

**ASSISTANCE AGREEMENT**

1. Award No. DE-EE0002884		2. Modification No. 007		3. Effective Date 12/29/2009		4. CFDA No. 81.087		
5. Awarded To SAPPHIRE ENERGY, INC. Attn: DAVID BUTTARO SAPPHIRE ENERGY 3115 MERRYFIELD ROW SAN DIEGO CA 921211125				5. Sponsoring Office Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401			7. Period of Performance 12/29/2009 through 09/30/2014	
8. Type of Agreement <input type="checkbox"/> Grant <input checked="" type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Other		9. Authority 109-58, Energy Policy Act 2005 111-5, Recovery Act 2009			10. Purchase Request or Funding Document No. 12EE000075			
11. Remittance Address SAPPHIRE ENERGY, INC. Attn: DAVID BUTTARO SAPPHIRE ENERGY 3115 MERRYFIELD ROW SAN DIEGO CA 921211125				12. Total Amount Govt. Share: \$49,725,000.00  Cost Share : \$ Redacted Exemption 4  Total : \$ Redacted Exemption 4		13. Funds Obligated This action: \$0.00  Total : \$49,725,000.00		
14. Principal Investigator Jaime E. Moreno Phone: 949-202-4700		15. Program Manager Carol Christine Sterner Phone: 720-356-1788			16. Administrator Golden Field Office U.S. Department of Energy Golden Field Office 1617 Cole Blvd. Golden CO 80401-3393			
17. Submit Payment Requests To OR for Golden U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 4517 Oak Ridge TN 37831			18. Paying Office OR for Golden U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 4517 Oak Ridge TN 37831			19. Submit Reports To See Attachment 3		
20. Accounting and Appropriation Data See Schedule								
21. Research Title and/or Description of Project RECOVERY ACT - SAPPHIRE INTEGRATED ALGAL BIOREFINERY (IABR)								
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 Molly Hames		27. Date Signed 10/20/2011		

**CONTINUATION SHEET**

REFERENCE NO. OF DOCUMENT BEING CONTINUED

DE-EE0002884/007

PAGE OF

2 | 3

NAME OF OFFEROR OR CONTRACTOR

SAPPHIRE ENERGY, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>DUNS Number: 798830688</p> <p>The purpose of this modification is to approve Budget Period 2, Phase 1, only. Accordingly, the following changes are made:</p> <p>1) In the Special Terms and Conditions, the following changes:</p> <p>a. Delete and replace the "Award Project Period and Budget Periods" provision;</p> <p>b. Delete and replace the "Cost Sharing" provision;</p> <p>c. Delete and replace the "Rebudgeting and Recovery of Indirect Costs" provision;</p> <p>d. Delete and replace the "Funding of Budget Periods" provision;</p> <p>2) Delete and replace Attachment 2, Statement of Project Objectives; and</p>				
	<p>3) Delete and replace Attachment 4, Budget Information;</p> <p>All other terms and conditions remain unchanged.</p> <p>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 12/29/2009 through 09/30/2014. For multiple Budget Periods, see Special Terms and Conditions, Provision 4, "Award Project Period and Budget Periods."</p> <p>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 \$275,000, which were funded directly.</p> <p>DOE Award Administrator: Molly Hames E-mail: molly.hames@go.doe.gov Phone: 720-356-1552</p> <p>DOE Project Officer: Christy Sterner E-mail: christy.sterner@go.doe.gov Phone: 720-356-1788</p> <p>Recipient Business Officer: Jaime E. Moreno E-mail: jaime.moreno@sapphireenergy.com Phone: 949-202-4700</p> <p>Continued ...</p>				

**CONTINUATION SHEET**

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
DE-EE0002884/007

PAGE OF  
3 | 3

NAME OF OFFEROR OR CONTRACTOR  
SAPPHIRE ENERGY, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Recipient Principal Investigator: Jaime E. Moreno E-mail: jaime.moreno@sapphireenergy.com Phone: 949-202-4700</p> <p>"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: STD IMMEDIATE Extent Competed: COMPETED Davis-Bacon Act: YES</p>				

## STATEMENT OF PROJECT OBJECTIVES

Sapphire Energy, Inc.

Recovery Act - Sapphire Integrated Algal Biorefinery (IABR)

### A. PROJECT OBJECTIVES

The Sapphire IABR project will realize the following objectives:

1. The design and construction of: all required infrastructure, including equipment, design and control methods, for the production of algal oil for green jet fuel and green diesel.
2. The shakedown and testing of: material and energy flows for all processes inputs and product flows and comparison of different process operating conditions, product flow rates and yields from different commercial algal strains against model projections.
3. The establishment of: steady state operations including material and energy balances; plant process design, including operating conditions, cash flow and capital requirements for a full-scale commercial plant capable of producing greater than 150 million gallons of algae oil per year (10,000 barrels per day (bpd)).

### B. PROJECT SCOPE

The Integrated Algal Biorefinery (IABR) will be built in Luna Country, near Columbus, New Mexico. The algae will fix approximately 56 metric tons of Carbon Dioxide (CO<sub>2</sub>) per day and produce, on average, 100 barrels of green crude oil per day, or approximately 1 million gallons per year of finished fuel product. The successful project will demonstrate the technical and economic feasibility of the algae to green fuels process that will form the basis for a series of commercial scale biorefineries.

The project will be executed in three phases of deployment and expansion. Each phase focuses on implementation and demonstration of the project technologies. The phased deployment is part of the project risk mitigation plan.

The first phase will develop the site base infrastructure and will

Redacted Exemption 4

The second phase of technology deployment will implement new pond designs with improved economics of construction and operation as part of the pathway to large scale economic process demonstration. The expansion in Phase 2 will

Redacted Exemption 4

The third phase will deploy extraction technology at full IABR scale by  
Redacted Exemption 4

**C. TASKS TO BE PERFORMED**

<b><u>A</u></b>	<b><u>Process Design</u></b>	-
<b><u>A.1</u></b>	<b><u>Award 1 Preparation</u></b>	-
<b><u>A.1.ML.1</u></b>	<b><u>Risk mitigation plan validation completed - Award 1 (DOE Core)</u></b>	<u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<b><u>A.1.ML.2</u></b>	<b><u>Submission of Award 1 application (DOE Core)</u></b>	<u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<b><u>A.1.ML.3</u></b>	<b><u>Acceptance of Award 1 application (DOE Core)</u></b>	<u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<b><u>A.1.ML.4</u></b>	<b><u>CD-2 Approve Performance Baseline (DOE Core)</u></b>	<u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<b><u>A.1.ML.5</u></b>	<b><u>Release of Award 1 funds (DOE Core)</u></b>	<u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<b><u>A.1.ML.6</u></b>	<b><u>Budget Period -1 Start</u></b>	<u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<b><u>A.2</u></b>	<b><u>Process Definition (Front End Loaded (FEL)-2)</u></b> Engineering, planning and estimation work to refine process diagrams, energy balances, capital and operating expense estimates, equipment list and site general arrangement. Estimation to Class 25 Level.	-
<b><u>A.2.ML.1</u></b>	<b><u>FEL-2 Complete</u></b> Front End Loaded-2 Engineering work complete internal tracking milestone.	<u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<b><u>A.2.ML.2</u></b>	<b><u>30% Design Complete</u></b> Milestone indicating project design has reached 30% design level. Information and design basis supplied to permitting activities to proceed with final permitting activities.	<u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<b><u>A.3</u></b>	<b><u>Site Planning</u></b> Site selection, screening and evaluation of potential locations. Completion of required site due-diligence	-

efforts. Completion of regulatory and permitting requirements review and scope.

