(d) Release, Publication and Use of Data

(1) The Recipient shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Recipient in the performance of this contract, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided in this paragraph of this clause or expressly set forth in this contract.

(2) The Recipient agrees that to the extent it receives or is given access to data necessary for the performance of this agreement which contain restrictive markings, the Recipient shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the Contracting Officer.

(e) Unauthorized Marking of Data

(1) Notwithstanding any other provisions of this agreement concerning inspection or acceptance, if any data delivered under this agreement bears any restrictive or limiting markings or notices not authorized by this agreement, the Contracting Officer may at any time either return the data to the Recipient or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer shall make written inquiry to the Recipient affording the Recipient 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Recipient fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Recipient provides written justification to substantiate the propriety of the markings within the period set in subdivision (e)(1)(i) of this clause, the Contracting Officer shall consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Recipient shall be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer shall furnish the Recipient a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Recipient files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government shall continue to abide by the markings under this subdivision (e)(1)(iii) until final resolution of the matter either by the Contracting Officer's determination become final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in subparagraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

(f) Omitted or Incorrect Markings

(1) Data delivered to the Government, without any restrictive or limiting markings or notices authorized by this agreement, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Recipient may request, within 6 months (or a longer time approved by the Contracting Officer for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Recipient's expense, and the Contracting Officer may agree to do so if the Recipient--

(i) Identifies the data to which the omitted notice is to be applied;

(ii) Demonstrates that the omission of the notice was inadvertent;

(iii) Establishes that the use of the proposed notice is authorized; and

(iv) Acknowledges that the Government has no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.

(2) The Contracting Officer may also:

(i) Permit correction at the Recipient's expense of incorrect notices if the Recipient identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized; or

(ii) Correct any incorrect notices.

(g) Rights to Protected Data:

(1) The Recipient may, with the concurrence of DOE, claim and mark as protected data, any data first produced in the performance of this award that would have been treated as a trade secret if developed at private expense. Any such claimed "Protected Data" will be clearly marked with the following Protected Rights Notice, and will be treated in accordance with such Notice, subject to the provisions of paragraphs (e) and (f) of this clause.

PROTECTED RIGHTS NOTICE
These protected data were produced under Agreement No. DE-EE0002867 with the U.S. Department of Energy and may not be published, disseminated, or disclosed to others outside the Government until, unless express written authorization is obtained from the recipient. Upon expiration of the period of protection set forth in this Notice, the Government shall have unlimited rights in this data. This Notice shall be marked on any reproduction of this data, in whole or in part.
(End of notice).

(2) Any such marked Protected Data may be disclosed under obligations of confidentiality for the following purposes:
(a) For internal DOE evaluation and planning purposes under the restriction that the Protected Data be retained in confidence and not be further disclosed; or
(b) To DOE staff members or authorized DOE contractors or subcontractors performing work under the Government's program under the restriction that the Protected Data be retained in confidence and not be further disclosed.

(3) The obligations of confidentiality and restrictions on publication and dissemination shall end for any Protected Data:
(a) At the end of the protected period;
(b) If the data become publicly known or available from other sources without a breach of the obligation of confidentiality with respect to the Protected Data;
(c) If the same data are independently developed by someone who did not have access to the Protected Data and such data are made available without obligations of confidentiality; or
(d) If the Recipient disseminates or authorizes another to disseminate such data without obligations of confidentiality.

(4) However, the Recipient agrees that the following types of data are not considered to be protected and shall be provided to the Government when required by this award without any claim that the data are Protected Data: General test results and data that demonstrate progress toward meeting DOE's technical goals to design, construct, build, and operate a demonstration- or pilot-scale integrated biorefinery employing lignocellulosic or algal feedstocks, and in certain special cases starch feedstocks, for the production of (i) liquid transportation fuels, (ii) biobased chemicals, products or co-products, or (iii) substitutes for petroleum-based feedstocks and products. These results and data will be made available to the public and included in the final project report, and in other reports and presentations, as appropriate. The parties agree that notwithstanding the data enumerated above, nothing precludes the Government from seeking delivery of additional data in accordance with this award, or from making publicly available additional nonprotected data, nor does the preceding enumerated data constitute any admission by the Government that technical data not so enumerated are Protected Data. The general data described above shall not include the following types of data, which Recipient intends, without limitation, to claim and mark as Protected Data:

a) Process Flow Diagrams
b) Mass & Energy Balances
c) Process Performance Parameters and Costs by Unit Operation, including the quality of the data used for those performance parameters, (e.g., scale, replication, degree of integration, range of values, etc.)
d) Capital Cost Estimate and Basis thereof: e.g. factored, vendor quotes, actual purchase prices, etc.
e) Pro Forma with best reproducible results to date with all assumptions listed and the basis/rationale behind all pro forma input parameters explained, including but not necessarily limited to:
    i. Production cost parameters: e.g. consumables, utilities, labor, etc.
    ii. Water consumption requirements and costs
    iii. Waste disposal requirements and costs
f) Any additional financial and technical project information necessary and sufficient to validate the current and actual conversion costs associated with the facility or system as constructed and projected to be operated for converting lignocellulosic or algal feedstocks, and in certain special cases starch feedstocks, into (i) liquid transportation fuels, or (ii) biobased chemicals, products or co-products, or (iii) substitutes for petroleum-based feedstocks and products.

g) Technical results based on data collected, to enable the analysis, assessment and evaluation of other areas of interest, including but not necessarily limited to life cycle assessments, green house gas emissions, and sustainability metrics.

(5) The Government's sole obligation with respect to any protected data shall be as set forth in this paragraph (g).

(h) Protection of Limited Rights Data

(1)When data other than that listed in subparagraphs (b)(1)(i), (ii), and (iii) of this clause are specified to be delivered under this agreement and such data qualify as either limited rights data or restricted computer software, the Recipient, if the Recipient desires to continue protection of such data, shall withhold such data and not furnish them to the Government under this agreement. As a condition to this withholding the Recipient shall identify the data being withheld and furnish form, fit, and function data in lieu thereof.

(2) Notwithstanding subparagraph (h)(1) of this clause, the agreement may identify and specify the delivery of limited rights data, or the Contracting Officer may require by written request the delivery of limited rights data that has been withheld or would otherwise be withholdable. If delivery of such data is so required, the Recipient may affix the following "Limited Rights Notice" to the data and the Government will thereafter treat the data, in accordance with such Notice:

LIMITED RIGHTS NOTICE
(a) These data are submitted with limited rights under Government Agreement No. DE-EE0002867. These data may be reproduced and used by the Government with the express limitation that they will not, without written permission of the Recipient, be used for purposes of manufacture nor disclosed outside the Government; except that the Government may disclose these data outside the Government for the following purposes, if any, provided that the Government makes such disclosure subject to prohibition against further use and disclosure:

(1) Use (except for manufacture) by Federal support services contractors within the scope of their contracts;
(2) These "limited rights data" may be disclosed for evaluation purposes under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;
(3) These "limited rights data" may be disclosed to other contractors participating in the Government's program, of which this Recipient is a part, for information or use (except for manufacture) in connection with the work performed under their awards, and under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;
(4) These "limited rights data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "limited rights data" be retained in confidence and not be further disclosed; and
(5) Release to a foreign government, or instrumentality thereof, as the interests of the United States Government may require, for information or evaluation, or for emergency repair or overhaul work by such government.

(b) This Notice shall be marked on any reproduction of these data, in whole or in part.

(End of notice)

(i) Subaward/Contract

The Recipient has the responsibility to obtain from its subrecipients/contractors all data and rights therein necessary to fulfill the Recipient's obligations to the Government under this agreement. If a subrecipient/contractor refuses to accept terms affording the Government such rights, the Recipient shall promptly bring such refusal to the attention of the Contracting Officer and not proceed with subaward/contract award without further authorization.

(j) Additional Data Requirements

In addition to the data specified elsewhere in this agreement to be delivered, the Contracting Officer may, at anytime during agreement performance or within a period of 3 years after acceptance of all items to be delivered under this agreement, order any data first produced or specifically used in the performance of this agreement. This clause is applicable to all data ordered under this subparagraph. Nothing contained in this subparagraph shall require the Recipient to deliver any data the withholding of which is authorized by this clause or data which are specifically identified in this agreement as not subject to this clause. When data are to be delivered under this subparagraph, the Recipient will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.

(k) The Recipient agrees, except as may be otherwise specified in this agreement for specific data items listed as not subject to this paragraph, that the Contracting Officer or an authorized representative may, up to 3 years after acceptance of all items to be delivered under this contract, inspect at the Recipient's facility any data withheld pursuant to paragraph (h) of this clause, for purposes of verifying the Recipient's assertion pertaining to the limited rights or restricted rights status of the data or for evaluating work performance. Where the Recipient whose data are to be inspected demonstrates to the Contracting Officer that there would be a possible conflict of interest if the inspection were made by a particular representative, the Contracting Officer shall designate an alternate inspector.

(End of clause)

04. FAR 52.227-23 Rights to Proposal Data (Technical) (JUN 1987)

Except for data contained on pages 6-10 of the Project Narrative, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data--General" clause contained in this contract) in and to the technical data contained in the proposal upon which this contract is based.

05. 10 CFR 600.325 Appendix A, Patent Rights (Small Business Firms and Nonprofit Organizations) (OCT 2003)

(a) Definitions

Invention means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).

Made when used in relation to any invention means the conception or first actual reduction to practice of such invention.

Nonprofit organization means 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 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a State nonprofit organization statute.

Practical application means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.

Small business firm means a small business concern as defined at section 2 of Public Law 85-536 (16 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3 through 121.8 and 13 CFR 121.3 through 121.12, respectively, will be used.

Subject invention means any invention of the Recipient conceived or first actually reduced to practice in the performance of work under this award, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d) must also occur during the period of award performance.

(b) Allocation of Principal Rights

The Recipient may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this Patent Rights clause and 35 U.S.C. 203. With respect to any subject invention in which the Recipient retains title, the Federal Government shall have a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the U.S. the subject invention throughout the world.

(c) Invention Disclosure, Election of Title and Filing of Patent Applications by Recipient

(1) The Recipient will disclose each subject invention to DOE within two months after the inventor discloses it in writing to Recipient personnel responsible for the administration of patent matters. The disclosure to DOE shall be in the form of a written report and shall identify the award under which the invention was made and the inventor(s). It shall be

sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOE, the Recipient will promptly notify DOE of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Recipient.

(2) The Recipient will elect in writing whether or not to retain title to any such invention by notifying DOE within two years of disclosure to DOE. However, in any case where publication, on sale, or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the U.S., the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Recipient will file its initial patent application on an invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the U.S. after a publication, on sale, or public use. The Recipient will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application, or six months from the date when permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications when such filing has been prohibited by a Secrecy Order.

(4) Requests for extension of the time for disclosure to DOE, election, and filing under subparagraphs (c)(1), (2), and (3) of this clause may, at the discretion of DOE, be granted.

(d) Conditions When the Government May Obtain Title

The Recipient will convey to DOE, upon written request, title to any subject invention:

(1) If the Recipient fails to disclose or elect the subject invention within the times specified in paragraph (c) of this patent rights clause, or elects not to retain title; provided that DOE may only request title within 60 days after learning of the failure of the Recipient to disclose or elect within the specified times;

(2) In those countries in which the Recipient fails to file patent applications within the times specified in paragraph (c) of this Patent Rights clause; provided, however, that if the Recipient has filed a patent application in a country after the times specified in paragraph (c) of this Patent Rights clause, but prior to its receipt of the written request of DOE, the Recipient shall continue to retain title in that country; or

(3) In any country in which the Recipient decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

(e) Minimum Rights to Recipient and Protection of the Recipient Right to File

(1) The Recipient will retain a non-exclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Recipient fails to disclose the subject invention within the times specified in paragraph (c) of this Patent Rights clause. The Recipient's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Recipient is a party and includes the right to grant sublicenses of the same scope of the extent the Recipient was legally obligated to do so at the time the award was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the Recipient's business to which the invention pertains.

(2) The Recipient's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR part 404 and the agency's licensing regulation, if any. This license will not be revoked in that field of use or the geographical areas in which the Recipient has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at discretion of the funding Federal agency to the extent the Recipient, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

(3) Before revocation or modification of the license, the funding Federal agency will furnish the Recipient a written notice of its intention to revoke or modify the license, and the Recipient will be allowed thirty days (or such other time as may be authorized by DOE for good cause shown by the Recipient) after the notice to show cause why the license should not be revoked or modified. The Recipient has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and the agency's licensing regulations, if any, concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

(f) Recipient Action to Protect Government's Interest

(1) The Recipient agrees to execute or to have executed and promptly deliver to DOE all instruments necessary to:

(i) Establish or confirm the rights the Government has throughout the world in those subject inventions for which the Recipient retains title; and

(ii) Convey title to DOE when requested under paragraph (d) of this Patent Rights clause, and to enable the government to obtain patent protection throughout the world in that subject invention.

(2) The Recipient agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Recipient each subject invention made under this award in order that the Recipient can comply with the disclosure provisions of paragraph (c) of this Patent Rights clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information requested by paragraph (c)(1) of this Patent Rights clause. The Recipient shall instruct such employees through the employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) The Recipient will notify DOE of any decision not to continue prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.

(4) The Recipient agrees to include, within the specification of any U.S. patent application and any patent issuing thereon covering a subject invention, the following statement: ``This invention was made with Government support under (identify the award) awarded by (identify DOE). The Government has certain rights in this invention."

(g) Subaward/Contract

(1) The Recipient will include this Patent Rights clause, suitably modified to identify the parties, in all subawards/contracts, regardless of tier, for experimental, developmental or research work to be performed by a small business firm or nonprofit organization. The subrecipient/contractor will retain all rights provided for the Recipient in this Patent Rights clause, and the Recipient will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractors' subject inventions.

(2) The Recipient will include in all other subawards/contracts, regardless of tier, for experimental, developmental or research work, the patent rights clause required by 10 CFR 600.325(c).

(3) In the case of subawards/contracts at any tier, DOE, the Recipient, and the subrecipient/contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subrecipient/contractor and DOE with respect to those matters covered by the clause.

(h) Reporting on Utilization of Subject Inventions

The Recipient agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Recipient or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Recipient and such other data and information as DOE may reasonably specify. The Recipient also agrees to provide additional reports in connection with any march-in proceeding undertaken by DOE in accordance with paragraph (j) of this Patent Rights clause. As required by 35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without the permission of the Recipient.

(i) Preference for United States Industry.

Notwithstanding any other provision of this Patent Rights clause, the Recipient agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the U.S. unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the U.S. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Recipient or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the U.S. or that under the circumstances domestic manufacture is not commercially feasible.

(j) March-in-Rights

The Recipient agrees that with respect to any subject invention in which it has acquired title, DOE has the right in accordance with procedures at 37 CFR 401.6 and any supplemental regulations of the Agency to require the Recipient, an assignee or exclusive licensee of a subject invention to grant a non-exclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances and if the Recipient, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that:

(1) Such action is necessary because the Recipient or assignee has not taken or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

(2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Recipient, assignee, or their licensees;

(3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Recipient, assignee, or licensee; or

(4) Such action is necessary because the agreement required by paragraph (i) of this Patent Rights clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the U.S. is in breach of such agreement.

