PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Rochester Institute of Technology **STATE:** NY

PROJECT TITLE : Integrated Power For Microsystems

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-FG36-08GO88110	GFO-09-025-002	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B3.6 Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

Rational for determination:

Rochester Institute of Technology proposes to use federal funding to advance the research of lithium ion batteries, quantum dot photovoltiacs, and beta-voltaic power sources. Due to a technology barrier the availability of efficient and reliable power sources is needed.

This project will include research to advance lithium ion batteries to include conductive additives, cathode materials, anodes, electrodes, and pathways to increase battery life; strain compensated quantum dot photovoltaic material will include optimizing growth by use of nanotechnology; betavoltaic power sources will include development of heterojunchtion photodiodes, bragg reflector development, and anti-reflection coating development; and project management and reporting.

This project will include conventional laboratory research that will take place within a laboratory on the Rochester Institute of Technology campus. The applicant has submitted an R & D Questionnaire which thoroughly addresses chemical and safety handling protocols.

This project will comprised of research and development to include reporting on findings; therefore a CX A9 & B3.6 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/20/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: City of Akron **STATE:** OH

PROJECT TITLE : Akron City ARRA-EECBG Act 11-Energy Efficiency Survey of Municipally-Owned Buildings

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DOE-FOA-0000013	DE-EE0000703		0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

A11 Technical advice and planning assistance to international, national, state, and local organizations.

Rational for determination:

The City of Akron intends to use EECBG funds to hire a consultant to conduct a comprehensive analysis of three City-owned facilities in order to determine the feasibility of energy efficiency retrofits. Buildings to be audited include the CitiCenter Building, the Municipal Building and the Stubbs Justice Center. Potential energy conservation measures will be generated for each of the three buildings being audited. A report will include a general building overview, an evaluation of the existing building and its existing mechanical and electrical systems, a baseline energy model calibrated against actual utility bills, an evaluation of various energy conservation measures and their cost to implement and a list of recommended energy conservation measures as well as building upgrades. The consultation fee includes funding to prepare an RFP for recommended energy efficiency retrofits.

If the City proceeds with recommended retrofits it would do so through different funding source.

The proposed project is consistent with activities outlined in A9 "Information gathering", and A11 "Technical advice", therefore, it has been categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

This EF-2A was completed by Logan Sholar on 9-21-10.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager

PMC-EF2a

(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Louisville Jefferson County Metro **STATE:** KY

PROJECT TITLE : EECBG Green Jobs Revolving Loan Fund / Borrower: Estate Products Manufacturing Group, Inc.

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000013-000003	DE-EE0000729.002		0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

Louisville Jefferson County Metro is proposing to award a $500,000 loan to Estate Products Manufacturing Group, Inc. to allow them to purchase machinery and equipment to produce a light weight authentic looking stone, called AirStone, using recycled styrofoam. This equipment will allow the company to move from slow manual production to mass production so that it can meet the demands for the product. Currently, only about 32% of styrofoam is recycled; this equipment will allow Estate Products to significantly reduce landfill waste.

All equipment purchased will be placed in an existing facility. There will be no new construction and no expansion of the existing building. No new permits are required for the proposed expansion of production capabilities.

The proposed project is consistent with activities outlined in B5.1 and has been categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF-2A completed by Logan Sholar

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2/04/02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: The University of Texas at El Paso **STATE:** TX

PROJECT TITLE : Computational Analysis of Nanoparticles-Molten Salt Thermal Energy Storage for Concentrated Solar Power Systems

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000089	DE-EE0004008	GFO-10-613	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

Rational for determination:

The University of Texas at El Paso proposes to use federal funds to develop a computational model to design efficient thermal energy storage systems. UTEP will develop research and educational capabilities in solar energy technology related research.