<u>A.3.ML.1</u>	<u>Land Purchase Option Executed</u> Project site real property secured.	E - Project Internal Tracking
<u>A.4</u> <u>A.4.GN.1</u>	<u>Task A Stage Gate Evaluation</u> <u>Task A Stage Gate Evaluation</u> Project Stage Gate evaluation.	- GN - Go No/Go Decision
<u>B</u> <u>B.1</u> <u>B.1.ML.1</u>	<u>Front End Engineering</u> <u>Front End Engineering Design (FEL-3)</u> <u>FEL-3 Complete</u> Front End Loaded-3 Engineering work complete internal tracking milestone.	- - E - Project Internal Tracking
<u>B.2</u> <u>B.2.ML.1</u>	<u>Permitting</u> <u>Permitting Complete</u> Permits required to start construction secured.	- E - Project Internal Tracking
<u>B.3</u> <u>B.3.ML.1</u>	<u>National Environmental Policy Act (NEPA)</u> <u>NEPA Finding Issued</u> NEPA process complete and agency NEPA determination issued.	- E - Project Internal Tracking
<u>B.4</u>	<u>Detailed Engineering</u> Final engineering and planning activities to issue project engineering and bid packages for procurement and construction.	-
<u>B.4.ML.1</u>	<u>Completed Facility Design</u> Issued for Bid Package delivered to Construction Management.	E - Project Internal Tracking
<u>B.5</u>	<u>Staging</u> Project site mobilization, pre-construction services (detail survey, earthwork modeling, site construction trailer infrastructure, security, health and safety program), site power connection(s), relocation of utility interferences, well development and pre-grading soil preparation work. Early procurement of critical path long-lead equipment.	E - Project Internal Tracking
<u>B.6</u> <u>B.6.GN.1</u>	<u>Task B Stage Gate Evaluation</u> <u>Task B Stage Gate Evaluation</u> Project Stage Gate evaluation.	- GN - Go No/Go Decision
<u>C</u> <u>C.1</u> <u>C.1.ML.1</u>	<u>Implementation</u> <u>Award 2 Preparation</u> <u>Risk mitigation plan validation completed - Award 2 (DOE Core)</u>	- - E - Project Internal

<u>C.1.ML.2</u>	<u>NEPA approval to proceed (DOE Core)</u>	<u>Tracking</u> <u>E - Project</u> <u>Internal</u>
<u>C.1.ML.3</u>	<u>EPC contract finalized and signed (DOE Core)</u>	<u>Tracking</u> <u>E - Project</u> <u>Internal</u>
<u>C.1.ML.4</u>	<u>Financial Closing (DOE Core)</u>	<u>Tracking</u> <u>E - Project</u> <u>Internal</u>
<u>C.1.ML.5</u>	<u>Define commissioning criteria (DOE Core)</u>	<u>Tracking</u> <u>E - Project</u> <u>Internal</u>
<u>C.1.ML.6</u>	<u>Submission of Award 2 application (DOE Core)</u>	<u>Tracking</u> <u>E - Project</u> <u>Internal</u>
<u>C.1.ML.7</u>	<u>Acceptance of Award 2 application (DOE Core)</u>	<u>Tracking</u> <u>E - Project</u> <u>Internal</u>
<u>C.1.ML.8</u>	<u>CD-3 Approve Start of Construction (DOE Core)</u>	<u>Tracking</u> <u>E - Project</u> <u>Internal</u>
<u>C.1.ML.9</u>	<u>Release of Award 2 funds (DOE Core)</u>	<u>Tracking</u> <u>E - Project</u> <u>Internal</u>
<u>C.1.ML.10</u>	<u>Budget Period-2 Start</u>	<u>Tracking</u> <u>E - Project</u> <u>Internal</u>
<u>C.2</u>	<u>Construction 1 - Technology Deployment 1 (Phase 1)</u> Procurement, Construction and Commissioning of Phase 1 to include site and utilities, buildings and structures,  Redacted Exemption 4	<u>Tracking</u> <u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<u>C.3</u>	<u>Engineering 2 - Technology Deployment 2 (Phase 1)</u> Planning and Engineering of Phase 2 to include expanding the production pond capacity. Includes  Redacted Exemption 4	<u>Tracking</u> <u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<u>C.4</u>	<u>Construction 2 - Technology Deployment 2 (Phase 2)</u> Procurement, Construction and Commissioning of Phase 2 to include Redacted Exemption 4	<u>Tracking</u> <u>E - Project</u> <u>Internal</u> <u>Tracking</u>

<u>C.5</u>	<b><u>Engineering 3 - Technology Deployment 3 (Phase 2)</u></b> Planning and Engineering of Phase 3 to include further Redacted Exemption 4	E - Project <u>Internal</u> <u>Tracking</u>
<u>C.6</u>	<b><u>Construction 3 - Technology Deployment 3 (Phase 3)</u></b> Procurement, Construction and Commissioning of Phase 3 to include Redacted Exemption 4	E - Project <u>Internal</u> <u>Tracking</u>
<u>D</u>	<b><u>Process Demonstration and Evaluation</u></b>	-
<u>D.1</u>	<b><u>Award 3 Preparation (BP2)</u></b>	-
<u>D.1.ML.1</u>	<b><u>CD-4: Initiate Shakedown (DOE Core) (BP2)</u></b>	E - Project <u>Internal</u> <u>Tracking</u>
<u>D.1.ML.2</u>	<b><u>Shakedown complete (DOE Core) (BP2)</u></b>	E - Project <u>Internal</u> <u>Tracking</u>
<u>D.1.ML.3</u>	<b><u>Commissioning - Start of commercial operation</u></b> <b><u>(DOE Core) (BP2)</u></b>	E - Project <u>Internal</u> <u>Tracking</u>
<u>D.1.ML.4</u>	<b><u>Completion of Commissioning Criteria (DOE</u></b> <b><u>Core)(BP2)</u></b>	E - Project <u>Internal</u> <u>Tracking</u>
<u>D.1.ML.5</u>	<b><u>Budget Period-3 Start</u></b>	E - Project <u>Internal</u> <u>Tracking</u>
<u>D.2</u>	<b><u>Process Demonstration 1 - Deployment 1</u></b>	-
<u>D.2.GN.1</u>	<b><u>Stage Gate Evaluation</u></b> Project Stage Gate evaluation.	GN - Go <u>No/Go</u> <u>Decision</u>
<u>D.3</u>	<b><u>Process Demonstration 2 - Deployment 2</u></b>	-
<u>D.3.GN.1</u>	<b><u>Stage Gate Evaluation</u></b> Project Stage Gate evaluation.	GN - Go <u>No/Go</u> <u>Decision</u>
<u>D.4</u>	<b><u>Process Demonstration 3 - Deployment 3</u></b>	-
<u>D.4.GN.1</u>	<b><u>Stage Gate Evaluation</u></b> Project Stage Gate evaluation.	GN - Go <u>No/Go</u> <u>Decision</u>
<u>D.5</u>	<b><u>Operational Data Reporting</u></b> Collection of facility data for process reporting and analysis.	-



