acquisition strategies
- Project execution plans
- Project controls including earned value management systems
- Qualifications of the integrated project team.
- Financial strategy for funding the construction project
- Updated marketing and business plan
- Invoices submitted to DOE

DOE will evaluate the quality and completeness of information and documentation provided by the Recipient to DOE and its consultants in order to allow DOE to provide technical direction and/or redirection to the Recipient about how best to achieve the purposes of the award. Consultants to DOE may not provide technical direction and/or redirection to the Recipient.

5. New/Revised Project Period for this Award: From: 01/29/2010 To: 12/31/2014
New/Revised Budget Period 1 for this Award: From: 01/29/2010 To: 9/30/2010
New/Revised Budget Period 2 for this Award: From: 10/01/2010 To: 12/31/2014

6. Compliance Assessment (skip if new award):
a. Deliverables
The Recipient is current in submitting required reports: ☐ Yes ☐ No
If no, identify the delinquent report(s), indicate what action(s) have been taken to remedy the situation, and identify what further action(s) are necessary, if any:

N/A

b. Financial
The Recipient is current in meeting the cost share requirement: ☐ Yes ☐ No
If no, indicate what action(s) have been taken to remedy the situation and validate why this new action should proceed:

N/A

7. Check the applicable box for Funding Appropriation: ☒ Energy and Water ☐ Other _____

8. Check the applicable box for Statutory Authority:
☒ 109-58, Energy Policy Act 2005
☐ 110-140, Energy Independence and Security Act 2007
☒ 109-58, Recovery Act (2009)
☐ Other: _____

9. Per 10 CFR 600, the preferred payment method for State/Local Governments, Institutions of Higher Education, Hospitals, or Other Non-Profit Organizations is **Advance**. The preferred Payment Method for For-Profit organizations is **Reimbursement**. If the preferred payment method is not planned for a new award, provide an explanation below. Also explain below if the payment method for the award is being changed by this action.

The recipient is receiving ARRA funds and will continue to be on the ACH payment method to monitor their funds to ensure costs outside of Budget Period 1 are not charged to the award.

10. Is the proposed Recipient on the debarred or suspended list? Yes ☐ No ☒
Are any of the proposed subrecipients/subcontractors on the debarred or suspended list? Yes ☐ No ☒
Is the Project Director on the debarred or suspended list? Yes ☐ No ☒
If yes for either response above, award cannot be made without obtaining a waiver. See attached waiver.
The review was conducted on the Internet on 03/15/2010 (Include Printout in permanent STRIPES file)
(Date)

11. A risk determination has been completed on the PMC Form 460.2 Yes ☒ N/A ☐

12. Negotiation:

	Government Negotiator(s)		Recipient Negotiator(s)	
	Name	**Organization**	**Name**	**Position**
1.	Molly Hames	Contract Specialist	Dr. Craig Smith	COO
2.	Christy Sterner	Project Officer	Pat Alm	Assistant Project Manager
3.	Christine English	Navarro Project Engineer	Dax Denman	Assistant Project Manager

SECTION II – NEGOTIATION SUMMARY

1. Please record any significant application or budget submissions that resulted in a revised budget in the Negotiation History Table below (including SF424A, budget justifications, e-mails, etc.):

Application/Budget Submission	Reference Document(s)	Date of Submission	Summary of Change
Original		Jun-09	
Revision #1	123.1; SF424A	1/10/2010	Updated budget to remove some BP2 activities and contigency
Final	123.1;SF424A, SOPO	3/2/2010	Budget and SOPO were adjusted to reflect expedited schedule.

2. Complete Budget Table below (only include the original budget and final negotiated costs – the Percent of Total Negotiated Budget will calculate automatically)
Note: List proposed amounts by category even if there are no differences in the dollar amount.

Element of Cost	Original BP1 Budget Submission	Final BP1 Negotiated Costs (3/2/10)	Percent of Total Negotiated Budget	Fringe Benefits and Indirects	
				Proposed Rate	Negotiated Rate
Personnel Fringe Benefits Travel Equipment Supplies Contractual Construction Other Total Direct Charges Indirect Charges	Exemption 4				
TOTAL					
Program Income	0	0	0%		
DOE Share (non-FFRDC)	$9,669,386	$10,668,903	Exemption 4		
DOE Share (FFDRC)	$0	$424,480			
Total DOE Share	$9,669,386	$11,093,383			
Non-Federal Cost Share	Exemption 4				

SEE ATTACHED SF 424A FOR BUDGET PERIOD BREAKDOWN

3. Total Allowable Adjustment without Concurrence from the Selection Official per the Selection Statement: 10%
   Actual Total Adjustment based on Budget Table Above: 0%

Total Project Costs have not changed from Selection Statement – these are BP1 costs only.

Is the original budget the same as the negotiated budget: ☐ Yes ☒ No

If No, please check all boxes that apply:

☒ Change in the Project Scope
☒ Changes due to Time Delays
☐ Math Errors in Budget
☒ Changes in Indirect/Fringe Costs Caused Changes in Direct Costs or Total Project Costs
☐ Indirect/Fringe Rates incorrectly applied
☐ Other (explain) _____

4. Briefly describe and explain any substantial change(s) to the original Statement of Project Objectives submitted by the recipient:

Project Officer commentary: The original scope and schedule for the project exceeded allowable timelines for Budget Period 1 activities. Therefore, when the Recipient revised the scope and schedule to accommodate the accelerated timeframe for Budget Period 1, the SOPO and associated costs changed. Progress between the original application submittal and negotiations was accounted for in the revised SOPO and budget. All 'final' activities related to engineering and designs were moved to BP2 as were all site/facility related activities. The SOPO, as submitted on 3/2/10, is the final, approved SOPO for BP1. The associated costs for that SOPO are being evaluated here.

SECTION III – TECHNICAL EVALUATION SUMMARY

A. For each cost category, the Project Officer and the Specialist will complete his/her Technical Evaluation of the Negotiated Costs to confirm that they are all reasonable, allowable, and allocable. Additional comments should be added as necessary and as indicated below.

1. Personnel:

Total Negotiated Personnel Costs: $Exemption 4 Not Applicable, the recipient did not propose personnel costs: ☐

Project Officer:

The labor hours proposed in the negotiated budget are reasonable for the scope of work: ☒

The labor mix proposed in the negotiated budget is reasonable: ☒
The supporting documentation detailing labor positions, hours, and rates totals to slightly less than the cost proposed – Exemption 4

positions, experience levels, and rates for technology positions in the industry, the rates are reasonable. While some may seem high, such as the VPs, PI, Mgrs, etc., these positions are for highly experienced personnel and their rates are comparable to higher end rates for these types of positions.