This project will include performance of eulerian granular modeling for thermal energy storage; perform molecular dynamics modeling with large scale atomic/molecular massively parallel simulator; carry out computational analysis of nano-partical mixing on the thermal energy storage medium's heat capacity; verification and validation with experimental data; develop the solar energy course curriculum to be taught each spring; organization of summer trip to Texas A&M and NREL; Organize summer workshop on solar energy resources (K-12); and project management and reporting.

This project will be comprised of computer modeling, information gathering, and dissemination to include development of an educational program; therefore a CX A9 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/20/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: GreenWood Resources, Inc. **STATE:** OR

PROJECT TITLE : SunGrant Initiative Hybrid Poplar Energy Crop Development Plan

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	GO85041	GFO-07-135-080	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B3.1 Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

South Dakota State University's sub recipient of the SunGrant, GreenWood Inc proposes to use federal funds to further the efforts of a previous award (GFO-07-135-65) by adding nine new locations for hybrid poplar production. This project will include the establishment of poplar clone tests nationally, hybridization of poplar to produce novel hybrid taxa, establishment of new yield tests evaluation of existing poplar yield tests nationally, and project management and reporting. Continuing operations at the previous locations will include monitoring and measurement of poplar hybrids

These new field plots will be located in Clatskanie, Oregon (46.117° N 123.209° W; 21 acres) and (46.157° N 123.167° W; 46 acres). These new locations are currently used as cultivated agriculture lands. There will be no use of generically modified organisms in the implementation of this project.

This project is comprised of characterization, environmental monitoring, and sampling of soil and of flora; therefore a CX B3.1 & B5.1 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/17/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a

(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Michigan State University **STATE:** MI

PROJECT TITLE : Regional biomass Feedstock Partnership

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-FC36-05GO85041	GFO-07-135-082	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B3.1 Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

South Dakota State University's sub recipient of the SunGrant, Michigan State University, proposes to use federal funds to further the efforts of a previous award (GFO-07-135-61) by adding two new locations for hybrid poplar production.

This project will include the establishment of poplar clone tests nationally, hybridization of poplar to produce novel hybrid taxa, establishment of new yield tests evaluation of existing poplar yield tests nationally, and project management and reporting. Continuing operations at the previous locations will include monitoring and measurement of poplar hybrids

The two locations of this project are Onaway, MI 10 acres (Lat. 45°22'55" N, 84°13'37" W) and Lake City, M 10 acres (Lat. 44°17"56" N, Long. 85°12'30" W). These locations are currently used as cultivated agriculture lands. There will be no use of generically modified organisms in the implementation of this project.

This project is comprised of characterization, environmental monitoring, and sampling of soil and of flora; therefore a CX B3.1 and B5.1 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/20/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager

PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: South Dakota State university **STATE:** SD

PROJECT TITLE : Feedstock Partnership 2010 crop year

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-FC36-05GO85041	GFO-07-135-081	GO85041

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

Rational for determination:

South Dakota State University proposes to use federal funds to develop feedstock partnerships. Through these regional partnerships biomass supply availability will be addressed by developing industry accessible data on current and future feedstock supplies.

This project will include a biomass resource assessment to address issues relating to cost, food vs. fuel, and water availability; education and outreach; and regional partnership planning and organization.

This project is comprised of information gathering, planning studies, and education and outreach; therefore a CX A9 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/16/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: South Dakota State University – University of Minnesota **STATE:** SD

PROJECT TITLE : Regional Biomass Feedstock Partnership

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	GO85041	GFO-07-135-078	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B3.1 Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

South Dakota State University's sub recipient of the SunGrant, the University of Minnesota-Duluth, proposes to use federal funds to further the efforts of a previous award (GFO-07-135-64) by adding four new locations for hybrid poplar production.

This project will include the establishment of poplar clone tests nationally, hybridization of poplar to produce novel hybrid taxa, establishment of new yield tests evaluation of existing poplar yield tests nationally, and project management and reporting.