<u>D.6</u>	<u>Financial Data Reporting</u> Collection of facility data for economic reporting and analysis.	-
<u>D.7</u>	<u>Task D Stage Gate Evaluation</u>	-
<u>D.7.GN.1</u>	<u>Task D Stage Gate Evaluation</u> Project Close-Out Stage Gate evaluation.	<u>GN - Go</u> <u>No/Go</u> <u>Decision</u>
<u>D.7.ML.4</u>	<u>BP-3 End</u>	<u>E - Project</u> <u>Internal</u> <u>Tracking</u>
<u>E</u>	<u>Research and Development Partners</u>	-
<u>E.1</u>	<u>NMSU - Pond Liner Research</u> Technology development to advance pond liner design and economics.	-
<u>E.2</u>	<u>SNL - Pond Modeling</u> Technology development to reduce pond construction and operation costs.	-

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**U.S. Department of Energy  
FEDERAL ASSISTANCE REPORTING CHECKLIST  
AND INSTRUCTIONS FOR RD&D PROJECTS**

1. Identification Number: DE -EE0002884.005		2. Program/Project Title: Recovery Act - Sapphire Integrated Algal Biorefinery (IABR)	
3. Recipient: Sapphire Energy, Inc.			
4. Reporting Requirements: <b>A. MANAGEMENT REPORTING</b> <input checked="" type="checkbox"/> Research Performance Progress Report (RPPR) <input checked="" type="checkbox"/> Special Status Report <b>B. SCIENTIFIC/TECHNICAL REPORTING</b> (Reports/Products must be submitted with appropriate DOE F 241. The 241 forms are available at <a href="http://www.osti.gov/elink">www.osti.gov/elink</a> ) Report/Product Form <input checked="" type="checkbox"/> Final Scientific Report DOE F 241.3 <input checked="" type="checkbox"/> Conference papers/proceedings* DOE F 241.3 <input checked="" type="checkbox"/> Software/Manual DOE F 241.4 <input type="checkbox"/> Other (see special instructions) DOE F 241.3 <i>* Scientific and technical conferences only</i> <b>C. FINANCIAL REPORTING</b> <input checked="" type="checkbox"/> SF-425, Federal Financial Report <b>D. CLOSEOUT REPORTING</b> <input checked="" type="checkbox"/> Patent Certification <input checked="" type="checkbox"/> SF-428 & 428B Final Property Report <input type="checkbox"/> Other <b>E. OTHER REPORTING</b> <input checked="" type="checkbox"/> Annual Indirect Cost Proposal <input checked="" type="checkbox"/> Audit of For-Profit Recipients <input type="checkbox"/> SF-428 Tangible Personal Property Report Forms Family <input checked="" type="checkbox"/> Other	Frequency	Addresses	
	A	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>	
A	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>		
F	<a href="http://www.osti.gov/elink-2413">http://www.osti.gov/elink-2413</a>		
A	<a href="http://www.osti.gov/elink-2413">http://www.osti.gov/elink-2413</a>		
A	<a href="http://www.osti.gov/estsc/241-4pre.isp">http://www.osti.gov/estsc/241-4pre.isp</a>		
	<a href="http://www.osti.gov/elink-2413">http://www.osti.gov/elink-2413</a>		
FQ	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>		
F	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>		
F	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>		
	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>		
Y180	See block 5 below for instructions.		
Y180	See block 5 below for addresses.		
	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>		
AF	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>		
<b>FREQUENCY CODES AND DUE DATES:</b> A - Within 5 calendar days after events or as specified.      Q - Quarterly; within 30 days after end of the reporting period. F - Final; 90 calendar days after expiration or termination of the award.      O - Other: See instructions for further details Y - Yearly; 90 days after the end of the reporting period.      Y180 - Yearly; 180 days after end of the recipient's fiscal year. S - Semiannually; within 30 days after end of the reporting period.			
5. Special Instructions:  Annual Indirect Cost Proposal - If DOE is the Cognizant Federal Agency, then the proposal should be sent to <a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a> . Otherwise, it should be sent to the Cognizant Federal Agency.  Audit of For-Profit Recipients must be sent to 2 different addresses in accordance with the final audit guidance. A copy for the Contracting Officer shall be submitted via <a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a> ; a copy must also be e-mailed to the CFO at DOE-Audit-Submissions@hq.doe.gov <b>MANAGEMENT REPORTING</b> 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. <b>OTHER REPORTING</b> 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 the award. <b>AMERICAN RECOVERY AND REINVESTMENT ACT REPORTING:</b> See the Special Terms and Conditions for Recovery Act reporting requirements, along with the following website: <a href="http://www.federalreporting.gov">http://www.federalreporting.gov</a> . 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.			

## Federal Assistance Reporting Instructions (3/11)

### A. MANAGEMENT REPORTING

#### Research Performance Progress Report (RPPR)

See attached document entitled "Research Performance Progress Report".

#### Special Status Report

The recipient must report the following events by e-mail 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.
  - 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 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. If not provided previously, attach or send copies of any public releases to the DOE Program Manager identified in Block 15 of the Assistance Agreement Cover page;
  - 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) accessed at <http://www.osti.gov/mlink-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. Materials, such as prints, videos, and books, that are essential to the report but cannot be submitted electronically, should be sent to the DOE Administrator at the address listed in Block 16 of the Assistance Agreement Cover Page.

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.

### **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/mlink-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. If the proceedings cannot be submitted electronically, they should be sent to the DOE Administrator at the address listed in Block 16 of the Assistance Agreement Cover Page.