(k) Special Provisions for Awards with Nonprofit Organizations

If the Recipient is a nonprofit organization, it agrees that:

(1) Rights to a subject invention in the U.S. may not be assigned without the approval of DOE, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the Recipient;

(2) The Recipient will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when DOE deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

(3) The balance of any royalties or income earned by the Recipient with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific or engineering research or education; and

(4) It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms and that it will give preference to a small business firm if the Recipient determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided that the Recipient is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Recipient. However, the Recipient agrees that the Secretary of Commerce may review the Recipient's licensing program and decisions regarding small business applicants, and the Recipient will negotiate changes to its licensing policies, procedures or practices with the Secretary when the Secretary's review discloses that the Recipient could take reasonable steps to implement more effectively the requirements of this paragraph (k)(4).

(l) Communications

All communications required by this Patent Rights clause should be sent to the DOE Patent Counsel address listed in the Award Document.

(m) Electronic Filing

Unless otherwise Specified in the award, the information identified in paragraphs (f)(2) and (f)(3) may be electronically filed.

[End of clause]

STATEMENT OF PROJECT OBJECTIVES

Algenol Biofuels Inc.

Recovery Act: Integrated Pilot-Scale Biorefinery for Producing Ethanol from Hybrid Algae

A. PROJECT OBJECTIVES

1. Demonstrate the commercial potential of DIRECT TO ETHANOL™ technology by building a pilot-scale DIRECT TO ETHANOL™ integrated biorefinery.

2. Operate a pilot-scale DIRECT TO ETHANOL™ integrated biorefinery that uses approximately 2 tonnes per day of carbon dioxide from industrial emissions as the feedstock for making ethanol.

3. Implement an integrated biorefinery project that will immediately create or save more than 300 well-paying high-tech jobs in Texas, Maryland, and Florida.

4. Assess the economic and environmental impact of a new breakthrough energy technology that could eventually create billions of dollars of economic value and thousands of new well-paying jobs while consuming large quantities of carbon dioxide from industrial emissions, displacing petroleum, and moving the U.S. toward energy independence.

5. Assemble a consortium of private industry, federal laboratories, and academic institutions that will contribute to the development, construction, operation and optimization of Algenol's pilot-scale integrated biorefinery and can contribute to future improvements in DIRECT TO ETHANOL™ technology.

B. PROJECT SCOPE

The DOE Office of Energy Efficiency and Renewable Energy (EERE) has established performance goals. Among these goals are to: 1) dramatically reduce, or even end, dependence on imported oil; and 2) spur the creation of the domestic bio-industry. To that end, the Office of the Biomass Program is offering to fund integrated biorefinery projects under this FOA entitled "Demonstration of Integrated Biorefinery Operations." The FOA lists three main criteria for selection: 1) technical merit and rationale; 2) credible economics and competitive advantages that justify an award; and 3) knowledge and experience in project management.

Algenol and its collaborators have collectively prepared a project that is responsive to the selection criteria as detailed below.

Algenol's DIRECT TO ETHANOL™ technology is based on over-expressing in blue-green algae the genes for fermentation pathway enzymes found widely in nature. The resulting metabolically enhanced hybrid algae actively carry out photosynthesis and utilize carbon dioxide to make ethanol inside each algal cell. The ethanol diffuses through the cell wall into the culture medium and then evaporates, along with water, into the headspace of an enclosed, sealed bioreactor. The ethanol-water vapor is then condensed, collected as a liquid, and distilled into fuel grade ethanol. Algenol currently has hybrid algae that produce ethanol at a rate greater than 0.6 moles/m2 per week. The productivity of these algae is currently being evaluated in 20-liter laboratory bioreactors and in 100-liter outdoor bioreactors under "field" conditions. The proposed pilot-scale bio-refinery will consist of approximately 17 acres of plastic fully enclosed 4500-liter specialized bioreactors and supporting areas for testing, distillation, and storage. The project will be divided into three Phases. In Phase I (Budget Period 1) Algenol will complete optimization of the hybrid algae and bioreactors and obtain the necessary regulatory approvals and permitting for construction. In Phase II (Budget Period 2) Algenol will construct the pilot-scale bio-refinery, establish minimum performance characteristics and test second-generation ethanol/water separation equipment. In Phase III (Budget Period 2), Algenol will demonstrate commercially viable operations, optimize operating conditions, improve efficiency, and reduce costs.

C. TASKS TO BE PERFORMED

Phase I: Development, Planning and Preparation of Integrated Biorefinery
The primary deliverable for this Work Breakdown Structure (WBS) element is to complete the planning and preparation of all aspects of the proposed Integrated Ethanol Biorefinery.

WBS Element A.1 Appoint Algenol/Dow Chemical Joint Project Team
Algenol and Dow will each assign employees to the Program Management Team (PMT). The PMT will be responsible for all final decisions related to the proposed Biorefinery project.

WBS Element A.2 Organism Development
This research and development component will involve the optimization of Algenol Biofuels 1st generation ethanogenic hybrid algae, as well as continued research on developing second-generation strains with improved ethanol production capabilities.

WBS Element A.3 Flexible Film Photobioreactor Development
Over the past three years, Algenol has conducted research and development on photobioreactor systems. The data generated during Phase I will be used to identify preliminary design specifications of the photobioreactor systems that will be used in the proposed pilot-scale biorefinery. The commercial scale photobioreactor research and development will be focused on the materials of construction and manufacturing of the photobioreactor, the materials, methods of construction and the mixing system for the photobioreactors.

WBS Element A.4 Process Engineering
Over the past three years, Algenol has conducted research and development on process engineering. The research and development to date has resulted in the design and construction of a commercial scale photobioreactor system and a process for operating these systems. Process engineering is broken down into two phases, Upstream Processes and Downstream Processes. Phase I will be used to define preliminary specifications for the various systems and develop Standard Operating Procedures (SOPs).

WBS Element A.5 Architect Search and Site Selection, Construction Planning, Employee Recruiting and SOP Development
The primary purpose of this element is to interview and hire architectural firms, and continue to evaluate the site location, all designs, preliminary blueprints, systems specifications and deliver all of this information to an architectural firm for the preparation of construction blueprints. In parallel, Algenol will identify and interview various general contractors for construction of the pilot plant and issue Request for Proposals to the top three candidate firms. Algenol will also start the recruiting process for the Plant Manager and other critical personnel to operate the Pilot Plant.

WBS Element A.6 NEPA Review and Determination
As with any federally funded project, a satisfactory NEPA determination will be required in order to proceed to Phase II of the project. Based on the favorable responses Algenol has received from APHIS and the EPA, as well as Algenol's assessment, Algenol remains optimistic that under DOE's own NEPA implementation regulations, Algenol's activities could be categorically excluded from additional NEPA environmental review. However, should the DOE determine that an environmental assessment of Phase II activities be required, Algenol is prepared to meet those requirements. The ultimate deliverable in this element will be finding of a categorical exclusion, or subsequent to an environmental assessment, a finding of no significant impact allowing the project to proceed as scheduled to Phase II.

WBS Element A.7 Regulatory Submissions and Approval
The primary purpose of this element is to prepare all regulatory submissions and approvals from all applicable regulatory agencies for the Biorefinery.

WBS Element A.8 Life Cycle Analysis (Phase I Update)
The purpose of this element is to update the life-cycle analysis of the projected Algenol commercial process in light of on-going research and development and evaluation of the carbon dioxide emission reduction in comparison to gasoline.

WBS Element A.9 Program Management of DOE Phase I Activities
The purpose of this element is to capture the activities of certain employees, the Principle Investigator, project management professionals and others, who are involved with overall management of the project as well as specific tasks. The goal of activities associated with this element is to provide effective and efficient communication, administration, and general support to advance the project successfully.

WBS Element A.10 Phase I Gate Review
The Phase I gate criteria will be finalized as part of the startup of the project. Phase I Gate Criteria will be proposed by the PMT at the initiation of the project, approved by the Internal Gatekeeper Team (IGT), and communicated to DOE. At the end of Phase I, the IGT will review the project reports prepared by the PMT. After review, the IGT will submit, with appropriate documentation, a recommendation to the DOE regarding the pass or fail or extension of the Phase.

WBS Element A.11 Pre-award Look-back
The purpose of this element is to capture pre-award costs for budget period 1 that were incurred within the ninety (90) calendar day period immediately preceding the effective date of the award, but not prior to the signing of the selection statement; these costs are allowable in accordance with the applicable Federal cost principles and direction from the DOE.

Phase II: Build Pilot-Scale Integrated Biorefinery
After entering Phase II, Algenol and Dow will sign a construction contract with a general contractor and build the Pilot Plant according to the final construction blueprints prepared by the architect and approved by the local regulatory authorities. Key Pilot Plant personnel will be hired from the pool of applicants identified in Phase I. During the construction of the Pilot Plant, these personnel will be trained to run the facility at Algenol's PDU in Florida. In addition, Pilot Plant and PDU personnel will transfer and write Standard Operating Procedures (SOPs) for the Pilot Plant based on the SOPs developed and used at the PDU. Upon completion of the construction of the Pilot Plant, systems checks and shake down runs will be performed.

Phase III: Ethanol Biorefinery Project – Optimize Pilot Plant Operations, Prepare and Submit Technical and Financial Reports to the DOE, Wind Down Operations and Decommission the Biorefinery
After entering Phase III, Algenol will continue with the operations of the facility and focus on the reduction of operating, feedstock, energy and capital cost. Part of the cost reduction effort will be to evaluate the cost and operation of the ethanol purification unit. During this time, technical and financial reports will be prepared and submitted to the DOE. Upon completion of negotiated plant operation duration, the operations of the Biorefinery will be wound down and decommissioned.

DOE F 4600.2
(02/09)
All Other Editions Are Obsolete

U.S. Department of Energy
FEDERAL ASSISTANCE REPORTING CHECKLIST AND INSTRUCTIONS

1. Identification Number: DE -EE0002867.001	2. Program/Project Title: Recovery Act - Integrated Pilot-Scale Biorefinery for Producing Ethanol from Hybrid Algae
3. Recipient: Algenol Biofuels, Inc.	

4. Reporting Requirements:		Frequency	No. of Copies	Address
A. MANAGEMENT REPORTING				
☑ Progress Report		A		https://www.eere-pmc.energy.gov/SubmitReports.aspx
☑ Special Status Report (see special instructions)		A		
B. SCIENTIFIC/TECHNICAL REPORTING (Reports/Products must be submitted with appropriate DOE F 241. The forms are available at www.osti.gov/elink)				
Report/Product	Form			
☑ Final Scientific Report	DOE F 241.3	F		http://www.osti.gov/elink-2413
☑ Conference papers/proceedings*	DOE F 241.3	A		http://www.osti.gov/elink-2413
☑ Software/Manual	DOE F 241.4	A		http://www.osti.gov/estsc/241-4pre.jsp
☐ Other (see special instructions)	DOE F 241.3			
** Scientific and technical conferences only*				
C.FINANCIAL REPORTING				
☑ SF-425, Federal Financial Report		FQ		https://www.eere-pmc.energy.gov/SubmitReports.aspx
D. CLOSEOUT REPORTING				
☑ Patent Certification		F		https://www.eere-pmc.energy.gov/SubmitReports.aspx
☑ Property Certification		F		
☐ Other (see Special Instructions)				
E. OTHER REPORTING				
☑ Annual Indirect Cost Proposal		F Y		
☑ Annual Inventory of Federally Owned Property, If Any		F Y		
☑ Other (see special instructions)		A F Q		

FREQUENCY CODES AND DUE DATES:

A - Within 5 calendar days after events or as specified.

F - Final; 90 calendar days after expiration or termination of the award.

Y - Yearly; 90 days after the end of the reporting period.

S - Semiannually; within 30 days after end of the reporting period.

Q - Quarterly; within 30 days after end of the reporting period.

5. Special Instructions: The forms identified in the checklist are available at http://management.energy.gov/business_doe/business_forms.htm.

MANAGEMENT REPORTING

Special Instructions for the Progress Report: 1) The monthly progress report and financial spreadsheet templates will be forwarded to the Recipient after award. These reports are due within 30 days following the end of each month the project is active.

OTHER REPORTING

Special Instructions: 1) A Project Management Plan (PMP) is due to the Project Officer 30 days after award and should be revised on a yearly basis. An electronic template will be provided to the Recipient to complete or update as needed. 2) An Annual Technical and Financial Report must be developed and submitted to the DOE Project Officer after award and must be updated annually throughout the duration of the award. Subject to the availability of project funding, the Report will also be due annually for three (3) years after the facility is substantially completed. The schedule for submission will be established by the DOE Project Officer after award. The format of the report with instructions for completion, the electronic template for reporting data, and the schedule will be forwarded to the Recipient after award. 3) Comprehensive Annual Project Review - The Recipient will be required to present the Annual Technical and Financial Report at a Comprehensive Annual Project Review Meeting. The schedule for the Comprehensive Annual Project Review will be established by the DOE Project Officer after award. AMERICAN RECOVERY AND REINVESTMENT ACT REPORTING: See the Special Terms and Conditions for Recovery Act reporting requirements, along with the following website: http:/www.federalreporting.gov. The required reports are due no later than ten calendar days after each calendar quarter in which the recipient receives the assistance award funded in whole or in part by the Recovery Act. Recipients are to report according to ARRA reporting instructions.

A. MANAGEMENT REPORTING

Progress Report

The Progress Report must provide a concise narrative assessment of the status of work and include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist:

1. The DOE award number and name of the recipient.

2. The project title and name of the project director/principal investigator.

3. Date of report and period covered by the report.

4. A comparison of the actual accomplishments with the goals and objectives established for the period and reasons why the established goals were not met.

5. A discussion of what was accomplished under these goals during this reporting period, including major activities, significant results, major findings or conclusions, key outcomes or other achievements. **This section should not contain any proprietary data or other information not subject to public release.** If such information is important to reporting progress, do not include the information, but include a note in the report advising the reader to contact the Principal Investigator or the Project Director for further information.

6. Cost Status. Show approved budget by budget period and actual costs incurred. If cost sharing is required break out by DOE share, recipient share, and total costs.

7. Schedule Status. List milestones, anticipated completion dates and actual completion dates. If you submitted a project management plan with your application, you must use this plan to report schedule and budget variance. You may use your own project management system to provide this information.

8. Any changes in approach or aims and reasons for change. Remember significant changes to the objectives and scope require prior approval by the contracting officer.

9. Actual or anticipated problems or delays and actions taken or planned to resolve them.

10. Any absence or changes of key personnel or changes in consortium/teaming arrangement.

11. A description of any product produced or technology transfer activities accomplished during this reporting period, such as:

    A. Publications (list journal name, volume, issue); conference papers; or other public releases of results.

    B. Web site or other Internet sites that reflect the results of this project.

    C. Networks or collaborations fostered.

D. Technologies/Techniques.

E. Inventions/Patent Applications.

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

Special Status Report

The recipient must report the following events as soon as possible after they occur:

1. Developments that have a significant favorable impact on the project.

2. Problems, delays, or adverse conditions which materially impair the recipient's ability to meet the objectives of the award or which may require DOE to respond to questions relating to such events from the public. The recipient must report any of the following incidents and include the anticipated impact and remedial action to be taken to correct or resolve the problem/condition:

   a. Any single fatality or injuries requiring hospitalization of five or more individuals.

   b. Any significant environmental permit violation.

   c. Any verbal or written Notice of Violation of any Environmental, Safety, and Health statutes or regulations.

   d. Any incident which causes a significant process or hazard control system failure.

   e. Any event which is anticipated to cause a significant schedule slippage or cost increase.

   f. Any damage to Government-owned equipment valued in excess of $50,000.

   g. Any other incident that has the potential for high visibility in the media.