The four new locations of this project are Perham, MN 7.5 acres (46° 39' N 95° 24' W), Wadena, MN 3 acres (46° 31' N 95° 9' W), Sebeka, MN 7.0 acres (46° 36' N 95° 2' W), Thief River Falls, MN 5 acres (48° 8' N 96° 12' W). These locations are currently used as cultivated agriculture lands. There will be no use of generically modified organisms in the implementation of this project.

This project is comprised of characterization, environmental monitoring, and sampling of soil and of flora; therefore a CX B3.1 and B5.1 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/20/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a

(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: South Dakota State university **STATE:** SD

PROJECT TITLE : Feedstock Partnership 2010 crop year

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-FC36-05GO85041	GFO-07-135-081	GO85041

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

Rational for determination:

South Dakota State University proposes to use federal funds to develop feedstock partnerships. Through these regional partnerships biomass supply availability will be addressed by developing industry accessible data on current and future feedstock supplies.

This project will include a biomass resource assessment to address issues relating to cost, food vs. fuel, and water availability; education and outreach; and regional partnership planning and organization.

This project is comprised of information gathering, planning studies, and education and outreach; therefore a CX A9 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/16/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: ArborGen LLC **STATE:** SD

PROJECT TITLE : Regional Biomass Feedstock Partnership

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
GO85041	GO85041	GFO-07-135-077	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

B3.1 Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

Rational for determination:

South Dakota State University's sub recipient of the SunGrant, ArborGen LLC proposes to use federal funds to further the efforts of a previous award (GFO-07-135-67) by adding nine new locations for hybrid poplar production.

This project will include the establishment of poplar clone tests nationally, hybridization of poplar to produce novel hybrid taxa, establishment of new yield tests evaluation of existing poplar yield tests nationally, and project management and reporting. Continuing operations at the previous locations will include monitoring and measurement of poplar hybrids.

Richland County, SC 1 acre (33° 51.892 N 80° 43.244 W), Allendale County, SC 1 acre (33° 0.106 N 81° 22.965 W), Bibb County, AL 1 acre (32° 55.390 N 86° 53.918 W), Pitt County, NC 1 acre (35° 42.089 N 77° 34.316 W), Jackson County, GA 2 acres (34° 7.212 N 83° 48.337 W), Tattnall County, GA 8 acres (32° 3.530 N 81° 55.991 W), Nevada County, AR 3 acres (33° 39.093 N 93° 9.013 W), Tyler County, TX 1 acre (30° 42.438 N 94° 28.010 W), Bamburg County, SC 10 acres (33° 9.981 N 81° 9.240 W) These new locations are currently used as cultivated agriculture lands. There will be no use of generically modified organisms in the implementation of this project.

This project is comprised of characterization, environmental monitoring, and sampling of soil and of flora; therefore a CX B3.1 and B5.1 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/20/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager

PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: County of Lewis IDA **STATE:** NY

PROJECT TITLE : Energy Efficiency Repairs & Air Quality Improvements at Lyonsdale Biomass

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-EE0003131	DE-EE0003131	GFO-10-617	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B3.6 Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The Lewis County Industrial Development Agency proposes to use federal funding to make repairs and upgrades to its biomass cogeneration facility to increase energy creation efficiency, reduce air pollutants and biomass throughput.

This project will include installing a refractory lining of the wood fired boiler firebox, fluid dynamic gas-path modeling to analyze gas flow for improved combustion, plantation fuel trial to demonstrate efficiency of woody energy crops for electrical power, steam leak investigations to increase electric generation efficiency, acid gas control demonstration to reduce air pollutants, steam turbine refurbishment to increase efficiency, and project management and reporting.

This project is comprised of small scale pilot projects and improvements to a biomass cogeneration facility to conserve energy; therefore a CX B3.6 and B5.1 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/21/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager

PMC-EF2a
(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Cellana LLC Consortium

STATE: HI

PROJECT TITLE : Large Scale Production of Fuels and Feeds from Marine Microalgae

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-000123	EE0003371	GFO-10-616	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B3.6 Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

Rational for determination:

The Cellana LLC Consortium, which is comprised of private industry, university laboratories, and commercial partners, proposes to use federal funding to deliver a design report which analyzes life cycle and costs for a commercial scale algae cultivation and harvesting process based on technologies studied. This project focus' on optimization of known technologies for impacts on yield, costs, energy input, carbon footprint, and product value.