Specialist:

Please fill out the following table with the negotiated costs:

Labor Type	Budget Period 1		
	Hours	Rate	Total
Regulatory/Legal	Exemption 4		
Principal Investigator			
Sr. Prog. Mgr.			
Eng/Construct Mgr.			
Principal Scientist			
Scientists (x3)			
Research Associates (x6)			
Lab Technicians (x2)			
VP R&D			
Sr. Scientists (x2)			
Engineers (x3)			
Sr. Engineers (x2)			
Program Managers (x2)			
Plant Manager			
VP Engineering			
Project Accountant			
Head of Fac. Maint.			
Total:			

Negotiated labor rates are reasonable: ☒
Please detail the basis for the reasonable determination: The Specialist concurs with the discussion above regarding the minor difference in the calculated and requested amounts as well as the basis for determining the rates as reasonable. The Principal Investigator and Construction Manager for this project are leading professionals in the industry and the founders of Algenol. They are very hands on with their project management and oversight efforts for this integrated demonstration-scale biorefinery; therefore, their time and personnel costs are reasonable and essential to the viability of this project.

2. Fringe Benefits:

Total Negotiated Fringe Benefit Costs: $Exemption 4 Not Applicable, the recipient did not propose fringe benefit costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The fringe benefit costs in the negotiated budget are reasonable: ☐

3. Travel:

Total Negotiated Travel Costs: $Exemption 4 Not Applicable, the recipient did not propose travel costs: ☐

Project Officer:

The number and type of trips proposed in the negotiated budget are reasonable for the scope of work: ☒

The costs per trip proposed in the negotiated budget are reasonable: ☒

Is foreign travel included in the negotiated budget: ☐ Yes ☒ No

☒ Specialist concurs: These costs are necessary for budget period 1 activities.

4. Equipment:

Total Negotiated Equipment Costs: $Exemption 4 Not Applicable, the recipient did not propose equipment costs: ☒

Project Officer:

The type(s) of equipment proposed in the negotiated budget is/are reasonable for the scope of work: ☒

The cost of equipment proposed in the original budget are reasonable: ☒

Is there any proposed equipment with a total cost exceeding $50,000: ☐ Yes ☒ No

☒ Specialist concurs.

5. Supplies:

Total Negotiated Supplies Costs: $Exemption 4 Not Applicable, the recipient did not propose supplies costs: ☒

Project Officer:

The types /quantities of supplies proposed in the negotiated budget are reasonable based on the scope of work: ☒

The costs of supplies proposed in the negotiated budget are reasonable: ☒

☒ Specialist concurs.

6. Contractual:

Total Negotiated Contractual Costs: $Exemption 4 Not Applicable, the recipient did not propose contractual costs: ☐

Project Officer:

The subrecipients proposed in the negotiated budget are appropriate for the scope of work: ☒

The contractual costs proposed in the negotiated budget are reasonable: ☒ Yes

Did the Recipient propose any subrecipients with total costs above $100,000? ☒ Yes ☐ No (If Yes, a separate Technical Evaluation/Negotiation Memorandum is required for each subrecipient/vendor – see below)

☒ Specialist concurs: These costs are covered in a separate Technical Evaluation/Negotiation Memorandum.

7. Construction:

Total Negotiated Construction Costs: $Exemption 4 Not Applicable, the recipient did not propose construction costs: ☒

Project Officer:

The type of construction proposed in the original budget is appropriate for the scope of work: ☒

The construction costs proposed in the original budget are reasonable: ☒

☒ Specialist concurs.

8. Other Direct Costs:

Total Negotiated Other Direct Costs: $Exemption 4 Not Applicable, the recipient did not propose other direct costs: ☒

Project Officer:

The other direct costs proposed in the original budget are reasonable for the scope of work: ☒

The costs proposed in the original budget for other direct costs are reasonable for the scope of work: ☒

☒ Specialist concurs.

9. Indirect Charges:

Total Negotiated Indirect Costs: $Exemption 4 Not Applicable, the recipient did not propose indirect costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:

☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)

☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____

☐ Specialist determined that rate was reasonable

☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The indirect costs proposed in the original budget are reasonable: ☐

10. Cost Share:

Project Officer:

Project is a: ☒ Research ☒ Development ☐ Demonstration ☐ Other: Pilot Project, BP1 (Explain)

The minimum recipient's cost share required for thi Exemption 4
The recipient proposed cost share for this award is:

Does the proposed cost share meet the minimum requirement: ☒ Yes ☐ No

Specialist:

Is the proposed cost share: ☒ Cash ☐ In-kind (detail the amount and category below for in-kind cost share, if applicable)

All proposed cost share is proposed as cash contributions: Exemption 4
from Membrane Technology and Research, Inc.

	Organization	Type of Cost Share (Cash or in-kind)	Cost Share Amount	Basis of Value (how the recipient calculated value)
	Solazyme, Inc.	Exemption 4		
	DOW Chemical Company			
	Membrane Technology and Research, Inc.			
Total				

Third Party cost share commitment letters have been obtained: ☒ (Please include letters in permanent STRIPES file)
Both MTR and DOW's cost share letters state they will commit Exemption 4 be working on for the duration of the project, which they have met in their budget, MT and DOW= Exemption 4

B. The following Project Officer and Specialist evaluation and negotiation commentary and recommendations address their agreement on all additional considerations for this award.

1. Please list any other special provisions agreed upon for inclusion in this award and describe the rationale for their inclusion below.

This recipient is receiving ARRA funds, and the Davis Bacon Act applies; therefore, the ARRA provisions have been included in the award. The indirect rates have not been negotiated for the prime and the Reopener provision clause has been added to the Special Terms and Conditions of the award, so that we may address these at a later date. Continuation provision, Funding of Budget Periods, Blanket CX NEPA provision, and Contingency provision have also been included in the special terms and conditions of this award, due to the holds on budget period 2 for the prime and subrecipients.

2. If a negotiation strategy, or strategies, is/are specified in the selection statement, provide a discussion below of how this was addressed and resolved.

Exemption 4 of Total Project Costs must be kept aside from the project budget as contingency for the project. This contingency is applicable total project costs and will be verified by the Project Officer as requested and discussed in the Contingency Appendix that will be attached to the award. Contingency will be reported and tracked as well to address the Exemption 4 requirement per the Selection Statement.

3. Any other comments or concerns of the Project Officer and/or Specialist for this award, and the recommended approach to mitigating them, will be explained and addressed below.

All comments and concerns have been previously noted.

4. Is this a Recovery Act award? ☒ Yes ☐ No

- If Yes, does the Buy American Act apply (see applicability below)? ☐ Yes ☒ No
- If Yes, does Davis Bacon Act apply (see applicability below)? ☒ Yes ☐ No

If the answer to either the Buy American Act or Davis Bacon Act questions is Yes, provide a short discussion below on: 1) the type of entity; 2) what applies; Davis Bacon, Buy American, or both; 3) whether it applies to the prime, subrecipient, or both; and 4) work to be performed that requires applicability of Buy American and/or Davis Bacon.

Algenol Biofuels Inc. is subject to the Davis Bacon Act, particularly in Budget Period 2. It will apply to the Recipient and their subrecipients. Budget Period 2 will include construction activities that are subject to the Davis Bacon Act.