B. SCIENTIFIC/TECHNICAL REPORTS

Final Scientific/Technical Report

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

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

2. Display prominently on the cover of the report any authorized distribution limitation notices, such as patentable material or protected data. Reports delivered without such notices may

be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use or reproduction of such reports.

3. Provide an executive summary, which includes a discussion of 1) how the research adds to the understanding of the area investigated; 2) the technical effectiveness and economic feasibility of the methods or techniques investigated or demonstrated; or 3) how the project is otherwise of benefit to the public. The discussion should be a minimum of one paragraph and written in terms understandable by an educated layman.

4. Provide a comparison of the actual accomplishments with the goals and objectives of the project

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

6. Identify products developed under the award and technology transfer activities, such as:

   a. Publications (list journal name, volume, issue), conference papers, or other public releases of results.

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

   c. Networks or collaborations fostered;

   d. Technologies/Techniques;

   e. Inventions/Patent Applications, licensing agreements; and

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

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

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

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

   c. Test results to demonstrate the model performance criteria were met (e.g., code verification/validation, sensitivity analyses, history matching with lab or field data, as appropriate);

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

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

   f. Whether or not the theory and mathematical algorithms were peer reviewed, and, if so, include a summary of theoretical strengths and weaknesses;

g. Hardware requirements; and

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

Electronic Submission. The final scientific/technical report must be submitted electronically via the DOE Energy Link System (E-Link) at http://www.osti.gov/elink-2413.

Electronic Format. Reports must be submitted in the ADOBE PORTABLE DOCUMENT FORMAT (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematic, graphs, and charts.

Submittal Form. The report must be accompanied by a completed electronic version of DOE Form 241.3, "U.S. Department of Energy (DOE), Announcement of Scientific and Technical Information (STI)." You can complete, upload, and submit the DOE F.241.3 online via E-Link. You are encouraged not to submit patentable material or protected data in these reports, but if there is such material or data in the report, you must: (1) clearly identify patentable or protected data on each page of the report; (2) identify such material on the cover of the report; and (3) mark the appropriate block in Section K of the DOE F 241.3. Reports must not contain any limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release. Protected data is specific technical data, first produced in the performance of the award that is protected from public release for a period of time by the terms of the award agreement.

Protected Personally Identifiable Information (PII). Management Reports or Scientific/Technical Reports must not contain any Protected PII. PII is any information about an individual which can be used to distinguish or trace an individual's identity. Some information that is considered to be PII is available in public sources such as telephone books, public websites, university listings, etc. This type of information is considered to be Public PII and includes, for example, first and last name, address, work telephone number, e-mail address, home telephone number, and general educational credentials. In contrast, Protected PII is defined as an individual's first name or first initial and last name in combination with any one or more of types of information, including, but not limited to, social security number, passport number, credit card numbers, clearances, bank numbers, biometrics, date and place of birth, mother's maiden name, criminal, medical and financial records, educational transcripts, etc.

Conference Papers/Proceedings

Content. The recipient must submit a copy of any conference papers/proceedings, with the following information: (1) Name of conference; (2) Location of conference; (3) Date of conference; and (4) Conference sponsor.

Electronic Submission. Scientific/technical conference paper/proceedings must be submitted electronically via the DOE Energy Link System (E-Link) at http://www.osti.gov/elink-2413. Non-scientific/technical conference papers/proceedings must be sent to the URL listed on the Reporting Checklist.

Electronic Format. Conference papers/proceedings must be submitted in the ADOBE PORTABLE DOCUMENT FORMAT (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematic, graphs, and charts.

Submittal Form. Scientific/technical conference papers/proceedings must be accompanied by a completed DOE Form 241.3. The form and instructions are available on E-Link at http://www.osti.gov/elink-2413. This form is not required for non-scientific or non-technical conference papers or proceedings.

Software/Manual

Content. Unless otherwise specified in the award, the following must be delivered: source code, the executable object code and the minimum support documentation needed by a competent user to understand and use the software and to be able to modify the software in subsequent development efforts.

Electronic Submission. Submissions may be submitted electronically via the DOE Energy Link System (E-Link) at http://www.osti.gov/estsc/241-4pre.jsp They may also be submitted via regular mail to:

Energy Science and Technology Software Center
P.O. Box 1020
Oak Ridge, TN 37831

Submittal Form. Each software deliverable and its manual must be accompanied by a completed DOE Form 241.4 "Announcement of U.S. Department of Energy Computer Software." The form and instructions are available on E-Link at http://www.osti.gov/estsc//241-4pre.jsp.

C. FINANCIAL REPORTING

Recipients must complete the SF-425 as identified on the Reporting Checklist in accordance with the report instructions. A fillable version of the form is available at http://www.whitehouse.gov/omb/grants/grants_forms.aspx.

D. CLOSEOUT REPORTS

Final Invention and Patent Report

The recipient must provide a DOE Form 2050.11 , "PATENT CERTIFICATION." This form is available at http://www.directives.doe.gov/pdfs/forms/2050-11.pdf and http://management.energy.gov/business_doe/business_forms.htm.

Property Certification

The recipient must provide the Property Certification, including the required inventories of non-exempt property, located at http://management.energy.gov/business_doe/business_forms.htm.

E. OTHER REPORTING

Annual Indirect Cost Proposal and Reconciliation

Requirement. In accordance with the applicable cost principles, the recipient must submit an annual indirect cost proposal, reconciled to its financial statements, within six months after the close of the fiscal year, unless the award is based on a predetermined or fixed indirect rate (s), or a fixed amount for indirect facilities and administration (F&A) costs.

Cognizant Agency. The recipient must submit its annual indirect cost proposal directly to the cognizant agency for negotiating and approving indirect costs.

Annual Inventory of Federally Owned Property

Requirement. If at any time during the award the recipient is provided with Government-furnished property or aquires property with project funds and the award specifies that the property vests in the Federal Government (i.e. federally owned property), the recipient must submit an annual inventory of this property to the DOE Award Administrator identified in Block 12 of the Notice of Financial Assistance Award no later then October 30th of each calendar year, to cover an annual reporting period ending on the preceding September 30th.

Content of Inventory. The inventory must include a description of property, tag number, acquisition date, location of property, and acquisition cost, if purchased with project funds. The report must list all federally owned property, including property located at subcontractor's facilities or other locations.

Applicant Name: Algenol Biofuels Inc. Award Number: DE-EE0002867.001 Attachment 4

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Budget Period 1	81.087			$10,668,902		
2. Budget Period 2	81.087			TBD		
3.						
4.						
5. Totals		$0	$0	$10,668,902		

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EXEMPTION 4

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) Budget Period 1	(2) Budget Period 2	(3)	(4)	
a. Personnel					
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

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EXEMPTION 4

APPENDIX

To

SPECIAL TERMS AND CONDITIONS, PROVISION 37

REQUIREMENTS FOR CONTINGENCY FUNDS FOR INTEGRATED BIOREFINERY PROJECTS

TO DE-EE0002867 – Algenol Biofuels, Inc Biorefinery Project

I. Background

Recipients of awards selected under Funding Opportunity Announcement DE-FOA-0000096 are required to provide an initial amount of Contingency funds equal to not less than 25 percent of the Total Project Cost (TPC), subject to the requirements and clarifications provided in this Appendix. TPC includes the approved combined Federal and Recipient cost share funding amounts to accomplish the approved scope in the Statement of Project Objectives that are allowable, reasonable and allocable to the project in accordance with 10 Code of Federal Regulations (CFR) 600.317.

II. Definition

For the purposes of this award, **Contingency** is defined as follows:

A provision in the project management plan to mitigate cost and /or schedule risk (Project Management Body of Knowledge, Third Edition).

III. Requirements

A. Purpose

The Recipient may expend Contingency funds solely for the purpose of mitigating risks to the cost and/or schedule associated with the project performance baseline and consistent with the Risk Mitigation or Management Plan (RMP) and Risk Register. Schedule risks ultimately would be reflected as cost overruns. It is expected that those risks will either be: a) performance baseline schedule and/or cost risks that are identified in the RMP and Risk Register (known risks or opportunities); or, b) to mitigate unknown performance baseline risks or uncertainties that become incorporated into the RMP and Risk Register as they are discovered.

B. Framework and Criteria

1. The framework that governs the use of Contingency funds on the project authorized under this award relies on the Recipient to manage and control project performance baseline risks, opportunities and uncertainties utilizing the most recent, change-controlled performance baseline, Risk RMP and Risk Register. As risks are successfully mitigated throughout the duration of the project, the need for contingency is anticipated to decline. At the point when the performance test has been completed, the number and magnitude of risks and the available project and Contingency funds will need to be evaluated prior to DOE's Critical Decision 4 – Approval of Operations.

2. The initial 25 percent minimum Contingency is calculated based on the TPC (DOE share + Recipient cost share) in dollars. The award is divided into two budget periods – Budget Periods 1 and 2 (BP1 and BP2). BP1 primarily involves relatively low risk activities associated with design work, permitting, environmental baseline data gathering and analysis, financial close, and other activities that should not require significant contingency to be managed effectively. Therefore, for the purposes of this award, the 25% minimum Contingency requirement will be calculated based on the estimated TPC balance that begins with Budget Period 2 (BP2 - construction and operations). The Recipient will need to provide evidence (consistent with evidence standards identified in C. below) of meeting the required 25% minimum Contingency prior to DOE authorizing Critical Decision 3 – Approve Start of Construction. For example, if the BP2 estimate for construction and operations equals a TPC of $100 million, with $50 million DOE funds and $50 million Recipient cost share funds, a minimum of $25 million in initial Contingency funds would be required at the start of BP2. Any increase in the TPC resulting from cost and/or schedule overruns incurred during BP1 will be added to the BP2 TPC before calculating the initial 25% Contingency minimum.

3. Contingency Funds must be: a) liquid, b) immediately available, and c) unrestricted funds that are dedicated to the project.

4. Expenditures of Contingency funds is in addition to the TPC, and cannot count towards cost share. Similarly, expenditures of Contingency cannot result in reimbursement by DOE above the share approved for the project.

5. Contingency is **NOT** to be included in the project budget estimate.

6. The use of Contingency funds cannot be considered allowable costs under the award unless and until Recipient has actually expended such funds to address cost and/or schedule overruns to the performance baseline.

7. Estimated or projected program income CANNOT count towards contingency up front. However, the Recipient may use program income to reimburse actual expenditures of Contingency funds upon approval by the DOE Contracting Officer.

C. Acceptable Evidence of Sufficient Contingency Funds

1. Recipient must provide evidence of Contingency funds that are dedicated to the project and sufficient to meet the 25 percent minimum, which must be documented and reported on a monthly basis consistent with the reporting requirements for this award.

2. Below is a list of the types of evidence the Contracting Officer may consider. Although this list is not all-inclusive, it represents some of the types of documents the Contracting Officer may consider as evidence of adequate Contingency. DOE will review evidence of adequate Contingency provided by the Recipient on a case-by-case basis to determine its acceptability. This evidence may include, but not is not limited to, one or a combination of the following:

   (i) Bank statement of availability of funds

   (ii) Letter of credit

(iii) Evidence of sufficient cash funds (e.g., a letter from the bank or investors certifying to the specific amounts and availability of cash contributions)

(iv) EPC Performance Guarantees

(v) Evidence of funds in an escrowed account dedicated to the project

(vi) Performance bond(s) – Terms and conditions must be approved by the Contracting Officer

3. Self-certification of the availability of Contingency funds is generally **NOT** acceptable evidence. In order for self-certification to be considered acceptable by the Contracting Officer, the following minimum requirements must be met:

   a. An executive officer from the Recipient (typically, the Chief Financial Officer) who has control of the disbursement of Contingency funds must:

      i. Certify to no less than the minimum required initial specific amount, types and availability of Contingency funds;

      ii. Report on the expenditure of those funds monthly to the Contracting Officer; and

      iii. Recertify to the specific amount, type and availability of Contingency funds each month.

   b. Any Contingency funds expended to address risks and/or opportunities in the performance baseline must be transparent and documented through the most recent approved baseline change control procedure; and

   c. The documentation of expenditures of Contingency funds must be transparent such that an independent auditor would be able to easily track the use of such funds through the financial accounting system to the project code of accounts and to the performance baseline cost overruns.

D. Control and Management of Contingency Funds

1. Cost overruns that result in changes to the performance baseline must go through baseline change control. Cost overruns involving the use of Contingency must be documented through the most recent, approved baseline change control procedure. Those cost or schedule overruns that exceed the DOE-approved change control threshold must be approved by DOE. **Exception**: In the situation where an event occurs that compromises safety or threatens human health or the environment, the Recipient is expected to expend the appropriate amount of resources and/or Contingency necessary to manage the event and the project to a safe configuration. Changes to the performance baseline and any cost overruns resulting from the event shall be addressed after the Recipient has achieved a safe project configuration.

2. Any month in which the amount of Contingency becomes insufficient to meet the required minimum, it must be reported to the Contracting Officer within five (5) calendar days of discovery.

3. Incorporation of Contingency within the basis of estimates for each activity shall not be allowed. Activity estimates should be consistent with standard Recipient project estimating methods (e.g., activity-based cost estimating, parametric cost estimating, etc.), but shall avoid the embedding and layering of contingency throughout the Work Breakdown Structure (WBS).

4. At the completion of performance test (as described in the performance baseline), DOE will conduct the Critical Decision 4 (CD-4) – Approval of Operations review. This review will also be the point at which DOE will determine the amount of Contingency the Recipient will be required to have available during the operations phase. The criteria for this determination will be as follows:

   a. Pilot plants – The amount of the Contingency typically required will be based on a minimum of 10 percent of the initial capital cost (BP2 TPC). Using this as a base, the amount of Contingency will be adjusted taking into account risk mitigation trends through the end of the performance test. For example, if the estimate to complete (ETC) and remaining risks through the end of the performance test reflect successful risk mitigation and cost effective project performance management, DOE would factor that into its decision on what percentage contingency will be required for the operations phase. DOE will withhold a percentage of its funds to assure that the operations phase is completed in accordance with the performance baseline and that DOE receives operations data in the form required.

   b. Demonstration plants – The required amount of Contingency typically will be based on a minimum of 10 percent of the initial capital cost (BP2 TPC). Using this as a base, the amount of Contingency will be adjusted using risk mitigation trends through completion of the performance test. For example, if the ETC and risks remaining through the end of the performance test reflect successful risk mitigation and cost effective project performance management, DOE could factor that into its decision on what percentage contingency will be required for the operations phase. Furthermore, if the cost of the core technology exceeds 10 percent of the initial capital cost (BP2 TPC), DOE will factor this into the percentage of DOE funds to be withheld to assure that the operations phase is completed in accordance with the performance baseline.

ASSISTANCE AGREEMENT

1. Award No.	2. Modification No.	3. Effective Date	4. CFDA No.
DE-EE0002867	001	01/29/2010	81.087

5. Awarded To	6. Sponsoring Office	7. Period of Performance
ALGENOL BIOFUELS INC. Attn: GREGORY SCHLICHT 28100 BONITA GRANDE DR STE 200 BONITA SPRINGS FL 341356220	Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401	01/29/2010 through 09/30/2010

8. Type of Agreement	9. Authority	10. Purchase Request or Funding Document No.
☐ Grant ☒ Cooperative Agreement ☐ Other	109-58, Energy Policy Act 2005 111-5, Recovery Act 2009	10EE003109

11. Remittance Address	12. Total Amount	13. Funds Obligated
ALGENOL BIOFUELS INC. Attn: GREGORY SCHLICHT 28100 BONITA GRANDE DR STE 200 BONITA SPRINGS FL 341356220	Govt. Share: $24,331,431.00 Cost Share : $ Total : $	This action: $0.00 Total :

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14. Principal Investigator	15. Program Manager	16. Administrator
Craig Smith Phone: 239-498-2000	Carol Christine Sterner Phone: 303-275-4720	Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401-3393

17. Submit Payment Requests To	18. Paying Office	19. Submit Reports To
OR for Golden U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 4517 Oak Ridge TN 37831	OR for Golden U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 4517 Oak Ridge TN 37831	See Attachment 3.