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/mlink-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>.

**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.**

## 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](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://management.energy.gov/business\\_doe/business\\_forms.htm](http://management.energy.gov/business_doe/business_forms.htm)

### Final Property Report

See instructions under **SF-428 Tangible Personal Property Report Forms Family** below.

## **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 recipient's fiscal year, unless the award is based on a predetermined or fixed indirect rate(s), or a fixed amount for indirect or 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. If the DOE awarding office is the cognizant agency, submit the annual indirect cost proposal to <https://www.eere-pmc.energy.gov/SubmitReports.aspx>.

### **Audit of For-Profit Recipients**

As required by 10 CFR 600.316, as supplemented by For-Profit Audit Guidance Parts I through IV, audits must be performed of For-Profit Recipients of financial assistance awards (prime awards) and sub-awards.

For-Profit Audit Guidance Parts I through IV to assist for-profit recipients in complying with the audit requirements of 10 CFR 600.316 are posted on the Financial Assistance Forms page of the MA home page under the 'Coverage of Independent Audits' subheading, [http://management.energy.gov/business\\_doe/business\\_forms.htm](http://management.energy.gov/business_doe/business_forms.htm).

Submission: For recipients, financial statement and compliance audit submissions are due to DOE within six months of the recipients' fiscal year-end dates. For sub-awardees, financial statement and compliance audit submissions are due to the pass-through entity within six months of the sub-awardees' fiscal year-end dates. For recipients, the compliance audits must be submitted, along with audited financial statements, to the appropriate DOE Contracting Officer at <https://www.eere-pmc.energy.gov/SubmitReports.aspx> as well as to the DOE Office of the Chief Financial Officer at [DOE-Audit-Submission@hq.doe.gov](mailto:DOE-Audit-Submission@hq.doe.gov)

### **SF-428 Tangible Personal Property Report Forms Family**

Requirement. The SF-428 is a forms family consisting of 5 forms: the SF-428, SF-428-A, SF-428-B, SF-428-C, and SF-428S. Fillable versions of the SF-428 forms are available at [http://management.energy.gov/business\\_doe/business\\_forms.htm](http://management.energy.gov/business_doe/business_forms.htm).

- The SF-428 is the cover page and the submitter attaches the appropriate form or forms as listed on the SF-428.
- The SF-428-A is the Annual report, due Oct. 30th of each calendar year.
- The SF-428-B is the Final Award Closeout Report, due at award completion.
- The SF-428-C is the Disposition Report/Request.

- The SF-428S is the supplemental form for the SF-428-A, SF-428-B and SF-428-C.

If at any time during the award the recipient is provided Government-furnished property or acquires 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 Administrator using the SF-428 and SF-428-A forms at the address on page 1 of this checklist no later than October 30th of each calendar year, to cover an annual reporting period ending on the preceding September 30th. The SF-428 and SF-428-B reports are required during closeout.

Content of Inventory. As required on the SF-428-A form, the inventory must include a description of the property, tag number, acquisition date, and acquisition cost, if purchased with project funds. The location of property should be listed under the Comments section. The report must list all federally owned property, including property located at subcontractor's facilities or other locations.



## RESEARCH PERFORMANCE PROGRESS REPORT

### Standard Cover Page Data Elements and Reporting Categories

The standard cover page data elements shown below, as well as mandatory and optional components comprise the complete research performance progress report format.

Each category in the RPPR is a separate reporting component. Each component is marked to indicate if it is optional or mandatory. Mandatory components must be addressed in each report, optional are at your discretion.

If you have nothing significant to report during the reporting period on a question or item, state "Nothing To Report".

#### **1. COVER PAGE DATA ELEMENTS: Mandatory**

- Federal Agency and Organization Element to Which Report is Submitted
- Federal Grant or Other Identifying Number Assigned by Agency
- Project Title
- PD/PI Name, Title and Contact Information (e-mail address and phone number)
- Name of Submitting Official, Title, and Contact Information (e-mail address and phone number), if other than PD/PI
- Submission Date
- DUNS Number
- Recipient Organization (Name and Address)
- Project/Grant Period (Start Date, End Date)
- Reporting Period End Date
- Report Term or Frequency (annual, semi-annual, quarterly, other)
- Signature of Submitting Official (electronic signatures (i.e., Adobe Acrobat) are acceptable)

#### **2. ACCOMPLISHMENTS: Mandatory**

##### **What was done? What was learned?**

The information provided in this section allows the agency to assess whether satisfactory progress has been made during the reporting period.

##### **INSTRUCTIONS – Accomplishments**

The PI is reminded that the grantee is required to obtain prior written approval from the Contracting Officer whenever there are significant changes in the project or its

direction. Requests for prior written approval must be submitted to the Contracting Officer (submission via Fedconnect is acceptable).

- What are the major goals and objectives of the project?
- What was accomplished under these goals?
- What opportunities for training and professional development has the project provided?
- How have the results been disseminated to communities of interest?
- What do you plan to do during the next reporting period to accomplish the goals and objectives?

### **What are the major goals of the project?**

List the major goals of the project as stated in the approved application or as approved by the agency. If the application lists milestones/target dates for important activities or phases of the project, identify these dates and show actual completion dates or the percentage of completion.

Generally, the goals will not change from one reporting period to the next. However, if the awarding agency approved changes to the goals during the reporting period, list the revised goals and objectives. Also explain any significant changes in approach or methods from the agency approved application or plan.

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### **What was accomplished under these goals?**

For this reporting period describe: (1) major activities; (2) specific objectives; (3) significant results, including major findings, developments, or conclusions (both positive and negative); and (4) key outcomes or other achievements. Include a discussion of stated goals not met. As the project progresses, the emphasis in reporting in this section should shift from reporting activities to reporting accomplishments.

### **What opportunities for training and professional development has the project provided?**

Describe opportunities for training and professional development provided to anyone who worked on the project or anyone who was involved in the activities supported by the project.

“Training” activities are those in which individuals with advanced professional skills and experience assist others in attaining greater proficiency. Training activities may include, for example, courses or one-on-one work with a mentor. “Professional development” activities result in increased knowledge or skill in one’s area of expertise and may include workshops, conferences, seminars, study groups, and individual study. Include participation in conferences, workshops, and seminars not listed under major activities.

### **How have the results been disseminated to communities of interest?**

Describe how the results have been disseminated to communities of interest. Include any outreach activities that have been undertaken to reach members of communities who are not

usually aware of these research activities, for the purpose of enhancing public understanding and increasing interest in learning and careers in science, technology, and the humanities.

**What do you plan to do during the next reporting period to accomplish the goals?**

Describe briefly what you plan to do during the next reporting period to accomplish the goals and objectives.