Subrecipient: Georgia Institute of Technology

SECTION II – NEGOTIATION SUMMARY

1. Please record any significant application or budget submissions that resulted in a revised budget in the Negotiation History Table below (including SF424A, budget justifications, e-mails, etc.):

Application/Budget Submission	Reference Document(s)	Date of Submission	Summary of Change
Original		Jun-09	
Revision #1	123.1.; SF424A	1/10/2010	Updated budget to remove some BP2 activities and contigency
Final	123.1: SF424A	3/11/2010	Provided 123.1

2. Complete Budget Table below (only include the original budget and final negotiated costs – the Percent of Total Negotiated Budget will calculate automatically)
Note: List proposed amounts by category even if there are no differences in the dollar amount.

Element of Cost	**Original BP1 Budget Submission**	**Final BP1 Negotiated Costs**	**Percent of Total Negotiated Budget**	**Fringe Benefits and Indirects**	
				Proposed Rate	**Negotiated Rate**
Personnel Fringe Benefits Travel Equipment Supplies Contractual Construction Other Total Direct Charges Indirect Charges	Exemption 4				
TOTAL					
Program Income	0	0	0%		
DOE Share (non-FFRDC)	$484,400	$484,400	Exemption 4		
DOE Share (FFDRC)	$0	$0			
Total DOE Share	$484,400	$484,400			
Non-Federal Cost Share	Exemption 4				

SEE ATTACHED SF 424A FOR BUDGET PERIOD BREAKDOWN

3. Is the original budget the same as the negotiated budget: ☒ Yes ☐ No

If No, please check all boxes that apply:

☐ Change in the Project Scope
☐ Changes due to Time Delays
☐ Math Errors in Budget
☐ Changes in Indirect/Fringe Costs Caused Changes in Direct Costs or Total Project Costs
☐ Indirect/Fringe Rates incorrectly applied
☐ Other (explain) _____

4. Briefly describe and explain any substantial change(s) to the original Statement of Project Objectives submitted by the recipient:

Project Officer commentary: The scope of work proposed by Georgia Institute of Technology within Algenol's project has not changed since the original application.

SECTION III – TECHNICAL EVALUATION SUMMARY

A. For each cost category, the Project Officer and the Specialist will complete his/her Technical Evaluation of the Negotiated Costs to confirm that they are all reasonable, allowable, and allocable. Additional comments should be added as necessary and as indicated below.

1. Personnel:

Total Negotiated Personnel Costs: $Exemption 4 Not Applicable, the recipient did not propose personnel costs: ☐

Project Officer:

The labor hours proposed in the negotiated budget are reasonable for the scope of work: ☒

The labor mix proposed in the negotiated budget is reasonable: ☒

Specialist:

Please fill out the following table with the negotiated costs:

Labor Type	Budget Period 1		
	Hours	Rate	Total
Co-PI	Exemption 4		
Co-PI			
Co-PI			
Post-Doc (x3)			
Total:			

Negotiated labor rates are reasonable: ☒ (Please attach supporting documentation e.g. www.salary.com, if applicable)
The calculated total personnel costs are slightly less than the estimated costs due to rounding. The difference is $117 and is considered negligible. Therefore, the recommended approved amount is $Exemption 4

2. Fringe Benefits:

Total Negotiated Fringe Benefit Costs: $Exemption 4 Not Applicable, the recipient did not propose fringe benefit costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☒ Yes ☐ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach

Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The fringe benefit costs in the negotiated budget are reasonable: ☐

3. Travel:

Total Negotiated Travel Costs: $Exemption 4 Not Applicable, the recipient did not propose travel costs: ☐

Project Officer:

The number and type of trips proposed in the negotiated budget are reasonable for the scope of work: ☒

The costs per trip proposed in the negotiated budget are reasonable: ☒

Is foreign travel included in the negotiated budget: ☐ Yes ☒ No

☒ Specialist concurs.

4. Equipment:

Total Negotiated Equipment Costs: $Exemption 4 Not Applicable, the recipient did not propose equipment costs: ☐

Project Officer:

The type(s) of equipment proposed in the negotiated budget is/are reasonable for the scope of work: ☒

The cost of equipment proposed in the original budget are reasonable: ☒

Is there any proposed equipment with a total cost exceeding $50,000: ☒ Yes ☐ No (If yes, please fill out the following table with the negotiated costs and basis of cost, i.e. historical price or vendor quote)

Equipment	Total Cost	Justification	Basis of Cost
Exemption 4			

☒ Specialist concurs: This equipment is reasonable and necessary for the tasks in Budget Period 1 of this award. The appropriate documentation has been received.

5. Supplies:

Total Negotiated Supplies Costs: $Exemption 4 Not Applicable, the recipient did not propose supplies costs: ☐

Project Officer:

The types /quantities of supplies proposed in the negotiated budget are reasonable based on the scope of work: ☒

The costs of supplies proposed in the negotiated budget are reasonable: ☒

☒ Specialist concurs.

6. Contractual:

Total Negotiated Contractual Costs: $Exemption 4 Not Applicable, the recipient did not propose contractual costs: ☐

Project Officer:

The subrecipients proposed in the negotiated budget are appropriate for the scope of work: ☒

The contractual costs proposed in the negotiated budget are reasonable: ☒ Yes

Please fill out the following table with the negotiated costs:

Subrecipient/Vendor Name	Cost 1	Cost 2	Total Cost (BP1)	Role in Project (Identify SOPO Tasks)
Exemption 4				

Did the Recipient propose any subrecipients with total costs above $100,000? ☒ Yes ☐ No (The University of Colorado is a subrecipient of a subrecipient. The costs are reasonable for the work being performed by CU.)

☒ Specialist concurs: This subrecipient is necessary for the scope of work within Budget Period 1 of this award.

7. Construction:

Total Negotiated Construction Costs: $Exemption 4 Not Applicable, the recipient did not propose construction costs: ☒

Project Officer:

The type of construction proposed in the original budget is appropriate for the scope of work: ☒

The construction costs proposed in the original budget are reasonable: ☒

☒ Specialist concurs.

8. Other Direct Costs:

Total Negotiated Other Direct Costs: $Exemption 4 Not Applicable, the recipient did not propose other direct costs: ☒

Project Officer:

The other direct costs proposed in the original budget are reasonable for the scope of work: ☒

The costs proposed in the original budget for other direct costs are reasonable for the scope of work: ☒

☒ Specialist concurs.

9. Indirect Charges:

Total Negotiated Indirect Costs: $Exemption 4 Not Applicable, the recipient did not propose indirect costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☒ Yes ☐ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:

☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)

☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____

☐ Specialist determined that rate was reasonable

☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The indirect costs proposed in the original budget are reasonable: ☐

10. Cost Share:

Project Officer: Georgia Institute of Technology is not providing cost share within Algenol's project.

Project is a: ☒ Research ☒ Development ☐ Demonstration ☐ Other: Pilot Project, BP1 (Explain)

The Prime Recipient's cost share required for this award is: Exemption 4
The Prime Recipient proposed cost share for this award is:

Does the proposed cost share meet the minimum requirement: ☒ Yes ☐ No

Specialist:

Is the proposed cost share: ☒ Cash ☐ In-kind (detail the amount and category below for in-kind cost share, if applicable)

All proposed cost share is proposed as cash contributions: $ Exemption 4
from Membrane Technology and Research, Inc.