This project will include feedstock supply strain development to include strain improvement, biochemical characterization, metabolic pathway development, and high output screening; feedstock supply cultivation to include optimization through flashing light/turbulence studies, nutrient stress, pond depth, and halotolerance lab studies; feedstock logistics harvesting and dewatering studies to include re-suspension and 3 alternate dewatering process; feedstock logistics extraction to include toll processing to increase defatted biomass and ash studies to measure moisture content of the organic material; product development to include aquaculture feed trials to test the nutritional value of biomass at fish farms; and delivery of a Design Report for a full scale commercial algae cultivation and harvesting process.

This project involves multiple research and development studies in conventional laboratories. Each lab associated with this project has submitted an R & D Questionnaire which thoroughly addresses chemical and safety handling protocols. No GMO's will be used in the implementation of this project.

This project is comprised of research and development and information dissemination via a Design Report; therefore a CX A9 & B3.6 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/21/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/22/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager

PMC-EF2a
(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Texas State Energy Conservation Office **STATE:** TX

PROJECT TITLE : State of Texas EECBG Roof Projects - T

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000013	DE-EE0000893		0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The Texas State Energy Office (SEO) proposes to use ARRA funding for the purchase and installation of cool roofing projects on multiple state and municipal buildings. The intended use of ARRA funds is going to be used by the Sub Grantees under the State of Texas EECBG Grant program to all of the entities that did not qualify for direct formula grants from the DOE originally. The State is operating under the SOW Template and under building retrofits roofs were originally not included in the bound activities. The State has a contract with each recipient that includes the SHPO/Waste Stream requirements that each recipient is fully aware and will perform. The roofing projects are retro-fit project that will utilize today's clean and cool roof technology.

Cool roofing installations on the various buildings will utilize a variety of methods and materials which include the use of energy star reflective coating, energy efficiency roofing with polaralum radiant barrier, acrylic & silicone protective coating, topcoat flashing grade mastic and topcoat elestomeric roofing membrane, polyurethane foam roofing system, spray polyurethane foam roof systems, white reflective membrane, thermoplastic polyolefin (TPO) roof, reflective metal roofing, and PVC membrane Duro-last roofing system.

No green roofing activities will be included as part of this action. Any buildings that submit for the installation of a green roof will require a separate EF-1 submission and NEPA review.

There would be no or negligible impacts to biological resources, cultural resources, wetalnds, or other sensitve habitats as buildings identified for the installation of cool roofing systems will be located in developed, urbanized areas.

Based on the information above, this project is Categorically Excluded from further NEPA review under CX B 5.1, Actions to Conserve Energy.

NEPA PROVISION

Note to Specialist :

EF-2a prepared by Bill Knapp.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/22/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: MA Department of Energy Resources **STATE:** MA

PROJECT TITLE : Town of Fairhaven 500 kW PV System

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000737		0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The Town of Fairhaven, Massachusetts is proposing to use EECBG ARRA funding to install a 500kW ground mounted solar PV array at the Fairhaven Municipal Landfill. The solar installation will provide power to the nearby Hastings Middle School. The solar installation will produce an estimated 569,400 kWh of electricity per year, avoiding the emission of 571,678 pounds of CO2 annually.

The Fairhaven Municipal Landfill was capped and closed in 1997. The landfill surface is vegetated with grass, which is mowed each year, and the site is not currently used for any other purpose. The surface construction of the landfill consists of an impermeable geomembrane liner covered with two feet of sand/soil. A venting system of pipes beneath the liner collects landfill gas and flares it to the atmosphere.

