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:

REDACTED
EXEMPTION 4

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.

REDACTED
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

PMC 111.1
(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.

PMC 111.1
(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 are needed or will be acquired 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	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)	$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: ☐