Third Party cost share commitment letters have been obtained: ☒ (Please include letters in permanent STRIPES file)

Subrecipient: The Dow Chemical Company

SECTION II – NEGOTIATION SUMMARY

1. Please record any significant application or budget submissions that resulted in a revised budget in the Negotiation History Table below (including SF424A, budget justifications, e-mails, etc.):

Application/Budget Submission	Reference Document(s)	Date of Submission	Summary of Change
Original		Jun-09	
Revision #1	123.1.; SF424A	1/10/2010	Updated budget to remove some BP2 activities and contigency
Final	123.1: SF424A	3/11/2010	Provided 123.1

2. Complete Budget Table below (only include the original budget and final negotiated costs – the Percent of Total Negotiated Budget will calculate automatically)
Note: List proposed amounts by category even if there are no differences in the dollar amount.

Element of Cost	Original BP1 Budget Submission	Final BP1 Negotiated Costs	Percent of Total Negotiated Budget	Fringe Benefits and Indirects	
				Proposed Rate	Negotiated Rate
Personnel	Exemption 4				
Fringe Benefits					
Travel					
Equipment					
Supplies					
Contractual					
Construction					
Other					
Total Direct Charges					
Indirect Charges					
TOTAL					
Program Income	0	0	0%		
DOE Share (non-FFRDC)	$2,150,008	$2,150,008	Exemption 4		
DOE Share (FFDRC)	$0	$0			
Total DOE Share	$2.150.008	$2,150,008			
Non-Federal Cost Share	Exemption 4				

SEE ATTACHED SF 424A FOR BUDGET PERIOD BREAKDOWN

3. Is the original budget the same as the negotiated budget: ☒ Yes ☐ No

If No, please check all boxes that apply:

☐ Change in the Project Scope
☐ Changes due to Time Delays
☐ Math Errors in Budget
☐ Changes in Indirect/Fringe Costs Caused Changes in Direct Costs or Total Project Costs
☐ Indirect/Fringe Rates incorrectly applied
☐ Other (explain)_____

4. Briefly describe and explain any substantial change(s) to the original Statement of Project Objectives submitted by the recipient:

Project Officer commentary: The scope of work proposed by Dow Chemical Company within Algenol's project has not changed since the original application. However, based on the budget details, it appears that Dow may have still included site preparation activities in their Budget Period 1 work Clarification is being sought.

SECTION III – TECHNICAL EVALUATION SUMMARY

A. For each cost category, the Project Officer and the Specialist will complete his/her Technical Evaluation of the Negotiated Costs to confirm that they are all reasonable, allowable, and allocable. Additional comments should be added as necessary and as indicated below.

1. Personnel:

Total Negotiated Personnel Costs: $ Exemption 4 Not Applicable, the recipient did not propose personnel costs: ☐

Project Officer: Dow proposed numerous positions by staff name rather than position. They also provided total hours and total compensation. The average rate based on this information calculates to ~$53.77. This a reasonable rate for the type of work Dow staff will be performing. Additional detail is being requested regarding actual positions and compensation rates per position. Based on the budget details presented, it appears that there may be budget allotted to activities that are not included in BP1. While clarification is sought, Dow's budget should remain conditional.

The labor hours proposed in the negotiated budget are reasonable for the scope of work: ☐

The labor mix proposed in the negotiated budget is reasonable: ☐

☒ Specialist concurs: The proposed costs for The Dow Chemical Company have been removed from BP1.

2. Fringe Benefits:

Total Negotiated Fringe Benefit Costs: $ Exemption 4 Not Applicable, the recipient did not propose fringe benefit costs: ☒

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☐ Other_____

The fringe benefit costs in the negotiated budget are reasonable: ☐

3. Travel:

Total Negotiated Travel Costs: $Exemption 4 Not Applicable, the recipient did not propose travel costs: ☒

Project Officer: The number and type of trips proposed in the negotiated budget are reasonable for the scope of work: ☒ The costs per trip proposed in the negotiated budget are reasonable: ☒ Is foreign travel included in the negotiated budget: ☐ Yes ☒ No
☒ Specialist concurs:

4. Equipment:

Total Negotiated Equipment Costs: $Exemption 4 Not Applicable, the recipient did not propose equipment costs: ☒

Project Officer: The type(s) of equipment proposed in the negotiated budget is/are reasonable for the scope of work: ☒ The cost of equipment proposed in the original budget are reasonable: ☒ Is there any proposed equipment with a total cost exceeding $50,000: ☐ Yes ☒ No
☒ Specialist concurs.

5. Supplies:

Total Negotiated Supplies Costs: $Exemption 4 Not Applicable, the recipient did not propose supplies costs: ☒

Project Officer: The types /quantities of supplies proposed in the negotiated budget are reasonable based on the scope of work: ☒ The costs of supplies proposed in the negotiated budget are reasonable: ☒
☒ Specialist concurs.

6. Contractual:

Total Negotiated Contractual Costs: $Exemption 4 Not Applicable, the recipient did not propose contractual costs: ☒

Project Officer: The subrecipients proposed in the negotiated budget are appropriate for the scope of work: ☒ The contractual costs proposed in the negotiated budget are reasonable: ☒ Yes Did the Recipient propose any subrecipients with total costs above $100,000? ☐ Yes ☒ No
☒ Specialist concurs.

7. Construction:

Total Negotiated Construction Costs: $Exemption 4 Not Applicable, the recipient did not propose construction costs: ☒

Project Officer: The type of construction proposed in the original budget is appropriate for the scope of work: ☒ The construction costs proposed in the original budget are reasonable: ☒
☒ Specialist concurs.

8. Other Direct Costs:

Total Negotiated Other Direct Costs: $Exemption 4 Not Applicable, the recipient did not propose other direct costs: ☐

Project Officer:

The other direct costs proposed in the original budget are reasonable for the scope of work: ☐

The costs proposed in the original budget for other direct costs are reasonable for the scope of work: ☐

These proposed costs are for activities no longer included under Budget Period 1. Therefore, these funds should be held conditional under the subcontractor approval clause.

☒ Specialist concurs: The proposed costs for The Dow Chemical Company have been removed from BP1.

9. Indirect Charges:

Total Negotiated Indirect Costs: $Exemption 4 Not Applicable, the recipient did not propose indirect costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☒ Other: The proposed costs for The Dow Chemical Company have been removed from BP1.

The indirect costs proposed in the original budget are reasonable: ☐

10. Cost Share:

Project Officer:

Project is a: ☒ Research ☒ Development ☐ Demonstration ☐ Other: Pilot Project, BP1 (Explain)

The minimum recipient's cost share required for this award is: Exemption 4
The recipient proposed cost share for this award is: Exemption 4 of their Budget Period 1 costs as cash cost share, totaling $Exemption 4

Does the proposed cost share meet the minimum requirement: ☒ Yes ☐ No

Specialist:

Is the proposed cost share: ☒ Cash ☐ In-kind (detail the amount and category below for in-kind cost share, if applicable)

All proposed cost share is proposed as cash contributions: $Exemption 4
from Membrane Technology and Research, Inc.