20. Accounting and Appropriation Data

IBR

21. Research Title and/or Description of Project

RECOVERY ACT: INTEGRATED PILOT - SCALE BIOREFINERY FOR PRODUCING ETHANOL FROM HYBRID ALGAE

For the Recipient		For the United States of America	
22. Signature of Person Authorized to Sign		25. Signature of Grants/Agreements Officer Signature on File	
23. Name and Title	24. Date Signed	26. Name of Officer Michael A. Schledorn	27. Date Signed 03/30/2010

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	DE-EE0002867/001	2	3

NAME OF OFFEROR OR CONTRACTOR
ALGENOL BIOFUELS INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	DUNS Number: 800399904 The administrative office (administrative contracting activity) for this award/modification/amendment is 03601 (administrative contracting activity) from STRIPES. The administrative office (administrative contracting activity) code is needed by the contractor/recipient for reporting to FederalReporting.gov concerning awards made with funding from the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act). The purposes of this modification are to: 1) Delete and replace the Special Terms and Conditions; 2) Add the Intellectual Property Provisions, CDSB-1003 (Attachment 1); 3) Add the Statement of Project Objectives (Attachment 2); 4) Add the Federal Assistance Reporting Checklist and Instructions, DOE F 4600.2 (Attachment 3); 5) Add the Budget Information, SF-424A (Attachment 4); 6) Add the Requirements For Contingency Funds for Integrated Biorefinery Projects, Appendix (Attachment 5); and 7) This modification approved only Budget Period 1 of the Project. All other terms and conditions remain unchanged. In Block 7 of the Assistance Agreement, the Period of Performance reflects the beginning of the Project Period through the end of the current Budget Period, shown as 01/28/2010 through 09/30/2010. For multiple Budget Periods, see Special Terms and Conditions, Provision 4, "Award Project Period and Budget Periods." Continued ...				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED: DE-EE0002867/001

PAGE 3 OF 3

NAME OF OFFEROR OR CONTRACTOR: ALGENOL BIOFUELS INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	The total amounts reflected in Blocks 12 and 13 of the Assistance Agreement do not include the Federally Funded Research and Development Center (FFRDC) funding amount of $424,480, which will be funded directly. DOE Award Administrator: Molly Hames E-mail: molly.hames@go.doe.gov Phone: 303-275-4864 DOE Project Officer: Christy Sterner E-mail: christy.sterner@go.doe.gov Phone: 303-275-4720 Recipient Business Officer: Craig Smith E-mail: craig.smith@algenolbiofuels.com Phone: 239-498-2000 Recipient Principal Investigator: Craig Smith E-mail: craig.smith@algenolbiofuels.com Phone: 239-498-2000 "Electronic signature or signatures as used in this document means a method of signing an electronic message that-- (A) Identifies and authenticates a particular person as the source of the electronic message; (B) Indicates such person's approval of the information contained in the electronic message; and, (C) Submission via FedConnect constitutes electronically signed documents." ASAP: NO Extent Competed: COMPETED Davis-Bacon Act: YES Fund: 05794 Appr Year: 2009 Allottee: 31 Report Entity: 200835 Object Class: 41000 Program: 1004173 Project: 2004000 WFO: 0000000 Local Use: 0000000 TAS Agency: 89 TAS Account: 0331				

SPECIAL TERMS AND CONDITIONS

Table of Contents

Number	Subject	Page
1.	RESOLUTION OF CONFLICTING CONDITIONS	3
2.	AWARD AGREEMENT TERMS AND CONDITIONS	3
3.	ELECTRONIC AUTHORIZATION OF AWARD DOCUMENTS	3
4.	AWARD PROJECT PERIOD AND BUDGET PERIODS	3
5.	PAYMENT PROCEDURES - REIMBURSEMENT THROUGH THE AUTOMATED CLEARING HOUSE (ACH) VENDER INQUIRY PAYMENT ELECTRONIC REPORTING SYSTEM (VIPERS)	4
6.	COST SHARING	5
7.	REBUDGETING AND RECOVERY OF INDIRECT COSTS	5
8.	FINAL INCURRED COST AUDIT	6
9.	STATEMENT OF FEDERAL STEWARDSHIP	6
10.	STATEMENT OF SUBSTANTIAL INVOLVEMENT	6
11.	SITE VISITS	7
12.	REPORTING REQUIREMENTS	7
13.	PUBLICATIONS	8
14.	FEDERAL, STATE, AND MUNICIPAL REQUIREMENTS	8
15.	INTELLECTUAL PROPERTY PROVISIONS AND CONTACT INFORMATION	8
16.	NATIONAL SECURITY: CLASSIFIABLE RESULTS ORIGINATING UNDER AN AWARD	9
17.	CONTINUATION APPLICATION AND FUNDING	10
18.	LOBBYING RESTRICTIONS	11
19.	NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS -- SENSE OF CONGRESS	11
20.	FUNDING OF BUDGET PERIODS	11
21.	PROPERTY	11
22.	DECONTAMINATION AND/OR DECOMMISSIONING (D&D) COSTS	12
23.	AT RISK FOR FINANCIAL CAPABILITY	12
24.	INSOLVENCY, BANKRUPTCY OR RECEIVERSHIP	13
25.	NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS	13
26.	INDEMNITY	14
27.	SUBCONTRACT APPROVALS	14
28.	SPECIAL PROVISIONS RELATING TO WORK FUNDED UNDER AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (May 2009)	15
29.	REPORTING AND REGISTRATION REQUIREMENTS UNDER SECTION 1512 OF THE RECOVERY ACT	19
30.	REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS – SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009	19
31.	REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS (COVERED UNDER INTERNATIONAL AGREEMENTS) – SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009	22
32.	RECOVERY ACT TRANSACTIONS LISTED IN SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND RECIPIENT RESPONSIBILITIES FOR INFORMING SUBRECIPIENTS	26

33. WAGE RATE REQUIREMENTS UNDER SECTION 1606 OF THE RECOVERY ACT 27
34. DAVIS BACON ACT AND CONTRACT WORK HOURS AND SAFETY STANDARDS ACT 28
35. REOPENER TERM – PENDING INDIRECT RATES – FINANCIAL ASSISTANCE 38
36. CONTINGENCY 39

1. RESOLUTION OF CONFLICTING CONDITIONS

Any apparent inconsistency between Federal statutes and regulations and the terms and conditions contained in this award must be referred to the DOE Award Administrator for guidance.

2. AWARD AGREEMENT TERMS AND CONDITIONS

This award/agreement consists of the Assistance Agreement, plus the following:

a. Special Terms and Conditions.
b. Attachments:

Attachment Number	Title
1.	Intellectual Property Provisions
2.	Statement of Project Objectives
3.	Federal Assistance Reporting Checklist and Instructions
4.	Budget Pages (SF 424A)
5.	Requirements for Contingency Funds for Integrated Biorefinery Projects

c. Applicable program regulations.
d. DOE Assistance Regulations, 10 CFR Part 600 at http://ecfr.gpoaccess.gov.
e. Application/proposal as approved by DOE.
f. National Policy Assurances to be incorporated as award terms in effect on date of award at http://management.energy.gov/business_doe/1374.htm.

3. ELECTRONIC AUTHORIZATION OF AWARD DOCUMENTS

Acknowledgement of award documents by the Recipient's authorized representative through electronic systems used by the Department of Energy, specifically FedConnect, constitutes the Recipient's acceptance of the terms and conditions of the award. Acknowledgement via FedConnect by the Recipient's authorized representative constitutes the Recipient's electronic signature.

4. AWARD PROJECT PERIOD AND BUDGET PERIODS

The Project Period for this award is 12/04/2009 through 12/31/2014, consisting of the following Budget Periods:

Budget Period	Start Date	End Date
1	01/29/2010	09/30/2010
2	10/01/2010	12/31/2014

5. PAYMENT PROCEDURES - REIMBURSEMENT THROUGH THE AUTOMATED CLEARING HOUSE (ACH) VENDER INQUIRY PAYMENT ELECTRONIC REPORTING SYSTEM (VIPERS)

a. Method of Payment. Payment will be made by reimbursement through ACH.

b. Requesting Reimbursement. Requests for reimbursements must be made electronically through Department of Energy's Oak Ridge Financial Service Center (ORFSC) VIPERS. To access and use VIPERS, you must enroll at https://finweb.oro.doe.gov/vipers.htm. Detailed instructions on how to enroll are provided on the web site.

For non-construction awards, you must submit a Standard Form (SF) 270, "Request for Advance or Reimbursement," at https://finweb.oro.doe.gov/vipers.htm and attach a file containing appropriate supporting documentation. The file attachment must show the total Federal share claimed on the SF 270, the non-Federal share claimed for the billing period if cost sharing is required, and cumulative expenditures to date (both Federal and non-Federal) for each of the following categories: salaries/wages and fringe benefits; equipment; travel; participant/training support costs, if any; other direct costs, including subawards/contracts; and indirect costs. For construction awards, you must submit a SF 271, "Outlay Report and Request for Reimbursement for Construction Programs," through VIPERS.

c. Timing of submittals. Submittal of the SF 270 or SF 271 should coincide with your normal billing pattern, but not more frequently than every two weeks. Requests for reimbursement must be limited to the amount of disbursements made during the billing period for the Federal share of direct project costs and the proportionate share of any allowable indirect costs incurred during that billing period.

d. Adjusting payment requests for available cash. You must disburse any funds that are available from repayments to and interest earned on a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds before requesting additional cash payments from DOE.

e. Payments. The DOE approving official will approve the invoice as soon as practical, but not later than 30 days after your request is received, unless the billing is improper. Upon receipt of an invoice payment authorization from the DOE approving official, the ORFSC will disburse payment to you. You may check the status of payments at the VIPER web site. All payments are made by electronic funds transfer to the bank account identified on the ACH Vendor/Miscellaneous Payment Enrollment Form (SF 3881) that you filed.

6. COST SHARING

a. Total Estimated Project Cost is the sum of the Federal Government share, including Federally Funded Research and Development Center (FFRDC) contractor costs, and Recipient share of the estimated project costs. The DOE FFRDC contractor cost is not included in the total approved budget for this award, because DOE will pay the DOE FFRDC contractor portion of the effort under an existing DOE contract. The Recipient is not responsible for reporting on that portion of the total estimated cost that is paid directly to the DOE FFRDC contractor.

The Recipient's cost share must come from non-Federal sources unless otherwise allowed by law. By accepting Federal funds under this award, you agree that you are liable for your percentage share of allowable project costs, on a budget period basis, even if the project is terminated early or is not funded to its completion. This cost is shared as follows:

Budget Period	DOE Cost Share, including FFRDC Costs		Recipient Cost Share	Total Estimated Costs
	DOE $ / %	FFRDC $ / %	$ / %	
1	$10,668,903 /	$424,480 /	REDACTED EXEMPTION 4	
2	TBD	TBD	TBD	TBD
Total Project	TBD	TBD	TBD	TBD

b. If you discover that you may be unable to provide cost sharing of at least the amount identified in paragraph a of this Article, you should immediately provide written notification to the DOE Award Administrator, indicating whether you will continue the project or phase out the project. If you plan to continue the project, the notification must describe how replacement cost sharing will be secured.

c. You must maintain records of all project costs you claim as cost sharing, including in-kind costs, as well as records of costs to be paid by DOE. Such records are subject to audit.

d. Failure to provide the cost share required by this Article may result in the subsequent recovery by DOE of some or all the funds provided under the award.

7. REBUDGETING AND RECOVERY OF INDIRECT COSTS

a. If actual allowable indirect costs are less than those budgeted and funded under the award, you may use the difference to pay additional allowable direct costs during the project period. If at the completion of the award the Government's share of total allowable costs (i.e., direct and indirect), is less than the total costs reimbursed, you must refund the difference.

b. Recipients are expected to manage their indirect costs. DOE will not amend an award solely to provide additional funds for changes in indirect cost rates. DOE recognizes that the inability to obtain full reimbursement for indirect costs means the Recipient must absorb the underrecovery. Such underrecovery may be allocated as part of the organization's required cost sharing.

8. FINAL INCURRED COST AUDIT

In accordance with 10 CFR 600, DOE reserves the right to initiate a final incurred cost audit on this award. If the audit has not been performed or completed prior to the closeout of the award, DOE retains the right to recover an appropriate amount after fully considering the recommendations on disallowed costs resulting from the final audit.

9. STATEMENT OF FEDERAL STEWARDSHIP

DOE will exercise normal Federal stewardship in overseeing the project activities performed under this award. Stewardship activities include, but are not limited to, conducting site visits; reviewing performance and financial reports; providing technical assistance and/or temporary intervention in unusual circumstances to correct deficiencies which develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to ensure that the award objectives have been accomplished.

10. STATEMENT OF SUBSTANTIAL INVOLVEMENT

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.

11. SITE VISITS

DOE's authorized representatives have the right to make site visits at reasonable times to review project accomplishments and management control systems and to provide technical assistance, if required. You must provide, and must require your subawardees to provide, reasonable access to facilities, office space, resources, and assistance for the safety and convenience of the government representatives in the performance of their duties. All site visits and evaluations must be performed in a manner that does not unduly interfere with or delay the work.

12. REPORTING REQUIREMENTS

a. Requirements. The reporting requirements for this award are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to this award. Failure to comply with these reporting requirements is considered a material noncompliance with the terms of the award. Noncompliance may result in withholding of future payments, suspension or termination of the current award, and withholding of future awards. A willful failure to perform, a history of failure to perform, or unsatisfactory performance of this and/or other financial assistance awards, may also result in a debarment action to preclude future awards by Federal agencies.

b. Dissemination of scientific/technical reports. Scientific/technical reports submitted under this award will be disseminated on the Internet via the DOE Information Bridge (www.osti.gov/bridge), unless the report contains patentable material, protected data or SBIR/STTR data. Citations for journal articles produced under the award will appear on the DOE Energy Citations Database (www.osti.gov/energycitations).

c. Restrictions. Reports submitted to the DOE Information Bridge must not contain any Protected Personal Identifiable Information (PII), limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release.

13. PUBLICATIONS

a. You are encouraged to publish or otherwise make publicly available the results of the work conducted under the award.

b. An acknowledgment of DOE support and a disclaimer must appear in the publication of any material, whether copyrighted or not, based on or developed under this project, as follows:

Acknowledgment: "This material is based upon work supported by the Department of Energy [National Nuclear Security Administration] [add name(s) of other agencies, if applicable] under Award Number(s) [enter the award number(s)]."

Disclaimer: "This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof."

14. FEDERAL, STATE, AND MUNICIPAL REQUIREMENTS

You must obtain any required permits and comply with applicable federal, state, and municipal laws, codes, and regulations for work performed under this award.