**3. PRODUCTS: [Optional/Mandatory]**

**What has the project produced?**

Publications are the characteristic product of research. Agencies evaluate what the publications demonstrate about the excellence and significance of the research and the efficacy with which the results are being communicated to colleagues, potential users, and the public, not the number of publications.

Many projects (though not all) develop significant products other than publications. Agencies assess and report both publications and other products to Congress, communities of interest, and the public.

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**INSTRUCTIONS – Products**

List any products resulting from the project during the reporting period. Examples of products include:

- Publications, conference papers, and presentations;
- Website(s) or other Internet site(s);
- Technologies or techniques;
- Inventions, patent applications, and/or licenses;
- Other products, such as data or databases, physical collections, audio or video products, software or NetWare, models, educational aids or curricula, instruments, or equipment; and
- Any other public release of information related to the project.

**Publications, conference papers, and presentations**

Report only the major publication(s) resulting from the work under this award. There is no restriction on the number. However, agencies are interested in only those publications that most reflect the work under this award in the following categories:

- **Journal publications.** List peer-reviewed articles or papers appearing in scientific, technical, or professional journals. Include any peer-reviewed publication in the periodically published proceedings of a scientific society, a conference, or the like. A publication in the proceedings of a one-time conference, not part of a series, should be reported under "Books or other non-periodical, one-time publications."

Identify for each publication: Author(s); title; journal; volume: year; page numbers; status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).

- **Books or other non-periodical, one-time publications.** Report any book, monograph, dissertation, abstract, or the like published as or in a separate publication, rather than a periodical or series. Include any significant publication in the proceedings of a one-time conference or in the report of a one-time study, commission, or the like.

Identify for each one-time publication: author(s); title; editor; title of collection, if applicable; bibliographic information; year; type of publication (book, thesis or dissertation, other); status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).

- **Other publications, conference papers and presentations.** Identify any other publications, conference papers and/or presentations not reported above. Specify the status of the publication as noted above.

#### **Website(s) or other Internet site(s)**

List the URL for any Internet site(s) that disseminates the results of the research activities. A short description of each site should be provided. It is not necessary to include the publications already specified above in this section.

#### **Technologies or techniques**

Identify technologies or techniques that have resulted from the research activities. Describe the technologies or techniques and how they are being shared.

#### **Inventions, patent applications, and/or licenses**

Identify inventions, patent applications with date, and/or licenses that have resulted from the research. Submission of this information as part of an interim research performance progress report is not a substitute for any other invention reporting required under the terms and conditions of an award.

#### **Other products**

Identify any other significant products that were developed under this project. Describe the product and how it is being shared. Examples of other products are:

- Databases;
- Physical collections;
- Audio or video products;
- Software or NetWare;
- Models;

- Educational aids or curricula;
- Instruments or equipment;
- Data & Research Material (e.g., cell lines, DNA probes, animal models); and
- Other.

#### **4. PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS:**

**[Optional/Mandatory]**

##### **Who has been involved?**

Agencies need to know who has worked on the project to gauge and report performance in promoting partnerships and collaborations.

##### **INSTRUCTIONS - Participants & Other Collaborating Organizations**

Provide the following information on participants:

- What individuals have worked on the project?
- What other organizations have been involved as partners?
- Have other collaborators or contacts been involved?

##### **What individuals have worked on the project?**

Provide the following information for: (1) principal investigator(s)/project director(s) (PIs/PDs); and (2) each person who has worked at least one person month per year on the project during the reporting period, regardless of the source of compensation (a person month equals approximately 160 hours of effort).

- Provide the name and identify the role the person played in the project. Do NOT include any other identifying information on individuals. Indicate the nearest whole person month (Calendar, Academic, Summer) that the individual worked on the project. Show the most senior role in which the person has worked on the project for any significant length of time. For example, if an undergraduate student graduates, enters graduate school, and continues to work on the project, show that person as a graduate student, preferably explaining the change in involvement.
- Describe how this person contributed to the project and with what funding support. If information is unchanged from a previous submission, provide the name only and indicate "no change".
- Identify whether this person is collaborating internationally. Specifically is the person collaborating with an individual located in a foreign country and whether the person had traveled to the foreign country as part of that collaboration and duration of stay. The foreign country(ies) should be identified.

Example:

Name: Mary Smith  
Project Role: Graduate Student  
Nearest person month worked: 5  
Contribution to Project: Ms. Smith has performed work in the area of combined error-control and constrained coding.  
Funding Support: The Ford Foundation (Complete only if the funding provided from other than this award.)  
Collaborated with individual in foreign country: Yes  
Country(ies) of foreign collaborator: China  
Traveled to foreign country: Yes  
If traveled to foreign country(ies), duration of stay: 5 months

**What other organizations have been involved as partners?**

Describe partner organizations – academic institutions, other nonprofits, industrial or commercial firms, state or local governments, schools or school systems, or other organizations (foreign or domestic) – that have been involved with the project. Partner organizations may provide financial or in-kind support, supply facilities or equipment, collaborate in the research, exchange personnel, or otherwise contribute.

Provide the following information for each partnership:

Organization Name:

Location of Organization: (if foreign location list country)

Partner's contribution to the project: (identify one or more)

- Financial support;
- In-kind support (e.g., partner makes software, computers, equipment, etc., available to project staff);
- Facilities (e.g., project staff use the partner's facilities for project activities);
- Collaborative research (e.g., partner's staff work with project staff on the project); and
- Personnel exchanges (e.g., project staff and/or partner's staff use each other's facilities, work at each other's site).

More detail on partner and contribution (foreign or domestic).

**Have other collaborators or contacts been involved?**

Some significant collaborators or contacts within the recipient's organization may not be covered by "What people have worked on the project?" Likewise, some significant collaborators or contacts outside the recipient's organization may not be covered under "What other organizations have been involved as partners?" For example, describe any significant:

- collaborations with others within the recipient's organization; especially interdepartmental or interdisciplinary collaborations;
- collaborations or contact with others outside the organization; and
- collaborations or contacts with others outside the United States or with an international organization.
- country(ies) of collaborations or contacts.

It is likely that many recipients will have no other collaborators or contacts to report.

## **5. IMPACT: [Optional/Mandatory]**

### **What is the impact of the project? How has it contributed?**

Over the years, this base of knowledge, techniques, people, and infrastructure is drawn upon again and again for application to commercial technology and the economy, to health and safety, to cost-efficient environmental protection, to the solution of social problems, to numerous other aspects of the public welfare, and to other fields of endeavor.

The taxpaying public and its representatives deserve a periodic assessment to show them how the investments they make benefit the nation. Through this reporting format, and especially this section, recipients provide that assessment and make the case for Federal funding of research and education.