Third Party cost share commitment letters have been obtained: ☒ (Please include letters in permanent STRIPES file)

Subrecipient: Membrane Technology and Research, Inc.

SECTION II – NEGOTIATION SUMMARY

1. Please record any significant application or budget submissions that resulted in a revised budget in the Negotiation History Table below (including SF424A, budget justifications, e-mails, etc.):

Application/Budget Submission	Reference Document(s)	Date of Submission	Summary of Change
Original		Jun-09	
Revision #1	123.1.; SF424A	1/10/2010	Updated budget to remove some BP2 activities and contigency
Final	123.1: SF424A	3/11/2010	Provided 123.1

2. Complete Budget Table below (only include the original budget and final negotiated costs – the Percent of Total Negotiated Budget will calculate automatically)
Note: List proposed amounts by category even if there are no differences in the dollar amount.

Element of Cost	Original BP1 Budget Submission	Final BP1 Negotiated Costs	Percent of Total Negotiated Budget	Fringe Benefits and Indirects	
				Proposed Rate	Negotiated Rate
Personnel Fringe Benefits Travel Equipment Supplies Contractual Construction Other Total Direct Charges Indirect Charges	Exemption 4				
TOTAL					
Program Income	0	0	0%		
DOE Share (non-FFRDC) DOE Share (FFDRC) Total DOE Share	$148,854 $0 $148,854	$148,854 $0 $148,854	Exemption 4		
Non-Federal Cost Share	Exemption 4				

SEE ATTACHED SF 424A FOR BUDGET PERIOD BREAKDOWN

3. Is the original budget the same as the negotiated budget: ☒ Yes ☐ No

If No, please check all boxes that apply:

- ☐ Change in the Project Scope
- ☐ Changes due to Time Delays
- ☐ Math Errors in Budget
- ☐ Changes in Indirect/Fringe Costs Caused Changes in Direct Costs or Total Project Costs
- ☐ Indirect/Fringe Rates incorrectly applied
- ☐ Other (explain)_____

4. Briefly describe and explain any substantial change(s) to the original Statement of Project Objectives submitted by the recipient:

Project Officer commentary: The scope of work proposed by MTR within Algenol's project has not changed since the original application.

SECTION III – TECHNICAL EVALUATION SUMMARY

A. For each cost category, the Project Officer and the Specialist will complete his/her Technical Evaluation of the Negotiated Costs to confirm that they are all reasonable, allowable, and allocable. Additional comments should be added as necessary and as indicated below.

1. Personnel:

Total Negotiated Personnel Costs: $Exemption 4 Not Applicable, the recipient did not propose personnel costs: ☐

Project Officer:

The labor hours proposed in the negotiated budget are reasonable for the scope of work: ☒

The labor mix proposed in the negotiated budget is reasonable: ☒

Specialist:

Please fill out the following table with the negotiated costs:

Labor Type	Budget Period 1		
	Hours	Rate	Total
PI	Exemption 4		
Co-PI			
Co-PI			
Design Engineer			
Total:			

Negotiated labor rates are reasonable: ☒ (Please attach supporting documentation e.g. www.salary.com, if applicable)
The proposed personnel costs are reasonable and necessary according to www.salary.com and the bureau of labor statistics for the scope of work under budget period 1.

2. Fringe Benefits:

Total Negotiated Fringe Benefit Costs: $ Not Applicable, the recipient did not propose fringe benefit costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The fringe benefit costs in the negotiated budget are reasonable: ☐

3. Travel:

Total Negotiated Travel Costs: $Exemption 4 Not Applicable, the recipient did not propose travel costs: ☐

Project Officer:

The number and type of trips proposed in the negotiated budget are reasonable for the scope of work: ☒ The costs per trip proposed in the negotiated budget are reasonable: ☒ Is foreign travel included in the negotiated budget: ☐ Yes ☐ No
☒ Specialist concurs: The proposed travel costs are reasonable.

4. Equipment:

Total Negotiated Equipment Costs: $Exemption 4 Not Applicable, the recipient did not propose equipment costs: ☒

Project Officer: The type(s) of equipment proposed in the negotiated budget is/are reasonable for the scope of work: ☒ The cost of equipment proposed in the original budget are reasonable: ☒ Is there any proposed equipment with a total cost exceeding $50,000: ☐ Yes ☒ No
☒ Specialist concurs.

5. Supplies:

Total Negotiated Supplies Costs: $Exemption 4 Not Applicable, the recipient did not propose supplies costs: ☒

Project Officer: The types /quantities of supplies proposed in the negotiated budget are reasonable based on the scope of work: ☒ The costs of supplies proposed in the negotiated budget are reasonable: ☒
☒ Specialist concurs.

6. Contractual:

Total Negotiated Contractual Costs: $Exemption 4 Not Applicable, the recipient did not propose contractual costs: ☒

Project Officer: The subrecipients proposed in the negotiated budget are appropriate for the scope of work: ☒ The contractual costs proposed in the negotiated budget are reasonable: ☒ Yes Did the Recipient propose any subrecipients with total costs above $100,000? ☐ Yes ☒ No
☒ Specialist concurs.

7. Construction:

Total Negotiated Construction Costs: $Exemption 4 Not Applicable, the recipient did not propose construction costs: ☒

Project Officer: The type of construction proposed in the original budget is appropriate for the scope of work: ☒ The construction costs proposed in the original budget are reasonable: ☒
☒ Specialist concurs.

8. Other Direct Costs:

Total Negotiated Other Direct Costs: $Exemption 4 Not Applicable, the recipient did not propose other direct costs: ☒

Project Officer:

The other direct costs proposed in the original budget are reasonable for the scope of work: ☒

The costs proposed in the original budget for other direct costs are reasonable for the scope of work: ☒

☒ Specialist concurs.

9. Indirect Charges:

Total Negotiated Indirect Costs: $Exemption 4 Not Applicable, the recipient did not propose indirect costs: ☐

Specialist:

Does the Recipient have an approved rate agreement: ☐ Yes ☒ No

If Yes, List the Date of Rate Agreement:_____ Cite Federal Cognizant Agency _____

If No, select one of the following:
☐ Rate proposal was reviewed by the Cost/Price Analyst and found to be reasonable, allowable, and allocable (attach Cost/Price Analyst Determination)
☐ Rate Proposal was reviewed by the Cost/Price Analyst for a previous award (attach Cost/Price Analyst Determination)
List Date of review_____
☐ Specialist determined that rate was reasonable
☒ Other: **Due to time constraints, the "Reopener Clause" will be placed into the Special Terms and Conditions of the award. These costs will be addressed and approved at a later date.**

The indirect costs proposed in the original budget are reasonable: ☐

10. Cost Share:

Project Officer:

Project is a: ☒ Research ☒ Development ☐ Demonstration ☐ Other: Pilot Project, BP1 (Explain)

The minimum recipient's cost share required for this award is: Exemption 4
The recipient proposed cost share for this award is: Exemption 4 cost share related to their total project costs ($Exemption 4 for subsequent Budget Periods).