15. INTELLECTUAL PROPERTY PROVISIONS AND CONTACT INFORMATION

a. The intellectual property provisions applicable to this award are provided as an attachment to this award.

b. Questions regarding intellectual property matters should be referred to the DOE Award Administrator identified and the Patent Counsel designated as the service provider for the DOE office that issued the award.

The Patent Counsel for the Golden Field Office is Julia Moody, who may be reached at julia.moody@go.doe.gov or 303-275-4867.

16. NATIONAL SECURITY: CLASSIFIABLE RESULTS ORIGINATING UNDER AN AWARD

a. This award is intended for unclassified, publicly releasable research. You will not be granted access to classified information. DOE does not expect that the results of the research project will involve classified information. Under certain circumstances, however, a classification review of information originated under the award may be required. The Department may review research work generated under this award at any time to determine if it requires classification.

b. Executive Order 12958 (60 Fed. Reg. 19,825 (1995)) states that basic scientific research information not clearly related to the national security shall not be classified. Nevertheless, some information concerning (among other things) scientific, technological, or economic matters relating to national security or cryptology may require classification. If you originate information during the course of this award that you believe requires classification, you must promptly:

   1. Notify the DOE Project Officer and the DOE Award Administrator;

   2. Submit the information by registered mail directly to the Director, Office of Classification and Information Control, SO-10.2; U.S. Department of Energy; P.O. Box A; Germantown, MD 20875-0963, for classification review.

   3. Restrict access to the information to the maximum extent possible until you are informed that the information is not classified, but no longer than 30 days after receipt by the Director, Office of Classification and Information Control

c. If you originate information concerning the production or utilization of special nuclear material (i.e., plutonium, uranium enriched in the isotope 233 or 235, and any other material so determined under section 51 of the Atomic Energy Act) or nuclear energy, you must:

   1. Notify the DOE Project Officer and the DOE Award Administrator;

   2. Submit the information by registered mail directly to the Director, Office of Classification and Information Control, SO-10.2; U.S. Department of Energy; P. O. Box A; Germantown, MD 20875-0963 for classification review within 180 days of the date the Recipient first discovers or first has reason to believe that the information is useful in such production or utilization; and

3. Restrict access to the information to the maximum extent possible until you are informed that the information is not classified, but no longer than 90 days after receipt by the Director, Office of Classification and Information Control.

d. If DOE determines any of the information requires classification, you agree that the Government may terminate the award by mutual agreement in accordance with 10 CFR 600.25(d). All material deemed to be classified must be forwarded to DOE, in a manner specified by DOE.

e. If DOE does not respond within the specified time periods, you are under no further obligation to restrict access to the information.

17. CONTINUATION APPLICATION AND FUNDING

a. Continuation Application. A continuation application is a non-competitive application for an additional budget period within a previously approved project period. At least 60 days before the end of each budget period, your continuation application must be submitted to the DOE Project Officer and the DOE Award Administrator identified in the Assistance Agreement, to be eligible to receive a continuation award for the next budget period. The continuation application must include the following information:

1. Application for Federal Assistance, SF-424.

2. A continuation report, which must provide a summary of the progress towards meeting the objectives of the award, including any significant findings, conclusions, or developments, a comparison of actual accomplishment with the objectives established for the reporting period (milestones, deliverables, decision point criteria and stage gates), reasons for slippage if goals were not met, an estimate of any unobligated balances remaining at the end of the budget period, and when applicable an explanation of cost overruns or underruns. A description of your plans for the award during the upcoming budget period and any variance from the DOE approved objectives needs to be included in the continuation application package.

3. A detailed budget and supporting justification for the upcoming budget period with the supporting documentation below, including an estimate of DOE funds expected to be remaining at the end of the current budget period:

   a) Budget Information – Non Construction Programs, SF-424A.

   b) Cost Reasonableness Determination, PMC 123.1 (Excel Version).

4. Environmental Checklist, EF1, (This form should be completed on-line at https://www.eere-pmc.energy.gov/).

5. Commitment Letters from Third Parties Contributing to Cost Sharing, if applicable.

6. Statement of Project Objectives (SOPO), if revision is required.

b. Continuation Funding. Continuation funding is contingent on: (1) availability of funds; (2) meeting the objectives, milestones, deliverables, decision point criteria and stage gates of your award and obtaining approval from DOE to continue work on the project (DOE authorizing either Pass or Redirect through a stage-gate review); (3) submittal of required reports; or (4) compliance with the terms and conditions of the award.

18. LOBBYING RESTRICTIONS

By accepting funds under this award, you agree that none of the funds obligated on the award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

19. NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS -- SENSE OF CONGRESS

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made.

20. FUNDING OF BUDGET PERIODS

DOE has obligated $24,331,431 for completion of the project authorized by this agreement; however, only $8,518,895 is available for work performed by the Recipient during Budget Period 1 of the project. An additional $2,687,510 in Federal Funds is restricted by Subcontract Approval Clause for Budget Period 1 and may be released pending the conditions of the clause are met and the subcontract approval clause is lifted. For Budget Period 2, the remainder or $13,125,026 will be available contingent upon the submission by the Recipient of a continuation application and written approval of the continuation application by the DOE Contracting Officer.

In the event that the Recipient does not submit a continuation application for subsequent Budget Periods, or DOE disapproves a continuation application for subsequent Budget Periods, the maximum DOE liability to the Recipient is the funds that are available for the current approved Budget Period. In such event, DOE reserves the right to deobligate any remaining funds.

21. PROPERTY

Real property and equipment acquired by the Recipient shall be subject to the rules set forth in 10 CFR 600.130-137, 10 CFR 600.231-233, or 10 CFR 600.320-324, as applicable.

Consistent with the goals and objectives of this project, the Recipient may continue to use Recipient acquired property beyond the Period of Performance, without obligation, during the period of such use, to extinguish DOE's conditional title to such property as described in 10 CFR 600.132-135, 10 CFR 600.231-233, or 600.321-324, subject to the following: (a) the Recipient continues to utilize such property for the objectives of the project as set forth in the Statement of Project Objectives; (b) DOE retains the right to periodically ask for, and the Recipient agrees to provide, reasonable information concerning the use and condition of the property; and (c) the Recipient follows the property disposition rules set forth in the applicable sections of 10 CFR Part 600, if the property is no longer used by the Recipient for the objectives of the project, and the fair market value of property exceeds $5,000.

Once the per unit fair market value of the property is less than $5,000, pursuant to the applicable sections of 10 CFR Part 600, DOE's residual interest in the property shall be extinguished and the Recipient shall have no further obligation to the DOE with respect to the property.

The regulations as set forth in 10 CFR Part 600 and the requirements of this article shall also apply to property in the possession of any team member, sub-recipient or other entity where such property was acquired in whole or in part with funds provided by DOE under this award or where such property was counted as cost-sharing under the award.

22. DECONTAMINATION AND/OR DECOMMISSIONING (D&D) COSTS

Notwithstanding any other provisions of this Agreement, the Government shall not be responsible for or have any obligation to the Recipient for (i) Decontamination and/or Decommissioning (D&D) of any of the Recipient's facilities, or (ii) any costs which may be incurred by the Recipient in connection with the D&D of any of its facilities due to the performance of the work under this Agreement, whether said work was performed prior to or subsequent to the effective date of the Agreement.

23. AT RISK FOR FINANCIAL CAPABILITY

You have been determined to be at risk for financial capability based on the Dun & Bradstreet (D&B) Business Information Report (BIR).

Based on this determination the following requirement has been incorporated into this award: Method of payment will be reimbursement through the Automated Clearing House (ACH) Vendor Inquiry Payment Electronic Reporting System (VIPERS).

You may report any change in circumstances that impact DOE's determination of your financial capability. If you feel that your circumstances have changed to this degree, you may request a re-evaluation at any time after 6 months from the initial determination. Please provide a written request and support to the DOE Award Administrator.

DOE will remove this provision by modification to the award if the conditions that prompted it have been corrected, as approved by the Contracting Officer.

24. INSOLVENCY, BANKRUPTCY OR RECEIVERSHIP

a. You shall immediately notify the DOE of the occurrence of any of the following events: (i) you or your parent's filing of a voluntary case seeking liquidation or reorganization under the Bankruptcy Act; (ii) your consent to the institution of an involuntary case under the Bankruptcy Act against you or your parent; (iii) the filing of any similar proceeding for or against you or your parent, or your consent to the dissolution, winding-up or readjustment of your debts, appointment of a receiver, conservator, trustee, or other officer with similar powers over you, under any other applicable state or federal law; or (iv) your insolvency due to its inability to pay debts generally as they become due.

b. Such notification shall be in writing and shall: (i) specifically set out the details of the occurrence of an event referenced in paragraph (a); (ii) provide the facts surrounding that event; and (iii) provide the impact such event will have on the project being funded by this award.

c. Upon the occurrence of any of the four events described in paragraph a. of this provision, DOE reserves the right to conduct a review of your award to determine your compliance with the required elements of the award (including such items as cost share, progress towards technical project objectives, and submission of required reports). If the DOE review determines that there are significant deficiencies or concerns with your performance under the award, DOE reserves the right to impose additional requirements, as needed, including (i) change of payment method; or (ii) institute payment controls.

d. Failure of the Recipient to comply with this provision may be considered a material noncompliance of this financial assistance award by the Contracting Officer.

25. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include: This NEPA determination applies to Budget Period 1 only. Budget Period 1 includes administrative tasks and some research and development activities. This NEPA determination does NOT apply to any Budget Period 2 activities. Additional NEPA review is required prior to beginning any Budget Period 2 activities.

This restriction does not preclude you from: Budget Period 1.

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

If this award includes construction activities, you must submit an environmental evaluation report/evaluation notification form addressing NEPA issues prior to DOE initiating the NEPA process.

26. INDEMNITY

The Recipient shall indemnify the Government and its officers, agents, or employees for any and all liability, including litigation expenses and attorneys' fees, arising from suits, actions, or claims of any character for death, bodily injury, or loss of or damage to property or to the environment, resulting from the project, except to the extent that such liability results from the direct fault or negligence of Government officers, agents or employees, or to the extent such liability may be covered by applicable allowable costs provisions.

27. SUBCONTRACT APPROVALS

a. At Risk Notice: The Recipient must obtain written approval by the Contracting Officer for reimbursement of costs associated with the subcontractors listed in paragraph b. below for Budget Period 1. If the subcontract is under $250,000, the Recipient must submit a Statement of Project Objectives, and basis of cost estimate. If the subcontract is $250,000 or more, the Recipient must submit (1) Statement of Project Objectives; (2) SF424A Budget Information, (3) PMC 123.1 Cost Reasonableness Determination for Financial Assistance, (4) approved rate agreement or proposal, (5) EF1 and Environmental Questionnaire. No funds shall be expended on the subcontracts supporting the tasks identified in Budget Period 2 unless DOE approval is provided. DOE does not guarantee or assume any obligation to reimburse costs incurred by the Recipient or subcontractor for these tasks, until approval is provided in writing by the Contracting Officer. Provision 22, "Reopener Term – Pending Indirect Rates – Financial Assistance" requirements apply to all subcontractors on this award.

b. Contracting Officer approval as set out above is requested for the following:

Budget Period	Subcontractors	Proposed Total Amount ($)
Budget Period 1	Dow Chemical Company	$2,687,510

The DOE Contracting Officer may require additional information concerning these tasks prior to providing written approval.

c. Upon written approval by the Contracting Officer, the Recipient may then receive payment for the tasks identified in paragraph b. above for allowable costs incurred, or DOE will recognize costs incurred toward cost share requirements, if any, in accordance with the payment provisions contained in the Special Terms and Conditions of this agreement.

28. SPECIAL PROVISIONS RELATING TO WORK FUNDED UNDER AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (May 2009)

Preamble

The American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act) was enacted to preserve and create jobs and promote economic recovery, assist those most impacted by the recession, provide investments needed to increase economic efficiency by spurring technological advances in science and health, invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits, stabilize State and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive State and local tax increases. Recipients shall use grant funds in a manner that maximizes job creation and economic benefit.

The Recipient shall comply with all terms and conditions in the Recovery Act relating generally to governance, accountability, transparency, data collection and resources as specified in Act itself and as discussed below.

Recipients should begin planning activities for their first tier subrecipients, including obtaining a DUNS number (or updating the existing DUNS record), and registering with the Central Contractor Registration (CCR).

Be advised that Recovery Act funds can be used in conjunction with other funding as necessary to complete projects, but tracking and reporting must be separate to meet the reporting requirements of the Recovery Act and related guidance. For projects funded by sources other than the Recovery Act, Contractors must keep separate records for Recovery Act funds and to ensure those records comply with the requirements of the Act.

The Government has not fully developed the implementing instructions of the Recovery Act, particularly concerning specific procedural requirements for the new reporting requirements. The Recipient will be provided these details as they become available. The Recipient must comply with all requirements of the Act. If the recipient believes there is any inconsistency between ARRA requirements and current award terms and conditions, the issues will be referred to the Contracting Officer for reconciliation.

Definitions

For purposes of this clause, Covered Funds means funds expended or obligated from appropriations under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5. Covered Funds will have special accounting codes and will be identified as Recovery Act funds in the grant, cooperative agreement or TIA and/or modification using Recovery Act funds. Covered Funds must be reimbursed by September 30, 2015.

Non-Federal employer means any employer with respect to covered funds -- the contractor, subcontractor, grantee, or recipient, as the case may be, if the contractor, subcontractor, grantee, or recipient is an employer; and any professional membership organization, certification of other

professional body, any agent or licensee of the Federal government, or any person acting directly or indirectly in the interest of an employer receiving covered funds; or with respect to covered funds received by a State or local government, the State or local government receiving the funds and any contractor or subcontractor receiving the funds and any contractor or subcontractor of the State or local government; and does not mean any department, agency, or other entity of the federal government.

Recipient means any entity that receives Recovery Act funds directly from the Federal government (including Recovery Act funds received through grant, loan, or contract) other than an individual and includes a State that receives Recovery Act Funds.

Special Provisions

A. Flow Down Requirement

Recipients must include these special terms and conditions in any subaward.

B. Segregation of Costs

Recipients must segregate the obligations and expenditures related to funding under the Recovery Act. Financial and accounting systems should be revised as necessary to segregate, track and maintain these funds apart and separate from other revenue streams. No part of the funds from the Recovery Act shall be commingled with any other funds or used for a purpose other than that of making payments for costs allowable for Recovery Act projects.

C. Prohibition on Use of Funds

None of the funds provided under this agreement derived from the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may be used by any State or local government, or any private entity, for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool.

D. Access to Records

With respect to each financial assistance agreement awarded utilizing at least some of the funds appropriated or otherwise made available by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, any representative of an appropriate inspector general appointed under section 3 or 8G of the Inspector General Act of 1988 (5 U.S.C. App.) or of the Comptroller General is authorized --

(1) to examine any records of the contractor or grantee, any of its subcontractors or subgrantees, or any State or local agency administering such contract that pertain to, and involve transactions that relate to, the subcontract, subcontract, grant, or subgrant; and

(2) to interview any officer or employee of the contractor, grantee, subgrantee, or agency regarding such transactions.

E. Publication

An application may contain technical data and other data, including trade secrets and/or privileged or confidential information, which the applicant does not want disclosed to the public or used by the Government for any purpose other than the application. To protect such data, the applicant should specifically identify each page including each line or paragraph thereof containing the data to be protected and mark the cover sheet of the application with the following Notice as well as referring to the Notice on each page to which the Notice applies:

Notice of Restriction on Disclosure and Use of Data
The data contained in pages ---- of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data here to the extent provided in the award. This restriction does not limit the Government's right to use or disclose data obtained without restriction from any source, including the applicant.