Agencies use this information to assess how their research programs:

- increase the body of knowledge and techniques;
- enlarge the pool of people trained to develop that knowledge and techniques or put it to use; and
- improve the physical, institutional, and information resources that enable those people to get their training and perform their functions.

### **INSTRUCTIONS - Impact**

This component will be used to describe ways in which the work, findings, and specific products of the project have had an impact during this reporting period. Describe distinctive contributions, major accomplishments, innovations, successes, or any change in practice or behavior that has come about as a result of the project relative to:

- the development of the principal discipline(s) of the project;
- other disciplines;
- the development of human resources;
- physical, institutional, and information resources that form infrastructure;
- technology transfer (include transfer of results to entities in government or industry, adoption of new practices, or instances where research has led to the initiation of a startup company); or
- society beyond science and technology.

**What is the impact on the development of the principal discipline(s) of the project?**

Describe how findings, results, techniques that were developed or extended, or other products from the project made an impact or are likely to make an impact on the base of knowledge, theory, and research and/or pedagogical methods in the principal disciplinary field(s) of the project. Summarize using language that an intelligent lay audience can understand (*Scientific American* style).

How the field or discipline is defined is not as important as covering the impact the work has had on knowledge and technique. Make the best distinction possible, for example, by using a "field" or "discipline", if appropriate, that corresponds with a single academic department (i.e., physics rather than nuclear physics).

**What is the impact on other disciplines?**

Describe how the findings, results, or techniques that were developed or improved, or other products from the project made an impact or are likely to make an impact on other disciplines.

**What is the impact on the development of human resources?**

Describe how the project made an impact or is likely to make an impact on human resource development in science, engineering, and technology. For example, how has the project:

- provided opportunities for research and teaching in the relevant fields;
- improved the performance, skills, or attitudes of members of underrepresented groups that will improve their access to or retention in research, teaching, or other related professions;
- developed and disseminated new educational materials or provided scholarships; or
- provided exposure to science and technology for practitioners, teachers, young people, or other members of the public?

**What is the impact on physical, institutional, and information resources that form infrastructure?**

Describe ways, if any, in which the project made an impact, or is likely to make an impact, on physical, institutional, and information resources that form infrastructure, including:

- physical resources such as facilities, laboratories, or instruments;
- institutional resources (such as establishment or sustenance of societies or organizations);  
or
- information resources, electronic means for accessing such resources or for scientific communication, or the like.

**What is the impact on technology transfer?**

Describe ways in which the project made an impact, or is likely to make an impact, on



commercial technology or public use, including:

- transfer of results to entities in government or industry;
- instances where the research has led to the initiation of a start-up company; or
- adoption of new practices.

**What is the impact on society beyond science and technology?**

Describe how results from the project made an impact, or are likely to make an impact, beyond the bounds of science, engineering, and the academic world on areas such as:

- improving public knowledge, attitudes, skills, and abilities;
- changing behavior, practices, decision making, policies (including regulatory policies), or social actions; or
- improving social, economic, civic, or environmental conditions.

**What dollar amount of the award's budget is being spent in foreign country(ies)?**

Describe what percentage of the award's budget is being spent in foreign country(ies). If more than one foreign country, identify the distribution between the foreign countries.

**6. CHANGES/PROBLEMS: [Optional/Mandatory]**

The PI is reminded that the grantee is required to obtain prior written approval from the Contracting Officer whenever there are significant changes in the project or its direction. Requests for prior written approval must be submitted to the Contracting Officer (submission via Fedconnect is acceptable). If not previously reported in writing, provide the following additional information, if applicable:

- Changes in approach and reasons for change.
- Actual or anticipated problems or delays and actions or plans to resolve them.
- Changes that have a significant impact on expenditures.
- Significant changes in use or care of animals, human subjects, and/or biohazards.

**INSTRUCTIONS - Changes/Problems**

**Changes in approach and reasons for change**

Describe any changes in approach during the reporting period and reasons for these changes. Remember that significant changes in objectives and scope require prior approval of the agency.

**Actual or anticipated problems or delays and actions or plans to resolve them**

Describe problems or delays encountered during the reporting period and actions or plans to resolve them.

### **Changes that have a significant impact on expenditures**

Describe changes during the reporting period that may have a significant impact on expenditures, for example, delays in hiring staff or favorable developments that enable meeting objectives at less cost than anticipated.

### **Significant changes in use or care of human subjects, vertebrate animals, and/or Biohazards**

Describe significant deviations, unexpected outcomes, or changes in approved protocols for the use or care of human subjects, vertebrate animals, and/or biohazards during the reporting period. If required, were these changes approved by the applicable institution committee and reported to the agency? Also specify the applicable Institutional Review Board/Institutional Animal Care and Use Committee approval dates.

### **Change of primary performance site location from that originally proposed**

Identify any change to the primary performance site location identified in the proposal, as originally submitted.

### **7. SPECIAL REPORTING REQUIREMENTS: [Optional/Mandatory]**

Respond to any special reporting requirements specified in the award terms and conditions, as well as any award specific reporting requirements.

### **8. BUDGETARY INFORMATION: [Optional/Mandatory]**

This component will be used to collect budgetary data from the recipient organization. The information will be used in conducting periodic administrative/budgetary reviews. Budgetary data should be submitted in an Excel spreadsheet format.

### Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary						
Grant Program Function or Activity (a)	Catalog of Federal Domestic (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
		1. IABR BP-1	81.087			\$9,145,000
2. IABR BP-2	81.087			\$39,019,162		
PHASE 1 BP-2 SUBTOTAL	81.087			\$21,954,072		
PHASE 2 BP-2 SUBTOTAL	81.087			\$7,107,744		
PHASE 3 BP-2 SUBTOTAL	81.087			\$9,957,346		
3. IABR BP-3	81.087			\$1,560,838		
4.						
5. Totals		\$0	\$0	\$49,725,000		

Section B - Budget Categories							
6. Object Class Categories	Grant Program, Function or Activity					Total (5)	
	(1) IABR BP-1	(2) IABR BP-2			(3) IABR BP-3		(4)
		PHASE 1	PHASE 2	PHASE 3			
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	\$0	\$0	\$0	\$0	\$0	