Does the proposed cost share meet the minimum requirement: ☒ Yes ☐ No

Specialist:

Is the proposed cost share: ☒ Cash ☐ In-kind (detail the amount and category below for in-kind cost share, if applicable)

All proposed cost share is proposed as cash contributions: $Exemption 4
from Membrane Technology and Research, Inc.

Third Party cost share commitment letters have been obtained: ☒ (Please include letters in permanent STRIPES file)

SECTION IV – RECOMMENDATIONS/APPROVAL

Signatures of the Project Officer and Specialist, indicating their recommendations, as indicated below, will occur after their mutual agreement on the contents of this document, and before the review and approval process for the action. The signatures below indicate that the costs in the negotiated budget are reasonable, allowable, and allocable.

1. Technical Recommendation

The project costs are acceptable and should be considered for a financial assistance award. The resources have been reviewed relative to the Statement of Project Objectives and are found to be reasonable, except as previously noted herein.

Christy Sterner — Signature
3/17/10 — Date

Christy Sterner
Project Officer

2. Specialist Recommendation

In view of the above analysis, the technical evaluation, and considering all known factors, this Award is recommended.

Molly Hames — Signature
03/17/10 — Date

Molly Hames
Grants and Agreements Specialist

3. Contracting Officer Approval *

☒ I concur with the above recommendation and have determined that the Recipient is responsible. I consider this Award to be in the best interest of the Government, and approve the award documents. (Select this box if the preparer is not the contracting officer)

☐ In view of the analysis, the technical evaluation, and considering all known factors, I have determined that the Recipient is responsible. This Award is considered to be in the best interest of the Government and approved. (Select this box if the preparer is also the contracting officer and indicate N/A in Block 2.)

Michael Schledorn — Signature
3/19/2010 — Date

Michael Schledorn
Contracting Officer

Department of Energy
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3305

February 16, 2010

Mr. Michael Schledorn
Branch Chief
U.S. Department of Energy
Golden Field Office
1617 Cole Blvd.
Golden, CO 80401

Via e-mail: michael.schledorn@go.doe.gov

Dear Mike:

SUBJECT: REQUEST FOR A CLASS WAIVER OF PATENT RIGHTS FOR INVENTIONS DEVELOPED BY AWARDEES UNDER FUNDING OPPORTUNITY ANNOUNCEMENT DE-FOA-0000096, RECOVERY ACT: DEMONSTRATION OF INTEGRATED BIOREFINERY OPERATIONS, W(C)2009-018

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privilege

Federal Recycling Program  Printed on Recycled Paper

REDACTED
EXEMPTION 5
- deliberative process
- attorney-client privilege

Sincerely,

Glen R. Drysdale

Glen R. Drysdale
Patent Attorney
U.S. Department of Energy
Golden Field Office

STATEMENT OF CONSIDERATIONS

ADVANCE CLASS WAIVER OF PATENT RIGHTS FOR TECHNOLOGY DEVELOPED UNDER THE OFFICE OF BIOMASS PROGRAM FUNDING OPPORTUNITY ANNOUNCEMENT, "RECOVERY ACT: DEMONSTRATION OF INTEGRATED BIOREFINERY OPERATIONS" DE-FOA-0000096, W(C) 2009-018

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privilege

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privilege

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privilege

REDACTED
EXEMPTION 5

- deliberative process
- attorney - client privilege

/Glen R. Drysdale/
Glen R. Drysdale
Patent Counsel
Golden Field Office

Date: November 27, 2009

REDACTED
EXEMPTION 5

- deliberative process
- attorney - Client privilege

CONCURRENCE:

John Ferrell
Acting Program Manager
Office of the Biomass Program

Date: 11/15/2010

APPROVAL:

Paul A. Gottlieb
Assistant General Counsel for
Technology, Transfer, and
Intellectual Property, GC-62

Date: 1-28-10

(t) U.S. COMPETITIVENESS

REDACTED
EXEMPTION 5

- deliberative process
- attorney - client privilege

PMC 133.3
(12/09)

U.S. DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CENTER

IPLD PRE-AWARD REVIEW REQUEST

TO: IPLD E-Mail: IPLegalReviews@go.doe.gov	Date Submitted:	01/08/2010
Attachments: (1) Financial Assistance Pre-Award Information Sheet (PMC 121.1) (2) Scope of Work or Statement of Project Objectives	Request Reply By:	03/31/2009

FROM: Molly Hames	PHONE: 303-275-4864
Name of Specialist (if different from submitter):	PHONE:

Awardee:	Algenol Biofuels, Inc.
Project Title:	**Recovery Act - Integrated Pilot-Scale Biorefinery for Producing Ethanol from Hybrid Algae**
Award/Mod/Amendment No:	**DE-EE0002867 / 001**
FOA Title: Recovery Act - Demonstration of Integrated Biorefinery Operations	
Topic Area(s): Topic Area 1	
Date of Application (including any modifications): 01/04/2010	
Type of Instrument:	☐ Grant ☒ Cooperative Agreement ☐ Other

Awardee POC:	Craig Smith
Phone:	239-498-2000
E-mail Address:	craig.smith@algenolbiofuels.com
Business Type:	☐ Large, For-Profit ☒ Small, For-Profit ☐ 501(c)(3) Nonprofit ☐ Other Nonprofit ☐ Other:_____

Project Officer:	Christy Sterner	DOE PO Phone:	303-275-4720

Response to B.3 on PMC 121.1 indicates Limited Rights Data or Restricted Computer Software will be used in the Award:	☒ YES	☐ NO	
Will 5-year data protection under EPAct apply for the Topic Areas included in this Award?	☒ YES	☐ NO	☐ This is a CDP

IPLD USE ONLY:

Hames, Molly

From: Moody, Julia
Sent: Thursday, March 11, 2010 1:53 PM
To: Hames, Molly
Cc: Costello, Jacki
Subject: IP clause set for Algenol EE0002867
Attachments: Algenol EE0002867 CDSB_1003.doc

Molly,

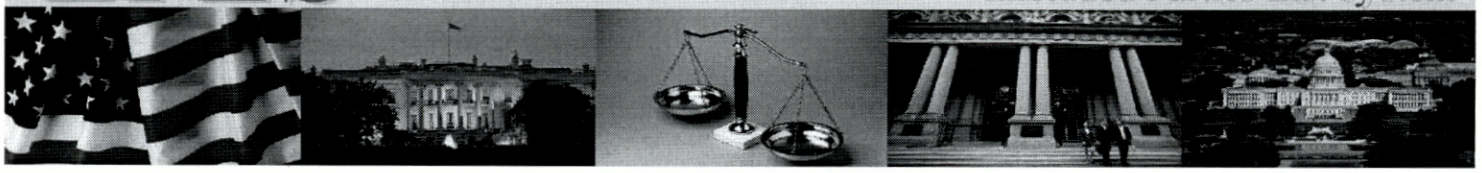
REDACTED
EXEMPTION 5

- deliberative process
- attorney client privilege

Julia Cook Moody
Deputy Chief Counsel
for Intellectual Property
U.S. Department of Energy
Golden Field Office
(303) 275-4867