Information about this agreement will be published on the Internet and linked to the website www.recovery.gov, maintained by the Accountability and Transparency Board. The Board may exclude posting contractual or other information on the website on a case-by-case basis when necessary to protect national security or to protect information that is not subject to disclosure under sections 552 and 552a of title 5, United States Code.

F. Protecting State and Local Government and Contractor Whistleblowers.

The requirements of Section 1553 of the Act are summarized below. They include, but are not limited to:

Prohibition on Reprisals: An employee of any non-Federal employer receiving covered funds under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing, including a disclosure made in the ordinary course of an employee's duties, to the Accountability and Transparency Board, an inspector general, the Comptroller General, a member of Congress, a State or Federal regulatory or law enforcement agency, a person with supervisory authority over the employee (or other person working for the employer who has the authority to investigate, discover or terminate misconduct), a court or grant jury, the head of a Federal agency, or their representatives information that the employee believes is evidence of:

- gross management of an agency contract or grant relating to covered funds;
- a gross waste of covered funds;
- a substantial and specific danger to public health or safety related to the implementation or use of covered funds;
- an abuse of authority related to the implementation or use of covered funds; or
- as violation of law, rule, or regulation related to an agency contract (including the competition for or negotiation of a contract) or grant, awarded or issued relating to covered funds.

Agency Action: Not later than 30 days after receiving an inspector general report of an alleged reprisal, the head of the agency shall determine whether there is sufficient basis to conclude that the non-Federal employer has subjected the employee to a prohibited reprisal. The agency shall either issue an order denying relief in whole or in part or shall take one or more of the following actions:

- Order the employer to take affirmative action to abate the reprisal.
- Order the employer to reinstate the person to the position that the person held before the reprisal, together with compensation including back pay, compensatory damages, employment benefits, and other terms and conditions of employment that would apply to the person in that position if the reprisal had not been taken.
- Order the employer to pay the employee an amount equal to the aggregate amount of all costs and expenses (including attorneys' fees and expert witnesses' fees) that were reasonably incurred by the employee for or in connection with, bringing the complaint regarding the reprisal, as determined by the head of a court of competent jurisdiction.

Nonenforceablity of Certain Provisions Waiving Rights and remedies or Requiring Arbitration: Except as provided in a collective bargaining agreement, the rights and remedies provided to aggrieved employees by this section may not be waived by any agreement, policy, form, or condition of employment, including any predispute arbitration agreement. No predispute arbitration agreement shall be valid or enforceable if it requires arbitration of a dispute arising out of this section.

Requirement to Post Notice of Rights and Remedies: Any employer receiving covered funds under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, shall post notice of the rights and remedies as required therein. (Refer to section 1553 of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, www.Recovery.gov, for specific requirements of this section and prescribed language for the notices.).

G. Request for Reimbursement

RESERVED

H. False Claims Act

Recipient and sub-recipients shall promptly refer to the DOE or other appropriate Inspector General any credible evidence that a principal, employee, agent, contractor, sub-grantee, subcontractor or other person has submitted a false claim under the False Claims Act or has committed a criminal or civil violation of laws pertaining to fraud, conflict of interest, bribery, gratuity or similar misconduct involving those funds.

I. Information in Support of Recovery Act Reporting

Recipient may be required to submit backup documentation for expenditures of funds under the Recovery Act including such items as timecards and invoices. Recipient shall provide copies of backup documentation at the request of the Contracting Officer or designee.

J. Availability of Funds

Funds appropriated under the Recovery Act and obligated to this award are available for reimbursement of costs until September 30, 2015.

29. REPORTING AND REGISTRATION REQUIREMENTS UNDER SECTION 1512 OF THE RECOVERY ACT

(a) This award requires the recipient to complete projects or activities which are funded under the American Recovery and Reinvestment Act of 2009 (Recovery Act) and to report on use of Recovery Act funds provided through this award. Information from these reports will be made available to the public.

(b) The reports are due no later than ten calendar days after each calendar quarter in which the Recipient receives the assistance award funded in whole or in part by the Recovery Act.

(c) Recipients and their first-tier subrecipients must maintain current registrations in the Central Contractor Registration (*http://www.ccr.gov*) at all times during which they have active federal awards funded with Recovery Act funds. A Dun and Bradstreet Data Universal Numbering System (DUNS) Number (*http://www.dnb.com*) is one of the requirements for registration in the Central Contractor Registration.

(d) The recipient shall report the information described in section 1512(c) of the Recovery Act using the reporting instructions and data elements that will be provided online at *http://www.FederalReporting.gov* and ensure that any information that is pre-filled is corrected or updated as needed.

30. REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS – SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

If the Recipient determines at any time that any construction, alteration, or repair activity on a public building or public works will be performed during the course of the project, the Recipient shall notify the Contracting Officer prior to commencing such work and the following provisions shall apply.

(a) *Definitions.* As used in this award term and condition—

(1) *Manufactured good* means a good brought to the construction site for incorporation into the building or work that has been—

(i) Processed into a specific form and shape; or

(ii) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

(2) *Public building and public work* means a public building of, and a public work of, a governmental entity (the United States; the District of Columbia; commonwealths, territories, and minor outlying islands of the United States; State and local governments; and multi-State, regional, or interstate entities which have governmental functions). These buildings and works may include, without limitation, bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals, and the construction, alteration, maintenance, or repair of such buildings and works.

(3) *Steel* means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.

(b) *Domestic preference.* (1) This award term and condition implements Section 1605 of the American Recovery and Reinvestment Act of 2009 (Recovery Act) (Pub. L. 111–5), by requiring that all iron, steel, and manufactured goods used in the project are produced in the United States except as provided in paragraph (b)(3) of this section and condition.

(2) This requirement does not apply to the material listed by the Federal Government as follows:

None

(3) The award official may add other iron, steel, and/or manufactured goods to the list in paragraph (b)(2) of this section and condition if the Federal Government determines that—

(i) The cost of the domestic iron, steel, and/or manufactured goods would be unreasonable. The cost of domestic iron, steel, or manufactured goods used in the project is unreasonable when the cumulative cost of such material will increase the cost of the overall project by more than 25 percent;

(ii) The iron, steel, and/or manufactured good is not produced, or manufactured in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(iii) The application of the restriction of section 1605 of the Recovery Act would be inconsistent with the public interest.

(c) *Request for determination of inapplicability of Section 1605 of the Recovery Act* . (1)(i) Any recipient request to use foreign iron, steel, and/or manufactured goods in accordance with paragraph (b)(3) of this section shall include adequate information for Federal Government evaluation of the request, including—

(A) A description of the foreign and domestic iron, steel, and/or manufactured goods;

(B) Unit of measure;

(C) Quantity;

(D) Cost;

(E) Time of delivery or availability;

(F) Location of the project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign iron, steel, and/or manufactured goods cited in accordance with paragraph (b)(3) of this section.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed cost comparison table in the format in paragraph (d) of this section.

(iii) The cost of iron, steel, and/or manufactured goods material shall include all delivery costs to the construction site and any applicable duty.

(iv) Any recipient request for a determination submitted after Recovery Act funds have been obligated for a project for construction, alteration, maintenance, or repair shall explain why the recipient could not reasonably foresee the need for such determination and could not have requested the determination before the funds were obligated. If the recipient does not submit a satisfactory explanation, the award official need not make a determination.

(2) If the Federal Government determines after funds have been obligated for a project for construction, alteration, maintenance, or repair that an exception to section 1605 of the Recovery Act applies, the award official will amend the award to allow use of the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is nonavailability or public interest, the amended award shall reflect adjustment of the award amount, redistribution of budgeted funds, and/or other actions taken to cover costs associated with acquiring or using the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is the unreasonable cost of the domestic iron, steel, or manufactured goods, the award official shall adjust the award amount or redistribute budgeted funds by at least the differential established in 2 CFR 176.110(a).

(3) Unless the Federal Government determines that an exception to section 1605 of the Recovery Act applies, use of foreign iron, steel, and/or manufactured goods is noncompliant with section 1605 of the American Recovery and Reinvestment Act.

(d) *Data.* To permit evaluation of requests under paragraph (b) of this section based on unreasonable cost, the Recipient shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Items Cost Comparison

Description	Unit of measure	Quantity	Cost (dollars)*
Item 1:			
Foreign steel, iron, or manufactured good	_____	_____	_____
Domestic steel, iron, or manufactured good	_____	_____	_____
Item 2:			
Foreign steel, iron, or manufactured good	_____	_____	_____
Domestic steel, iron, or manufactured good	_____	_____	_____

List name, address, telephone number, email address, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

*Include all delivery costs to the construction site.

31. REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS (COVERED UNDER INTERNATIONAL AGREEMENTS) – SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

(a) *Definitions.* As used in this award term and condition—

Designated country — (1) A World Trade Organization Government Procurement Agreement country (Aruba, Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom;

(2) A Free Trade Agreement (FTA) country (Australia, Bahrain, Canada, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Mexico, Morocco, Nicaragua, Oman, Peru, or Singapore); or

(3) A United States-European Communities Exchange of Letters (May 15, 1995) country: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, and United Kingdom.

Designated country iron, steel, and/or manufactured goods — (1) Is wholly the growth, product, or manufacture of a designated country; or

(2) In the case of a manufactured good that consist in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different manufactured good distinct from the materials from which it was transformed.

Domestic iron, steel, and/or manufactured good — (1) Is wholly the growth, product, or manufacture of the United States; or

(2) In the case of a manufactured good that consists in whole or in part of materials from another country, has been substantially transformed in the United States into a new and different manufactured good distinct from the materials from which it was transformed. There is no requirement with regard to the origin of components or subcomponents in manufactured goods or products, as long as the manufacture of the goods occurs in the United States.

Foreign iron, steel, and/or manufactured good means iron, steel and/or manufactured good that is not domestic or designated country iron, steel, and/or manufactured good.

Manufactured good means a good brought to the construction site for incorporation into the building or work that has been—

(1) Processed into a specific form and shape; or

(2) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

Public building and *public work* means a public building of, and a public work of, a governmental entity (the United States; the District of Columbia; commonwealths, territories, and minor outlying islands of the United States; State and local governments; and multi-State, regional, or interstate entities which have governmental functions). These buildings and works may include, without limitation, bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals, and the construction, alteration, maintenance, or repair of such buildings and works.

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.

(b) *Iron, steel, and manufactured goods.* (1) The award term and condition described in this section implements—

(i) Section 1605(a) of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111–5) (Recovery Act), by requiring that all iron, steel, and manufactured goods used in the project are produced in the United States; and

(ii) Section 1605(d), which requires application of the Buy American requirement in a manner consistent with U.S. obligations under international agreements. The restrictions of section 1605 of the Recovery Act do not apply to designated country iron, steel, and/or manufactured goods.

The Buy American requirement in section 1605 shall not be applied where the iron, steel or manufactured goods used in the project are from a Party to an international agreement that obligates the recipient to treat the goods and services of that Party the same as domestic goods and services. This obligation shall only apply to projects with an estimated value of $7,443,000 or more.

(2) The recipient shall use only domestic or designated country iron, steel, and manufactured goods in performing the work funded in whole or part with this award, except as provided in paragraphs (b)(3) and (b)(4) of this section.

(3) The requirement in paragraph (b)(2) of this section does not apply to the iron, steel, and manufactured goods listed by the Federal Government as follows:

None

(4) The award official may add other iron, steel, and manufactured goods to the list in paragraph (b)(3) of this section if the Federal Government determines that—

(i) The cost of domestic iron, steel, and/or manufactured goods would be unreasonable. The cost of domestic iron, steel, and/or manufactured goods used in the project is unreasonable when the cumulative cost of such material will increase the overall cost of the project by more than 25 percent;

(ii) The iron, steel, and/or manufactured good is not produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality; or

(iii) The application of the restriction of section 1605 of the Recovery Act would be inconsistent with the public interest.

(c) *Request for determination of inapplicability of section 1605 of the Recovery Act or the Buy American Act.* (1)(i) Any recipient request to use foreign iron, steel, and/or manufactured goods in accordance with paragraph (b)(4) of this section shall include adequate information for Federal Government evaluation of the request, including—

(A) A description of the foreign and domestic iron, steel, and/or manufactured goods;

(B) Unit of measure;

(C) Quantity;

(D) Cost;

(E) Time of delivery or availability;

(F) Location of the project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign iron, steel, and/or manufactured goods cited in accordance with paragraph (b)(4) of this section.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed cost comparison table in the format in paragraph (d) of this section.

(iii) The cost of iron, steel, or manufactured goods shall include all delivery costs to the construction site and any applicable duty.

(iv) Any recipient request for a determination submitted after Recovery Act funds have been obligated for a project for construction, alteration, maintenance, or repair shall explain why the recipient could not reasonably foresee the need for such determination and could not have requested the determination before the funds were obligated. If the recipient does not submit a satisfactory explanation, the award official need not make a determination.

(2) If the Federal Government determines after funds have been obligated for a project for construction, alteration, maintenance, or repair that an exception to section 1605 of the Recovery Act applies, the award official will amend the award to allow use of the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is nonavailability or public interest, the amended award shall reflect adjustment of the award amount, redistribution of budgeted funds, and/or other appropriate actions taken to cover costs associated with acquiring or using the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is the unreasonable cost of the domestic iron, steel, or manufactured goods, the award official shall adjust the award amount or redistribute budgeted funds, as appropriate, by at least the differential established in 2 CFR 176.110(a).

(3) Unless the Federal Government determines that an exception to section 1605 of the Recovery Act applies, use of foreign iron, steel, and/or manufactured goods other than designated country iron, steel, and/or manufactured goods is noncompliant with the applicable Act.

(d) *Data.* To permit evaluation of requests under paragraph (b) of this section based on unreasonable cost, the applicant shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Items Cost Comparison

Description	Unit of measure	Quantity	Cost (dollars)*
Item 1:			
Foreign steel, iron, or manufactured good	_____	_____	_____
Domestic steel, iron, or manufactured good	_____	_____	_____
Item 2:			
Foreign steel, iron, or manufactured good	_____	_____	_____
Domestic steel, iron, or manufactured good	_____	_____	_____

List name, address, telephone number, email address, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

*Include all delivery costs to the construction site.

32. RECOVERY ACT TRANSACTIONS LISTED IN SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND RECIPIENT RESPONSIBILITIES FOR INFORMING SUBRECIPIENTS

(a) To maximize the transparency and accountability of funds authorized under the American Recovery and Reinvestment Act of 2009 (Pub. L. 111–5) (Recovery Act) as required by Congress and in accordance with 2 CFR 215.21 "Uniform Administrative Requirements for Grants and Agreements" and OMB Circular A–102 Common Rules provisions, recipients agree to maintain records that identify adequately the source and application of Recovery Act funds. OMB Circular A–102 is available at *http://www.whitehouse.gov/omb/circulars/a102/a102.html.*

(b) For recipients covered by the Single Audit Act Amendments of 1996 and OMB Circular A–133, "Audits of States, Local Governments, and Non-Profit Organizations," recipients agree to separately identify the expenditures for Federal awards under the Recovery Act on the Schedule of Expenditures of Federal Awards (SEFA) and the Data Collection Form (SF–SAC) required by OMB Circular A–133. OMB Circular A–133 is available at *http://www.whitehouse.gov/omb/circulars/a133/a133.html.* This shall be accomplished by identifying expenditures for Federal awards made under the Recovery Act separately on the SEFA, and as separate rows under Item 9 of Part III on the SF–SAC by CFDA number, and inclusion of the prefix "ARRA-" in identifying the name of the Federal program on the SEFA and as the first characters in Item 9d of Part III on the SF–SAC.