## SPECIAL TERMS AND CONDITIONS

Table of Contents

<u>Number</u>	<u>Subject</u>	<u>Page</u>
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 .....	7
11.	SITE VISITS.....	8
12.	REPORTING REQUIREMENTS.....	8
13.	PUBLICATIONS.....	8
14.	FEDERAL, STATE, AND MUNICIPAL REQUIREMENTS .....	9
15.	INTELLECTUAL PROPERTY PROVISIONS AND CONTACT INFORMATION .....	9
16.	NATIONAL SECURITY: CLASSIFIABLE RESULTS ORIGINATING UNDER AN AWARD .....	9
17.	CONTINUATION APPLICATION AND FUNDING .....	11
18.	LOBBYING RESTRICTIONS .....	12
19.	NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS -- SENSE OF CONGRESS .....	12
20.	FUNDING OF BUDGET PERIODS .....	12
21.	TITLE AND DISPOSITION OF PROPERTY.....	12
22.	DECONTAMINATION AND/OR DECOMMISSIONING (D&D) COSTS.....	15
23.	AT RISK FOR FINANCIAL CAPABILITY .....	16
24.	INSOLVENCY, BANKRUPTCY OR RECEIVERSHIP.....	16
25.	CENTRAL CONTRACTOR REGISTRATION AND UNIVERSAL IDENTIFIER REQUIREMENTS.....	17
26.	NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS .....	18
27.	INDEMNITY.....	19
28.	SPECIAL PROVISIONS RELATING TO WORK FUNDED UNDER AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (May 2009).....	19
29.	REPORTING AND REGISTRATION REQUIREMENTS UNDER SECTION 1512 OF THE RECOVERY ACT .....	23
30.	REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS – SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 .....	24
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 .....	27
32.	RECOVERY ACT TRANSACTIONS LISTED IN SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND RECIPIENT RESPONSIBILITIES FOR INFORMING SUBRECIPIENTS .....	31

33.	WAGE RATE REQUIREMENTS UNDER SECTION 1606 OF THE RECOVERY ACT.....	31
34.	DAVIS BACON ACT AND CONTRACT WORK HOURS AND SAFETY STANDARDS ACT.....	32
35.	CONTINGENCY.....	43

## 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 (CDLB-1003)
2.	Statement of Project Objectives
3.	Federal Assistance Reporting Checklist and Instructions (DOE F 4600.2)
4.	Budget Information (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](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 12/29/2009 through 09/30/2014, consisting of the following Budget Periods:

Budget Period		Start Date	End Date
1		12/29/2009	10/20/2011
2	Phase	1	10/21/2011
		2	TBD
		3	TBD
3		TBD	09/30/2014

**5. PAYMENT PROCEDURES - REIMBURSEMENT THROUGH THE AUTOMATED CLEARING HOUSE (ACH) VENDOR 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		\$9,145,000 /	\$275,000 /	Redacted Exemption 4	
2	Phase 1	\$21,954,072	\$0 / 0%		
	2	\$7,107,744 / <small>Redacted Ex. 4</small>	\$0 / 0%		
	3	\$9,957,346 /	\$0 / 0%		
3		\$1,560,838 /	\$0 / 0%		
Total Project		\$49,725,000	\$275,000 /		

- 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.
- c. The Recipient shall not be reimbursed on this project for any final indirect costs that are in excess of the following designated indirect rate ceilings or specific amounts. In addition, the Recipient shall neither count costs in excess of the application of the rate ceilings or specific amounts as cost share, nor allocate such costs to other federally sponsored project, unless approved by the Contracting Officer. This restriction does not apply to subrecipients' indirect costs.

Budget Period		Type of Rate	Ceiling
1		Indirect Charges	\$2,099,981
2	Phase	1	\$0
		2	TBD
		3	TBD
3		Indirect Charges	TBD

## 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](http://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](http://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 or are referenced in the Assistance Agreement.
- 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.

Patent Counsel for the Golden Field Office is Julia Moody, who may be reached at [julia.moody@go.doe.gov](mailto:julia.moody@go.doe.gov) or 720-356-1699.

#### **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 \$50,000,000 (\$49,725,000 + \$275,000 to FFRDC) for completion of the project authorized by this agreement; however, only \$9,420,000 (\$9,145,000 + \$275,000 to FFRDC) is available for work performed by the Recipient during Budget Period 1 of the project. Of the total \$21,954,072 budgeted for the completion of Budget Period 2, Phase 1, only \$18,784,276 DOE share is available for work performed by the Recipient during Budget Period 2, Phase 1 of the project. The remainder (\$3,169,796) will be available contingent upon submission by the Recipient of cost share commitment in the amount of \$<sup>Redacted</sup> .  
Exemption 4

For Budget Period 2, Phases 2 and 3, and Budget Period 3 the remainder (\$18,625,928) 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 Budget Period 2, Phases 2 and 3, and/or Budget Period 3, or DOE disapproves a continuation application for Budget Period 2, Phases 2 and 3, and/or Budget Period 3, the maximum DOE liability to the Recipient is the funds that are available for the current approved Budget Period 2, Phase 1. In such event, DOE reserves the right to deobligate any remaining funds.

**21. TITLE AND DISPOSITION OF PROPERTY**

- a. Title. Title to Property acquired by the Recipient in whole or in part with funds received under this Award shall vest in the Recipient subject to the conditions of this Paragraph and 10 CFR § 600.321, unless otherwise provided. For purposes of this Paragraph, the term "Property" does not include "Intellectual Property," as defined in 10 CFR § 600.325, the terms of which are addressed in Paragraph 16 and Attachment 1 of this Award.

- b. Encumbrance. At no time shall Recipient encumber the Property acquired under this Award (includes Property acquired with DOE funds and recipient cost share), in whole or in part, without the prior written agreement of the DOE Contracting Officer. Recipient may request, however, that DOE permit an encumbrance on or subordination of DOE's property interest hereunder. In response to such request, the DOE Contracting Officer, in his or her sole and absolute discretion, will require the Recipient to submit appropriate supporting documentation.
- c. Subordination. Based on the Recipient's representations and the documents submitted in support of its request for DOE to subordinate its property interest in favor of Redacted Exemption 4 (Lender of Record), the DOE Contracting Officer has agreed to subordinate DOE's property interest and authorized Recipient to encumber the Property (with such term again not including Intellectual Property, the terms of which are addressed in Paragraph 16 and Attachment 1 of this Award), subject to the following requirements and/or conditions:

- (i) Recipient may only encumber DOE's property interest in favor of

Redacted Exemption 4

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. Except as provided in paragraph (vi) below, Recipient is prohibited from further encumbering or authorizing any other party, including the Lender of Record, to further encumber the Property acquired under the award, including in connection with any loan or other indebtedness other than the loan described in the preceding sentence;

- (ii) Upon encumbering the Property acquired under the award in favor of the Lender of Record, Recipient must send DOE an acknowledgement of the encumbrance within five (5) business days;
- (iii) DOE's property interest must align immediately behind the above referenced Lender of Record;
- (iv) The Lender of Record's priority lien must extinguish upon debt satisfaction (the financing terms must include a mechanism to implement the proceedings to discharge the lien against the property upon fulfillment of Recipient's obligations to the Lender of Record and any participants in or assignees or guarantors of the loan described in paragraph (i) above);
- (v) Recipient may not sell all or a substantial part (representing 50% or more in book value) of the Project titled "Recovery Act - Sapphire Integrated Algal Biorefinery (IABR)" funded under DOE award number DE-EE0002884 in the ordinary course of business without the prior written consent of DOE; any such sale that is in connection with an exercise of remedies by the Lender of Record or otherwise outside of the ordinary course of business will not require the consent of DOE. DOE will not unreasonably withhold such approval; and