EPLS

Excluded Parties List System



Search - Current Exclusions

> Advanced Search
> Multiple Names
> Exact Name and SSN/TIN
> MyEPLS
> Recent Updates

View Cause and Treatment Code Descriptions

> Reciprocal Codes
> Procurement Codes
> Nonprocurement Codes

Agency & Acronym Information

> Agency Contacts
> Agency Descriptions
> State/Country Code Descriptions

OFFICIAL GOVERNMENT USE ONLY

> Debar Maintenance
> Administration
> Upload Login

EPLS Search Results

Search Results for Parties Excluded by

Exact Name : Smith, Craig R or Algenol Biofuels, Inc. or The Dow Chemical Company or Georgia Institute of Technology or Membrane Technology and Research Inc.

As of 09-Mar-2010 1:50 PM EST

Save to MyEPLS

Your search returned no results.

It is further recommended that you perform a **Partial Name** search on any word of the name to further confirm the eligibility status of the party. An additional **Partial Name** search might be necessary because an **Exact Name** match will not be found if the spelling or format of the name you are searching for is different than the name of the exclusion in EPLS.

Back New Search Printer-Friendly

Resources

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> Public User's Manual
> FAQ
> Acronyms
> Privacy Act Provisions
> News

Reports

> Advanced Reports
> Recent Updates
> Dashboard

Archive Search - Past Exclusions

> Advanced Archive Search
> Multiple Names
> Recent Updates

Contact Information

> For Help: Federal Service Desk

PMC 112.2
(08/27/2009)

U.S. DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CENTER

REQUEST FOR REVIEW

☐ Normal Review ☒ Expedited Review Date: 03/15/2010

Justification for Expedited Review ARRA March 31st Deadline

Award Number: DE-EE0002867 – Algenol Biofuels FOA Number, if new award: N/A

Item(s) For Review: Lift Budget Period 1 Conditions

Total Project: REDACTED EXEMPTION 4
Federal Funds: $ 24,331,431

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 - deliberative process

Signature:

☐ CONTRACTING OFFICER REVIEW

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

Comments: See attached + purple flags.

Signature: Michael Boudreau Date: 3/19/2010

☐ 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)

IPLD REVIEW FOR FUNDING OPPORTUNITY ANNOUNCEMENTS

Comments: IPLD Review Results e-mails on: [insert date]

Signature: _____

IPLD REVIEW FOR NEW AWARDS & MAJOR MODS

Comments: IPLD Review Results e-mails on: [insert date]

LEGAL REVIEW FOR NEW AWARDS, MAJOR MODS & OTHER ACTIONS

Type of Review:
- ☐ New Award
- ☐ Mod, include short explanation:
- ☐ Novation/Name Change
- ☐ Other Action

Total Project: $
Federal Funds: $

Tailored Provisions Require Review for New Awards:
- ☐ Substantial Involvement Provision for Cooperative Agreements
- ☐ At Risk
- ☐ Conditional Availability of Funds
- ☐ NEPA
- ☐ Subcontractor Approval
- ☐ Specify other:

FOA Number: Title:

☐ Legally Sufficient ☐ Legally Sufficient subject to comments below/attached ☐ Legally Insufficient; Comments below/attached

Comments:

Signature: _____ Date: _____

☐ **FINANCIAL ASSISTANCE DIRECTOR REVIEW** **(Required for award actions greater than $25M)**

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

Comments:

Signature: _____ Date: _____

☐ **HEAD OF CONTRACTING ACTIVITY REVIEW** **(Required for award actions greater than $25M)**

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

Comments:

Signature: _____ Date: _____

REDACTED
EXEMPTION 5

- deliberative process

AWD-008

REDACTED
EXEMPTION 5

- deliberative process

CO Review

By: Michael Schledorn

Date: 03/19/2010

File: Algenol -DE-EE0002867.001

Item:

REDACTED
EXEMPTION 5
- deliberative process

REDACTED
EXEMPTION 5

- deliberative process



Hames, Molly

From: Wise, Melissa
Sent: Monday, March 22, 2010 1:05 PM
To: DL OAFA RE Financial Assistance Div Biomass Program
Subject: Legal Review of IBR Awards: 3/31

Importance: High

Hi Team,

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privilege

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

Hames, Molly

From: Wise, Melissa
Sent: Tuesday, March 23, 2010 8:51 AM
To: DL OAFA RE Financial Assistance Div Biomass Program
Subject: Memo to File: Legal Review and Division Director Review of IBR Awards: 3/31
Attachments: Memo to File - Legal and Director Reviews.pdf

Importance: High

Hi Team,

REDACTED
EXEMPTION 5
- deliberative process
- attorney - client privilege

Thanks,
Melissa

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

-----Original Message-----
From: Wise, Melissa
Sent: Monday, March 22, 2010 1:05 PM
To: DL OAFA RE Financial Assistance Div Biomass Program
Subject: Legal Review of IBR Awards: 3/31
Importance: High

Hi Team,

REDACTED
EXEMPTION 5
- deliberative process
- attorney - client privilege

REDACTED
EXEMPTION 5

- deliberative process

- attorney-client privilege

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

Hames, Molly

From: Wise, Melissa
Sent: Thursday, March 25, 2010 4:04 PM
To: DL OAFA RE Financial Assistance Div Biomass Program
Subject: HCA Approval for IBR Awards
Attachments: HCA Approval.pdf

Importance: High

Hi Team,

Here is the signed Action Memo from our HCA, Scott Hine, that approves our IBR awards. Please include this Memo under AWD-019.

I will forward HQ Business Clearance Approval as soon as I receive it.

Thanks!