(c) Recipients agree to separately identify to each subrecipient, and document at the time of subaward and at the time of disbursement of funds, the Federal award number, CFDA number, and amount of Recovery Act funds. When a recipient awards Recovery Act funds for an existing program, the information furnished to subrecipients shall distinguish the subawards of incremental Recovery Act funds from regular subawards under the existing program.

(d) Recipients agree to require their subrecipients to include on their SEFA information to specifically identify Recovery Act funding similar to the requirements for the recipient SEFA described above. This information is needed to allow the recipient to properly monitor subrecipient expenditure of ARRA funds as well as oversight by the Federal awarding agencies, Offices of Inspector General and the Government Accountability Office.

33. WAGE RATE REQUIREMENTS UNDER SECTION 1606 OF THE RECOVERY ACT

(a) Section 1606 of the Recovery Act requires that all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to the Recovery Act shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code.

Pursuant to Reorganization Plan No. 14 and the Copeland Act, 40 U.S.C. 3145, the Department of Labor has issued regulations at 29 CFR parts 1, 3, and 5 to implement the Davis-Bacon and related Acts. Regulations in 29 CFR 5.5 instruct agencies concerning application of the standard Davis-Bacon contract clauses set forth in that section. Federal agencies providing grants, cooperative agreements, and loans under the Recovery Act shall ensure that the standard Davis-Bacon contract clauses found in 29 CFR 5.5(a) are incorporated in any resultant covered contracts that are in excess of $2,000 for construction, alteration or repair (including painting and decorating).

(b) For additional guidance on the wage rate requirements of section 1606, contact your awarding agency. Recipients of grants, cooperative agreements and loans should direct their initial inquiries concerning the application of Davis-Bacon requirements to a particular federally assisted project to the Federal agency funding the project. The Secretary of Labor retains final coverage authority under Reorganization Plan Number 14.

34. DAVIS BACON ACT AND CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

If the Recipient determines at any time that any construction, alteration, or repair activity as defined by 29 CFR 5.2(j) (http://cfr.vlex.com/vid/5-2-definitions-19681309) will be performed during the course of the project, the Recipient shall notify the Contracting Officer prior to commencing such work and the following provisions shall apply. A modification to the award which incorporates the appropriate Davis-Bacon wage rate determination(s) will constitute the Contracting Officer's approval to proceed.

Definitions: For purposes of this provision, "Davis Bacon Act and Contract Work Hours and Safety Standards Act," the following definitions are applicable:

(1) "Award" means any grant, cooperative agreement or technology investment agreement made with Recovery Act funds by the Department of Energy (DOE) to a Recipient. Such Award must require compliance with the labor standards clauses and wage rate requirements of the Davis-Bacon Act (DBA) for work performed by all laborers and mechanics employed by Recipients (other than a unit of State or local government whose own employees perform the construction) Subrecipients, Contractors, and subcontractors.

(2) "Contractor" means an entity that enters into a Contract. For purposes of these clauses, Contractor shall include (as applicable) prime contractors, Recipients, Subrecipients, and Recipients' or Subrecipients' contractors, subcontractors, and lower-tier subcontractors. "Contractor" does not mean a unit of State or local government where construction is performed by its own employees."

(3) "Contract" means a contract executed by a Recipient, Subrecipient, prime contractor, or any tier subcontractor for construction, alteration, or repair. It may also mean (as applicable) (i) financial assistance instruments such as grants, cooperative agreements, technology investment agreements, and loans; and, (ii) Sub awards, contracts and subcontracts issued under financial assistance agreements. "Contract" does not mean a financial assistance instrument with a unit of State or local government where construction is performed by its own employees.

(4) "Contracting Officer" means the DOE official authorized to execute an Award on behalf of DOE and who is responsible for the business management and non-program aspects of the financial assistance process.

(5) "Recipient" means any entity other than an individual that receives an Award of Federal funds in the form of a grant, cooperative agreement, or technology investment agreement directly from the Federal Government and is financially accountable for the use of any DOE funds or property, and is legally responsible for carrying out the terms and conditions of the program and Award.

(6) "Subaward" means an award of financial assistance in the form of money, or property in lieu of money, made under an award by a Recipient to an eligible Subrecipient or by a Subrecipient to a lower-tier subrecipient. The term includes financial assistance when provided by any legal agreement, even if the agreement is called a contract, but does not include the Recipient's procurement of goods and services to carry out the program nor does it include any form of assistance which is excluded from the definition of "Award" above.

(7) "Subrecipient" means a non-Federal entity that expends Federal funds received from a Recipient to carry out a Federal program, but does not include an individual that is a beneficiary of such a program.

(a) Davis Bacon Act

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and, without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, *provided* that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The Contracting Officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the Contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination;

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this Contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *provided* that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The Department of Energy or the Recipient or Subrecipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this Contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the Contract, the Department of Energy, Recipient, or Subrecipient, may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in

providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii) (A) The Contractor shall submit weekly for each week in which any Contract work is performed a copy of all payrolls to the Department of Energy if the agency is a party to the Contract, but if the agency is not such a party, the Contractor will submit the payrolls to the Recipient or Subrecipient (as applicable), applicant, sponsor, or owner, as the case may be, for transmission to the Department of Energy. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead, the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Department of Energy if the agency is a party to the Contract, but if the agency is not such a party, the Contractor will submit them to the Recipient or Subrecipient (as applicable), applicant, sponsor, or owner, as the case may be, for transmission to the Department of Energy, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the Recipient or Subrecipient (as applicable), applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the Contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 3729 of title 31 of the United States Code.

(iii) The Contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Department of Energy or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees—

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State

Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the

Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The Contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this Contract.

(6) Contracts and Subcontracts. The Recipient, Subrecipient, the Recipient's, and Subrecipient's contractors and subcontractor shall insert in any Contracts the clauses contained herein in(a)(1) through (10) and such other clauses as the Department of Energy may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Recipient shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of the paragraphs in this clause.

(7) Contract termination: debarment. A breach of the Contract clauses in 29 CFR 5.5 may be grounds for termination of the Contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this Contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Recipient, Subrecipient, the Contractor (or any of its subcontractors), and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this Contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The Department of Energy or the Recipient or Subrecipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or

subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Contracts and Subcontracts. The Recipient, Subrecipient, and Recipient's and Subrecipient's contractor or subcontractor shall insert in any Contracts, the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Recipient shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(5) The Contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the Contract for all laborers and mechanics, including guards and watchmen, working on the Contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records to be maintained under this paragraph shall be made available by the Contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Department of Energy and the Department of Labor, and the Contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

(c) Recipient Responsibilities for Davis Bacon Act

(1) On behalf of the Department of Energy (DOE), Recipient shall perform the following functions:

(i) Obtain, maintain, and monitor all Davis Bacon Act (DBA) certified payroll records submitted by the Subrecipients and Contractors at any tier under this Award;

(ii) Review all DBA certified payroll records for compliance with DBA requirements, including applicable DOL wage determinations;

(iii) Notify DOE of any non-compliance with DBA requirements by Subrecipients or Contractors at any tier, including any non-compliances identified as the result of reviews performed pursuant to paragraph (ii) above;

(iv) Address any Subrecipient and any Contractor DBA non-compliance issues; if DBA non-compliance issues cannot be resolved in a timely manner, forward complaints, summary of investigations and all relevant information to DOE;

(v) Provide DOE with detailed information regarding the resolution of any DBA non-compliance issues;

(vi) Perform services in support of DOE investigations of complaints filed regarding noncompliance by Subrecipients and Contractors with DBA requirements;

(vii) Perform audit services as necessary to ensure compliance by Subrecipients and Contractors with DBA requirements and as requested by the Contracting Officer; and

(viii) Provide copies of all records upon request by DOE or DOL in a timely manner.

(d) Rates of Wages

The minimum wages to be paid laborers and mechanics under this award involved in performance of work at the project site, as determined by the Secretary of Labor to be prevailing for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the pertinent locality, are found at http://www.wdol.gov/, by clicking on "Selecting DBA WDs". The Wage Determination Number(s) and General Decision Number(s) specific to this award are found below. These wage rates are minimum rates and are not intended to represent the actual wage rates that the Contractor may have to pay.

CONSTRUCTION TYPE	WAGE DETERMINATION NUMBER	GENERAL DECISION NUMBER
Building	TX53; FL121; FL45; MD1	TX080053 01/22/2010 TX53; FL080121 02/12/2010 FL121; FL080045 02/12/2010 FL45; MD080001 02/12/2010 MD1

35. REOPENER TERM – PENDING INDIRECT RATES – FINANCIAL ASSISTANCE

(a) At the time the total budget cost for this award was established, agreement could not be reached on indirect rates. However, agreement was reached on a total estimated budget cost that includes a dollar amount for indirect costs and this amount is subject to adjustment in accordance with the provisions of this term and other administrative provisions of the award.

(b) By June 1, 2010 you shall submit an indirect rate proposal to the Contracting Officer and Cognizant Auditor for determination of a provisional billing rate.

(c) If the approved provisional billing rates result in amounts for indirect costs that are substantially lower the amount budgeted, you agree to commence negotiations to revise the budget and the total estimated cost for this award.

(d) Should you fail to submit the information in paragraph (b), or should there be no agreement as to the amount of the adjustment contemplated by this term, then the Contracting Officer may make a unilateral determination and modify the award accordingly.

36. CONTINGENCY

(a) Contingency Requirement. A minimum amount of Contingency is required for awards selected under Funding Opportunity Announcement DE-FOA-0000096. "Contingency" is defined in the Appendix as: "a provision in the Project Management Plan to mitigate cost and/or schedule risk." Contingency funds must be (a) liquid, (b) immediately available, and (c) unrestricted funds dedicated exclusively to the Project for the purpose of mitigating project performance baseline risk. Contingency funds may come from a variety of sources, as approved by the Contracting Officer on a case-by-case basis in accordance with the Appendix to these Terms and Conditions (Attachment 5).

(b) Minimum Amount of Contingency. Initial Contingency funds shall be not less than 25 percent of the Total Project Cost that begins with Budget Period 2, as more specifically described in Section B(2) of the Appendix to these Special Terms and Conditions (Attachment 5).

(c) Contingency Not Counted Toward Cost Share or DOE Reimbursement. Contingency is in addition to the Total Project Cost and cannot count toward cost share or result in reimbursement by DOE above the share approved in the award.

(d) Appendix. All of the terms and conditions set forth in this provision shall be further subject to the requirements and clarifications of Attachment 5.

PMC 128.1
06-18-2009

U.S. Department of Energy
Project Management Center

FINANCIAL ASSISTANCE AWARD
INDEX and CHECKLIST
(BUYER USE ONLY)

Award #:	**DE-EE0002867 / 001 - Budget Period 1**	**Program:**	The Office of the Biomass Program
Recipient Name:	**Algenol Biofuels, Inc.**		
FOA #:	**DE-FOA-0000096**		
Specialist:	**Molly Hames**	**Phone:**	303-275-4864
Contracting Officer:	**Michael Schledorn**	**Phone:**	303-275-4993
Project Officer:	**Christy Sterner**	**Phone:**	303-275-4720

ction Item	*Indicate Completion of Action Item by inserting a date in the applicable box below*	
1	Verify Recipient's registration with the Central Contractor Registration (CCR) (http://www.ccr.gov)	CCR Registration Valid through: 06/23/2010
2	Verify Recipient's registration with FedConnect (goto P:\STRIPES\Fedconnect Reports)	Registration Confirmed on: 03/15/2010
3	ASAP Enrollment; if Recipient is not enrolled in ASAP, send .pdf of completed PMC 121.1 to 'GO Finance' mailbox	PMC 121.1 sent to 'GO Finance' on: N/A
4	Vendor Supplier/Site Information Form; send completed PMC 128.8 to 'GO Finance' mailbox (MS 2007)	Vendor Supplier/Site Information Form sent to 'GO Finance' on: N/A

STRIPES Index #	Supporting Document		Form #	applicable	not applicable	Supporting Document Naming Convention	pdf. required
AWD-001	Award Index and Checklist		PMC 128.1	X		**AWD-001 AWDChecklist**	
AWD-002	Selection Statement		n/a		X	**AWD-002 SelStat**	.pdf
AWD-003	Determination of Non-Competitive Financial Assistance (DNFA) Documentation (include Request for Review PMC.112.2)		PMC 109.x		X	**AWD-003 DNFADocs**	batch .pdf
AWD-004	HCA Approval (Total Project Value greater than $25M and less than $50M) (include Request for Review PMC.112.2)		n/a	X		**AWD-004 HCAApvl**	.pdf
AWD-005	HQ Business Clearance Documentation (Total Project Value greater than or equal to $50M)						
	AWD-005a	HQ Business Clearance Worksheet	PMC 107.1	X		**AWD-005 HQBusClrDocs**	batch .pdf
	AWD-005b	HQ Business Clearance Transmittal Letter(s)	PMC 107.4	X			
	AWD-005c	HQ Business Clearance; Correspondence received from HQ	n/a	X			
AWD-006	Congressional Affairs Notification		DOE F 4220.10		X	**AWD-006CongNotification**	.pdf
AWD-007	Successful Application Documentation (Prime) - Algenol Biofuels, Inc.						
	AWD-007a	Application for Federal Assistance	SF-424		X	**AWD-007a AppDocsPrime (Algenol)**	batch .pdf
		SF424A Budget Information	SF-424A	X			
		Budget Justification	PMC 123.1	X			
		Disclosure of Lobbying Activities	SF-LLL		X		
		Cost Share Commitment Ltrs from Third Parties	n/a	X			
	Successful Application Documentation (Sub #1) Georgia Institute of Technology						
	AWD-007b	SF-424A Budget Information	SF-424A	X		**AWD-007b AppDocsSub [GA Tech]**	batch .pdf
		Budget Justification	PMC 123.1	X			
	Successful Application Documentation (Sub #2) Membrane Technology and Research, Inc.						
	AWD-007c	SF-424A Budget Information	SF-424A	X		**AWD-007c AppDocsSub [MTR]**	batch .pdf
		Budget Justification	PMC 123.1	X			
	Successful Application Documentation (Sub #3) The Dow Chemical Company						
	AWD-007d	SF-424A Budget Information	SF-424A	X		**AWD-007d AppDocsSub [Dow]**	batch .pdf
		Budget Justification	PMC 123.1	X			
	Successful Application Documentation (Sub #4) National Renewable Energy Laboratory (NREL)						
		SF-424A Budget Information	SF-424A	X			