- (vi) Notwithstanding anything to the contrary contained in the foregoing paragraphs (i) through (v), DOE acknowledges that Recipient, Redacted Exemption 4 and the other participants in and guarantors of the loan described in paragraph (i) above may agree to increase the principal amount of such loan in order to complete the project being financed by such loan and/or to advance the business interests of Recipient (and, therefore, to support the purpose of the Award) and, in such event, DOE will continue to permit the encumbrance of its property interest as described herein, but only to the extent that the principal amount of such loan is increased to an aggregate amount not greater than Redacted Exemption 4
- d. Use. Unless otherwise provided in this paragraph, 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.

- e. Disposition. At such time as the property is no longer needed for its authorized purposes, and prior to the Recipient's intended sale, transfer, conversion or assignment, the Recipient must contact the DOE Contracting Officer for disposition instructions. The following disposition methods and approaches may be considered:

Conversion. In the event the Recipient seeks to utilize property for any purpose other than the authorized purpose, the Recipient must notify the Contracting Officer. The DOE Contracting Officer, in his or her sole and absolute discretion, may require the Recipient to reimburse DOE that portion of the Federal share attributable to the current fair market value of the Property so converted. The parties should attempt to agree in good faith on the current fair market value of any property so converted. In the event that the parties cannot agree on the current market value of any property so converted, the parties will mutually agree on the selection of an independent assessor to conduct an independent assessment, at Recipient's expense, of the current fair market value.

Abandonment. In the event the Recipient abandons the project, DOE, at its option, may take title to property equal to DOE's pro rata share of the current fair market value of all property, subject to the terms and conditions of any encumbrance with DOE has previously authorized. Nothing in this provision intends to grant the right of abandonment to the Recipient.

Sale. DOE's interest in the property survives any sale or transfer of the Recipient and/or the property acquired under a DOE award subject to the terms of any encumbrance relating to the property that the DOE has approved. The Recipient shall consult with, and seek the approval of, DOE prior to any such sale or transfer. DOE will not unreasonably withhold approval. It shall be a condition of any sale or transfer of the project or any portion thereof which includes property acquired in whole or in part under a DOE financial assistance award that the transferee or purchaser agrees to be bound by the provisions of the Recipient's award. For purposes of this provision, "sale or transfer of the Recipient" means a sale of more than 50% of the outstanding voting securities of the Recipient, sale of substantially of all of the assets of the Recipient, or merger or similar transaction or series of transactions involving the Recipient.

## **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**

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- 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. CENTRAL CONTRACTOR REGISTRATION AND UNIVERSAL IDENTIFIER REQUIREMENTS

### A. Requirement for Central Contractor Registration (CCR)

Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain the currency of your information in the CCR until you submit the final financial report required under this award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another award term.

### B. Requirement for Data Universal Numbering System (DUNS) Numbers

If you are authorized to make subawards under this award, you:

1. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its DUNS number to you.

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2. May not make a subaward to an entity unless the entity has provided its DUNS number to you.

### C. Definitions

For purposes of this award term:

1. Central Contractor Registration (CCR) means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the CCR Internet site (currently at <http://www.ccr.gov>).

2. Data Universal Numbering System (DUNS) number means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at <http://fedgov.dnb.com/webform>).

3. Entity, as it is used in this award term, means all of the following, as defined at 2 CFR Part 25, subpart C:

- a. A Governmental organization, which is a State, local government, or Indian Tribe;
- b. A foreign public entity;
- c. A domestic or foreign nonprofit organization;

d. A domestic or foreign for-profit organization; and

e. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

4. Subaward:

a. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

b. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. \_\_.210 of the attachment to OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations).

c. A subaward may be provided through any legal agreement, including an agreement that you consider a contract.

~~5. Subrecipient means an entity that:~~

a. Receives a subaward from you under this award; and

b. Is accountable to you for the use of the Federal funds provided by the subaward.

## 26. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS

For this award, DOE has made a final NEPA determination for all activities under this award that are listed in the Statement of Project Objectives (SOPO) formally approved by DOE through incorporation into and attached to the award. You (Recipient) may proceed with the activities as described in the SOPO. This NEPA determination is specific to the project as described in the SOPO formally approved by DOE through incorporation into and attached to the award.

*If you later add to or modify the activities* in the above-referenced SOPO, you must submit the revised SOPO to the DOE Project Officer. Those additions or modifications are subject to review by the NEPA Compliance Officer and approval by the DOE's Contracting Officer. Recipients are restricted from taking any action using Federal funds, which would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to DOE providing a final NEPA determination. Any new activities or modification of activities is subject to additional NEPA review and is not authorized for federal funding until DOE provides a NEPA determination on those additions or modifications. DOE may require the Recipient to submit additional information to support a revised NEPA determination. Should you move forward with activities that are not authorized for Federal funding by the DOE Contracting Officer in advance of the final NEPA determination, you are doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share.

Per the Finding of No Significant Impact (FONSI) you are required to:

1. Minimize the likelihood of adverse impacts to birds protected under the Migratory Bird Treaty Act by completing nesting bird surveys in areas to be disturbed. If nesting birds occupy the area to be disturbed, all ground disturbing activities should be avoided until nesting is complete.
2. Coordinate with United States Fish and Wildlife Service (USFWS) and New Mexico Department of Fish and Game (NMDFG) in order to minimize potential impacts to any burrowing owls located on the site, if present, as outlined in the "Guidelines and Recommendations for Burrowing Owl Surveys and Mitigation" (July 2007).

Results of the nesting bird and burrowing owl surveys must be submitted to DOE for review and approval prior to DOE or cost share funds being applied to any ground disturbing activities.

## **27. 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.

## **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, subgrant, 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](http://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.

Nonenforceability 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](http://www.Recovery.gov), for specific requirements of this section and prescribed language for the notices.).

#### G. Request for Reimbursement

RESERVED

#### H. False Claims Act

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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)*
<i>Item 1:</i>			
Foreign steel, iron, or manufactured good			
Domestic steel, iron, or manufactured good			
<i>Item 2:</i>			
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)*
<i>Item 1:</i>			
Foreign steel, iron, or manufactured good	_____	_____	_____
Domestic steel, iron, or manufactured good	_____	_____	_____
<i>Item 2:</i>			
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 therefore 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; Heavy	NM1	NM100001 04/09/2010 NM1

### 35. 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.