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

Hames, Molly

From: Wise, Melissa
Sent: Friday, March 26, 2010 9:49 AM
To: DL OAFA RE Financial Assistance Div Biomass Program
Cc: Barron, Matt; Harris, Jamie; Craig, Kevin
Subject: FW: HQ Business Clearance Review and Approval of Special Terms and Conditions for Biorefinery Award Modifications

Importance: High

Hi Team,

REDACTED
EXEMPTION 5
- deliberative process

Thanks,
Melissa

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

-----Original Message-----
From: Jones, Steven [mailto:Steven.Jones@hq.doe.gov]
Sent: Friday, March 26, 2010 8:56 AM
To: Wise, Melissa
Cc: Leotta, David (Hq)
Subject: RE: HQ Business Clearance Review and Approval of Special Terms and Conditions for Biorefinery Award Modifications

Melissa,

REDACTED
EXEMPTION 5
- deliberative process

Steven C. Jones
Procurement Analyst
MA-621
U.S. Department of Energy
Phone Number: 202-287-1474
FAX Number: 202-287-1445

-----Original Message-----
From: Wise, Melissa [mailto:melissa.wise@go.doe.gov]
Sent: Tuesday, March 23, 2010 3:12 PM
To: Jones, Steven
Cc: Schledorn, Michael; Leotta, David; Barron, Matt; Harris, Jamie; Crawford, Lalida
Subject: RE: HQ Business Clearance Review and Approval of Special Terms and Conditions for Biorefinery Award Modifications
Importance: High

Steve,

REDACTED
EXEMPTION 5

- deliberative process

Kind regards,
Melissa

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

-----Original Message-----
From: Jones, Steven [mailto:Steven.Jones@hq.doe.gov]
Sent: Monday, March 15, 2010 8:53 AM
To: Wise, Melissa
Cc: Schledorn, Michael; Leotta, David (Hq)

Subject: FW: HQ Business Clearance Review and Approval of Special Terms and Conditions for Biorefinery Award Modifications

Melissa,

REDACTED
EXEMPTION 5

- deliberative process

Steven C. Jones
Procurement Analyst
MA-621
U.S. Department of Energy
Phone Number: 202-287-1474
FAX Number: 202-287-1445

-----Original Message-----
From: Wise, Melissa [mailto:melissa.wise@go.doe.gov]
Sent: Monday, March 15, 2010 10:33 AM
To: Jones, Steven
Cc: Schledorn, Michael
Subject: HQ Business Clearance Review and Approval of Special Terms and Conditions for Biorefinery Award Modifications

Hi Steve,

REDACTED
EXEMPTION 5

- deliberative process

Melissa

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

Risk Categories

Recipient Name	CID	Recipients and Subs (rate agreement? Prior gov't experience?)	% of Sub-awards (> or < than 50% of total project)	Prior and related experience (prior GO experience w/ prime and subs), has prime conducted similar work?)	Project Scope and Definition (is scope well defined? Size, budget, technical risk	Overal risk rating	PO Comments
Bluefire LLC	EE0003022	H	80 to H	M	H	H	
National Advanced Biofuels Consortium (NABC) Led by the National Renewable Energy Laboratory and Pacific Northwest National Laboratory	EE0002044	L	H	L	M	M	Consortium leads are national laboratories with exetensive experience with gov't regulations and subcontracting. Consortium is large complex project however.
National Alliance for Advanced Biofuels and Bioproducts (NAABB) Led by the Donald Danforth Plant Science Center	EE0003046	M	H	M	M	M	Many subs have rate agreements and experience with gov't regulations. Complex project with numerous subcontractors. Prime is new to gov't awards. May request detailed budget for selected subs based on individuel risk.
Algenol Biofuels inc.	EE0002867	H	H	H	M	H	
American Process, inc.	EE0002868	H	H	H	H	H	
Elevance Renewable Sciences	EE0002872	H	L	H	H	H	Project de-scoped in selection statement
HALDOR TOPSOE, INC.	EE0002874	H	H	H	M	H	
ICM, Inc.	EE0002875	H	M	H	H	H	Low % of subs but complex relationships.
Renewable Energy Institute International	EE0002876	H	H	H	M	H	
Solazyme, Inc.	EE0002877	H	M	H	H	H	
BioEnergy Interational LLC	EE0002878	H	H 55%	H	H	H	
UOP LLC	EE0002879	H	M	H	H	H	
ZeaChem Inc.	EE0002880	H	H	H	H	H	
Logos Technologies, Inc.	EE0002881	H	H	H	H	H	
Enerkem Corporation	EE0002882	H	H	H	H	H	
INEOS New Planet BioEnergy,LLC	EE0002883	H	H	H	H	H	
Sapphire Energy, Inc	EE0002884	H	H	H	H	H	

The Project Officers listed below have considered and consistently applied the risk factors and concur with the final rating.

Renee Binstock

Roxanne Dempsey

Glenn Doyle

Fred Gerdeman

Liz Moore

Gene Petersen

From: Sterner, Christy
Sent: Monday, July 26, 2010 7:06 PM
To: Hames, Molly
Subject: FW: Changing Katie McFadden to Business Officer

Importance: High

Hi Molly,

Per Craig's request below, please update the Business Contact for Algenol's award to Katie McFadden, Algenol's CFO.

Thanks and 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: Craig Smith [mailto:craig.smith@algenolbiofuels.com]
Sent: Monday, July 26, 2010 6:58 PM
To: Sterner, Christy
Subject: Re: Changing Katie McFadden to Business Officer
Importance: High

Dear Christy:

Please change the name of the Business contact for Algenol's DOE grant from Craig R. Smith, M.D. to Katie McFadden, Algenol's CFO. Thank you.

Craig R. Smith, M.D.
Chief Operating Officer
Algenol Biofuels Inc.

239-498-2000
craig.smith@algenolbiofuels.com

On Jul 26, 2010, at 4:34 PM, Sterner, Christy wrote:

> Hi Craig,
>
> I'm sorry for the confusion, but we need an email from you requesting
> changing the Business contact from you to Katie. Can you send me a
> quick email requesting that change?
>
> Thanks for your help!
>
> Best regards,
>
> Christy Sterner
> Project Officer

> U.S. Department of Energy
> Golden Field Office
> Phone: 303-275-4720
> Fax: 303-275-4753
> email: christy.sterner@go.doe.gov
>
> Go to http://www.eere.energy.gov/golden/funding.aspx for important
> news regarding Grants.gov.
>
>

Re Revised BP 1 SOPO

From: Craig Smith [craig.smith@algenolbiofuels.com]
Sent: Monday, March 22, 2010 4:01 PM
To: Sterner, Christy
Cc: Katie McFadden; Pat Ahlm; Dax Denman
Subject: Re: Revised BP 1 SOPO

Importance: High

Dear Christy:

The changes to the SOPO are fine with us.

Craig R. Smith, M.D.
Chief Operating Officer
Algenol Biofuels Inc.

239-498-2000
craig.smith@algenolbiofuels.com

On Mar 22, 2010, at 3:27 PM, Sterner, Christy wrote:

> Hi Craig,
>
> As I mentioned on the call, a brief clause was added into the WBS
> description for A.11. Please review the highlighted text and if you
> are okay with it, please send me an email concurring with the change.
>
> Thanks!
>
> Best regards,
>
> Christy Sterner
> Project Officer
> U.S. Department of Energy
> Golden Field Office
> Phone: 303-275-4720
> Fax: 303-275-4753
> email: christy.sterner@go.doe.gov
>
> Go to http://www.eere.energy.gov/golden/funding.aspx for important
> news regarding Grants.gov.
> <Algenol SOPO 31510.doc>

PMC123.1 - Budget Justification for SF 424A Budget

Instructions and Summary

Award Number: DE-FOA-0000096
Award Recipient: Algenol Biofuels Inc.

Date of Submission: Mar-10
Form submitted by: Algenol Biofuels Inc.
(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	Exemption 4					
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						

Additional Explanations/Comments (as necessary)