STRIPES Index #	Supporting Document		Form #	applicable	not applicable	Supporting Document Naming Convention	pdf. required
	AWD-007e	Budget Justification	PMC 123.1	X		AWD-007e AppDocsSub [NREL]	batch .pdf
		Authorization for non-DOE or DOE FFRDCs	n/a	X			
AWD-008	National Environmental Policy Act (NEPA) Documentation						
	AWD-008a	NEPA Checklist	EF-1	X		AWD-008 NEPADocs	batch .pdf
	AWD-008b	NEPA Review	EF-2	X			
	AWD-008c	NEPA Determination	EF-2a	X			
AWD-009	Pre-Award Information Sheet		PMC 121.1	X		AWD-009 PreAwardInfo	.pdf
AWD-010	Dun&Bradstreet Risk Assessment		PMC 460.2		X	AWD-010 D&BAssessment	.pdf
AWD-011	Combined Technical Evaluation / Negotiation Memorandum		PMC 120.2	X		AWD-011 TechEvalNegMem	.pdf
AWD-012	Intellectual Property Law Division (IPLD) Documentation						
	AWD-012a	IPLD Petition for Advance Waiver of Patent Rights	PMC 133.2		X	AWD-012 IPLDDocs	batch .pdf
	AWD-012b	IPLD Pre-Award Review Request	PMC 133.3	X			
	AWD-012c	IPLD Recommendation	e-mail	X			
	AWD-012d	IPLD Limited Rights Data and Restricted Computer Software	n/a	X			
AWD-013	Cost Share Determination Documentation						
	AWD-013a	Cost Share Determination	PMC 112.2		X	AWD-013a CostShareDet	.pdf
	AWD-013b	Cost Share Waiver	PMC 142.2		X	AWD-013b CostShareWaiver	.pdf
AWD-014	Cost / Price Documentation						
	AWD-014a	Financial Information	PMC 410.1		X	AWD-014 CostPriceDocs	batch .pdf
	AWD-014b	Indirect Rate Agreement or Rate Proposal	n/a		X		
	AWD-014c	Response from C/P Analyst regarding Indirect Rates	PMC 420.3		X		
AWD-015	Excluded Parties List System (EPLS) Query (https://www.epls.gov)		n/a	X		AWD-015 EPLS	
AWD-016	Pre-Award Cost Request and Authorization		n/a		X	AWD-016 PreAwdCostAuth	.pdf
AWD-017	Justification for Use of Conditional Availability of Funds Provision		PMC 132.2		X	AWD-017 JustificationCondAvail	.pdf
AWD-018	Correspondence to Recipients (use this section for correspondence not issued at FOA level)						
	AWD-018a	Correspondence			X	AWD-018a Correspondence	batch .pdf
AWD-019	Internal Review(s)						
	AWD-019a	Request for Review (Review of Award Package)	PMC 112.2	X		AWD-019a RvwAwdPkg	.pdf
	AWD-019b	HCA Approval and Business Clearance	n/a	X		AWD-019b DDRvw	.pdf
AWD-020	Deviations		n/a		X	AWD-020 GuideLtr	.pdf
Cover Page	Assistance Agreement Form		n/a	X			
Body	Special Terms and Conditions		n/a	X			
\ttachment 1	Intellectual Property Provisions		n/a	X			
Attachment 2	Statement of Project Objectives		n/a	X			
Attachment 3	Federal Assistance Reporting Checklist and Instructions		DOE F 4600.2	X			
Attachment 4	Budget Information		n/a	X			
Attachment 5	Congintency Appendix		n/a	X			

Hames, Molly

From: Wise, Melissa
Sent: Thursday, March 18, 2010 8:41 AM
To: DL OAFA RE Financial Assistance Div Biomass Program
Subject: FW: IP Approval_Business Clearance waiver for IBRs

Team,

REDACTED
EXEMPTION 5
- deliberative process
- attorney/client privelege

Thanks,
Melissa

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

From: Gottlieb, Paul <Paul.Gottlieb@hq.doe.gov>
To: Moody, Julia
Cc: Field, Linda (Hq)
Sent: Thu Mar 18 07:39:04 2010
Subject: RE: Business Clearance waiver for IBRs

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privelege

Paul Gottlieb
Assistant General Counsel
for Technology Transfer & Intellectual Property
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585
202-586-3439 (fax 2805)
Paul.Gottlieb@HQ.DOE.GOV
http://www.gc.doe.gov/intellectual prop lab partner.htm

From: Moody, Julia [mailto:julia.moody@go.doe.gov]
Sent: Thursday, March 18, 2010 9:28 AM
To: Gottlieb, Paul
Subject: Re: Business Clearance waiver for IBRs

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privelege

This message was sent from
a Blackberry Handheld Device
****
Golden Field Office

----- Original Message -----
From: Gottlieb, Paul <Paul.Gottlieb@hq.doe.gov>
To: Moody, Julia
Cc: Field, Linda (Hq)
Sent: Thu Mar 18 05:37:26 2010
Subject: RE: Business Clearance waiver for IBRs

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privelege

Paul Gottlieb
Assistant General Counsel
for Technology Transfer & Intellectual Property
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585
202-586-3439 (fax 2805)
Paul.Gottlieb@HQ.DOE.GOV
http://www.gc.doe.gov/intellectual prop lab partner.htm

-----Original Message-----
From: Moody, Julia [mailto:julia.moody@go.doe.gov]
Sent: Wednesday, March 17, 2010 4:21 PM
To: Gottlieb, Paul
Subject: Business Clearance waiver for IBRs

Paul,

REDACTED
EXEMPTION 5

- deliberative process
- attorney-client privelege

Julia Cook Moody
Deputy Chief Counsel
for Intellectual Property
U.S. Department of Energy
Golden Field Office

(303) 275-4867

PMC 138.1
12/05

U.S. Department of Energy

Memorandum To File

DATE: **March 22, 2010**

FROM: Melissa Wise MW

SUBJECT: Modifications to Awards under DE-FOA-0000096, "Recovery Act: Demonstration of Integrated Biorefinery Operations"

Attached is a copy of the Request for Review, PMC 112.2, which was completed for DE-EE0002870/001, Archer Daniels Midland. As all 11 Integrated Biorefinery awards are substantially the same in award construction and preparation to include the Special Terms and Conditions and Intellectual Property Provisions, DE-EE0002870/001 has been selected to serve as the representative file for the purpose of complying with the requirement for Legal and Division Director Reviews of modifications to lift conditions from ARRA awards with total estimated costs equal to or greater than $25,000,000. All corrections and modification identified for DE-EE0002870/001 will be adopted for inclusion in all Integrated Biorefinery awards.

Your signature on the PMC 112.2 and below will also constitute approval of the remaining 10 Integrated Biorefinery awards.

Derek G. Passarelli
Chief Counsel
Golden Field Office

3/22/10
Date

Matthew A. Barron
Director, Financial Assistance (RE)
Golden Field Office

3/22/10
Date

March 23, 2010

MEMORANDUM FOR: SCOTT HINE
HEAD OF CONTRACTING ACTIVITY
GOLDEN FIELD OFFICE

THROUGH: MATTHEW A. BARRON
FINANCIAL ASSISTANCE DIRECTOR
OFFICE OF ACQUISITION AND FINANCIAL ASSISTANCE

FROM: JAMIE HARRIS
ASSISTANT MANAGER
OFFICE OF ACQUISITION AND FINANCIAL ASSISTANCE

SUBJECT ACTION: REQUEST FOR HCA REVIEW AND APPROVAL OF FINANCIAL ASSISTANCE AWARDS EXCEEDING $25 MILLION, FUNDED THROUGH "RECOVERY ACT: DEMONSTRATION OF INTEGRATED BIOREFINERY OPERATIONS" (DE-FOA-0000096)

ISSUE: In accordance with the Memo from Rita L. Wells dated December 29, 2009, regarding the "Review and Approval of Financial Assistance Awards Exceeding $25 Million, Funded through the American Recovery and Reinvestment Act of 2009 (ARRA)," the HCA reserves the right to further exercise delegated authority to approve the individual award terms and conditions upon successful completion of award definitization.

BACKGROUND: The following conditional awards under DE-FOA-0000096, "Recovery Act: Demonstration of Integrated Biorefinery Operations" were granted HCA Approval:

- Algenol Biofuels, Inc. DE-EE0002867
- Amyris Biotechnologies, Inc. DE-EE0002869
- Archer Daniels Midland DE-EE0002870
- ClearFuels Technology, Inc. DE-EE0002871
- Haldor Topsoe, Inc. DE-EE0002874
- Solazyme, Inc. DE-EE0002877
- BioEnergy International, LLC DE-EE0002878
- LOGOS TECHNOLOGIES, INC. DE-EE0002881
- Enerkem Corp. DE-EE0002882
- INEOS New Planet BioEnergy, LLC DE-EE0002883

The awards listed above have successfully completed award definitization, and the individual award terms and conditions are now available for your review and approval.

As all awards listed above are substantially the same in award construction and preparation, to include the Special Terms and Conditions and Intellectual Property Provisions, Archer Daniels Midland, DE-EE0002870, has been selected to serve as the representative file for the purpose of complying with the requirement for HCA approval.

SENSITIVIES: These award modifications lift conditions on current ARRA awards, thereby releasing obligated funds and reducing uncosted balances.

POLICY IMPACT: None.

URGENCY: The anticipated issue date of these award modifications is March 31, 2010.

RECOMMENDATION: Receipt of HCA review and approval by March 26, 2010.

APPROVED: _____ DATE: 3/25/10

Scott E. Hine
Head of Contracting Activity
for the Golden Field Office

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

December 23, 2009

MEMORANDUM FOR MATTHEW A. BARRON
DIRECTOR
FINANCIAL ASSISTANCE (RE)

IBR Awards

JAMES P. DAMM
DIRECTOR
FINANCIAL ASSISTANCE (EE)

FROM: RITA L. WELLS Rita L Wells
HEAD OF CONTRACTING ACTIVITY (HCA)
GOLDEN FIELD OFFICE

SUBJECT: Review and Approval of Financial Assistance Awards Exceeding $25 Million, Funded through the American Recovery and Reinvestment Act of 2009 (ARRA)

In accordance with the delegated authorities set forth in paragraph 2(A)(ii) of the memorandum dated September 19, 2008, from Edward R. Simpson, Director, Office of Procurement Assistance Management, Subject: Delegation of Authority/Designation as Head of Contracting Activity (HCA) for the Golden Field Office, this Memorandum constitutes HCA review of each conditional award identified in Attachment A that has a total project value exceeding $25 million, and HCA approval of each conditional award with a total project value exceeding $25 million but less than $50 million.

More specifically, this Memorandum constitutes HCA preliminary review and approval of all conditional ARRA financial assistance awards with total project budgets greater than $25 million, scheduled for award by the Golden Field Office on or before January 31, 2010. The conditional nature of these awards is necessitated as a result of unprecedented exigencies dictated by the ARRA. By making these awards on a fully conditional basis, recipient access to ARRA funding will be restricted until such time as the award is fully negotiated. Non-tailored, standard terms and conditions will be incorporated at this time into each of the awards identified on Attachment A. As HCA, I reserve the right to further exercise my delegated authority to approve each of the conditional awards identified on Attachment A, with total project budgets greater than $25 million but less than $50 million, at such time as individual award terms and conditions are fully and successfully negotiated between the Golden Field Office and the recipients, and award definitization is complete.

Federal Recycling Program Printed on Recycled Paper

Attachment A-Recovery Act Awards Scheduled through January 31, 2010 with Total Project Costs > 25 million

Program	Description	Recipient	Federal Share	Cost Share	Award Status
Biomass	Modify Integrated Biorefinery Solicitation	Bluefire	$81,200,000	$223,227,314	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	Enerkem Corporation	$50,000,000	$90,470,217	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	INEOS New Planet BioEnergy,LLC	$50,000,000	$50,000,000	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	Sapphire Energy, Inc	$50,000,000	$85,064,206	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	Amyris Biotechnologies, Inc.	$25,000,000	$6,685,340	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	HALDOR TOPSOE, INC.	$25,000,000	$9,701,468	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	UOP LLC	$25,000,000	$6,685,340	Conditional
Water	Hydroelectric Modernization	Alcoa	$13,000,000	$64,352,334	Conditional
Wind	Large Dynamometer Testing Facility	Clemson University	$44,000,000	$51,072,206	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	Algenol Biofuels Inc.	$25,000,000	$33,915,478	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	LOGOS TECHNOLOGIES, INC.	$20,455,849	$5,113,962	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	Archer Daniels Midland	$24,834,592	$10,946,609	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	American Process Inc.	$17,944,902	$10,148,508	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	BioEnergy International, LLC	$50,000,000	$89,589,188	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	Clearfuels Technology Inc	$23,000,000	$13,433,926	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	ICM, Inc.	$25,000,000	$6,268,136	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	Renewable Energy Institute International	$19,980,930	$5,116,072	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	Solazyme, Inc.	$21,765,738	$3,857,111	Conditional
Biomass	Modify Integrated Biorefinery Solicitation	ZeaChem Inc.	$25,000,000	$48,400,000	Conditional
Geothermal	Enhanced Geothermal Systems	Naknek Electric	$12,376,568	$18,970,500	Conditional

Applicant Name: Algenol Biofuels Inc.

Award Number: DE-EE0002867, 001

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Budget Period 1	81.087			$10,668,902	REDACTED EXEMPTION 4	
2.						
3.						
4.						
5. Totals		$0	$0	$10,668,902		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) BP1	(2)	(3)	(4)	
a. Personnel	REDACTED EXEMPTION 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

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)

Task #	Title	Position Title	Budget Period 1			Budget Period 2			Budget Period 3		
			Time (Hours)	Pay Rate ($/hr)	Total Budget Period 1	Time (Hours)	Pay Rate ($/hr)	Total Budget Period 2	Time (Hours)	Pay Rate ($/hr)	Total Budget Period 3

Exemption 4

b. Fringe Benefits

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

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

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

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

...ditional explanation/comments (as necessary)

The Fringe Benefits rate is based on current actual and adjusted in the future periods for projected hiring salary levels.Currently a larger portion of our employess are senior level and as we expend they will represent a smaller portion of our staff. Since the majority of our fringe benefits is for healthcare insurance, the effect of this demographic change is that fringe benefits will be a higher percent of compensation. Please see the Indirect tab at the end of this file for the Fringe calculation. Fringe Benefits includes medical, dental, childcare reimbursement and payroll taxes.

c. Travel

PLEASE READ!!!

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

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

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

Purpose of travel	No. of Travelers	Depart From (not required for domestic travel)	Destination (not required for domestic travel)	No. of Days	Cost per Traveler	Cost per Trip	Basis for Estimating Costs
Budget Period 1							
Domestic Travel							
EXAMPLE ONLY!!! Visit to PV cell mfr. to set up vendor agreement	2			2	$650	$1,300	Internet prices
Exemption 4	Exemption 4						
Domestic Travel subtotal							
International Travel							
International Travel subtotal							
Budget Period 1 Total							
Budget Period 2							
Domestic Travel							
Exemption 4							

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

Additional Explanations/Comments (as necessary)

In the interest of having a more reader-friendly schedule, column B above represents the number of trips, not the number of travelers on each trip (e.g. Exemption 4

. We anticipated lower hotel rates due to the volume and ability to book in advance. Travel is primarily between Naples, FL and: Baltimore, MD; Freeport,Tx; Midland, MI

d. Equipment

PLEASE READ!!!

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

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

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

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

Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 1					
EXAMPLE ONLY!!! Thermal shock chamber	2	$20,000	$40,000	Vendor Quote	Reliability testing of PV modules- Task 4.3
	0		$0		
	0		$0		
	0		$0		
	0		$0		
	0		$0		
	0		$0		
	0		$0		
Budget Period 1 Total			$0		
Budget Period 2					
	0		$0		
Lab equipment - see attached detail sheet	Exemption 4				
Office equipment and set-up - see attached detail					
Budget Period 2 Total					
Budget Period 3					
	0		$0		

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

Additional Explanations/Comments (as necessary)

At the end of this file there are 2 tabs, one for Lab equipment the other for Office equipment which details the above amounts by item. Basis for quotes include vendor quotes, known actual and catalogs.