The solar installation site occupies a 5 acre (217,800 square feet) portion of the 27 acre landfill property. The approximately 2,200 solar PV panels will rise, at the highest, 9 feet above the landfill surface and will be attached to a mounting system. The mounting system consists of concrete ballast blocks with an attached aluminum frame. The concrete ballast blocks will sit on gravel that is spread on the surface of the landfill. None of the installed equipment will penetrate the landfill liner. All actions involved with the proposed project will occur within the boundary of the landfill property which is regularly maintained. The area surrounding the landfill is comprised of commercial, town-owned and residential. Fifty percent of the landfill boundary consists of wooded areas. Adverse visual effects are not expected as a result of the proposed project.

The interconnection point will be at a distribution line that runs along the eastern boundary of the property, approximately 400 feet from the ground mounted inverter. An overhead transmission line will run from the top of the ground mounted inverter to the interconnection point. The line will be suspended from up to three poles that will be installed along the edge of the landfill beyond the subsurface liner. At the interconnection point, the transformer and protective switchgear will follow the design requirements set by the utility (NSTAR). Discussions have been held with the interconnection engineer for NSTAR regarding the project and the forthcoming interconnection application.

The solar installation will be subject to review and approval by the Massachusetts Department of Environmental Protection under Fairhaven's existing post-closure use permit. An application will be submitted in the summer of 2010 to the Mass. DEP to request modification of the existing post-closure use permit that governs maintenance and monitoring of the landfill that is held by the town of Fairhaven. Construction will begin only after the modified post-closure use permit and other required permits have been approved.

After a thorough review of the information submitted for the proposed project, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed project will result in

a reduction in the use of conventional fossil fuels; therefore it is hereby Categorically Excluded B5.1 "actions to conserve energy," from further NEPA review.

NEPA PROVISION

Note to Specialist :

EF-2a prepared by Logan Sholar.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/22/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: County of Los Angeles **STATE:** CA

PROJECT TITLE : EECBGARRA County of LA(S)

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000013	DE-EE0000896		EE8

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

A11 Technical advice and planning assistance to international, national, state, and local organizations.

Rational for determination:

The County of Los Angeles, California would use EECBG funds for the following activity which is bounded by the signed SOW and are therefore categorically excluded from further NEPA review:

Activity 2: Community-Scale Building Retrofit Program

Any projects submitted for EECBG funding that fall outside the bounds of the signed SOW will require a separate NEPA determination review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF-2a prepared by Bill Knapp.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/22/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: City of Philadelphia and Philadelphia Industrial Development Corporation **STATE:** PA

PROJECT TITLE : City of Philadelphia (PA), EECBG: Commercial and Industrial Energy Efficiency Building Retrofit Revolving Loan -- Campus Apts

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000013	EE0000927		0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The City of Philadelphia is proposing to award $1,600,000 in EECBG ARRA funding to Campus Apartments to cover the incremental cost of purchasing energy efficient equipment and building materials, over traditional equipment and materials, for a new, LEED-certified, extended stay hotel. The new building will be constructed in a highly developed, urban area. The EECBG funding amount is 3.8% of the total cost of the $41,900,000 project.

A Phase 1 Environmental Site Assessment was conducted of the site by Environmental Consulting Inc. in November 2007 found no pre-existing contamination on the site.

The project will obtain and comply with all standard building permits and code requirements. A City of Philadelphia Zoning Permit, a City of Philadelphia Building Permit; PA Act 537 and IRSA compliance are required and will be obtained.

Meetings have been held with the local Spruce Hill community group and a letter of support has been obtained. Public hearings have been held by the Philadelphia City Planning Commission and the project has their support. An ordinance that will allow this project has been introduced to the Philadelphia City Council and their approval is pending.

No vegetation exists on the portion of the site that will be occupied by the new building. The remainder of the site is occupied by six 3 story residential buildings and their yards. These buildings are to remain. Excavation will take place for the hotel cellar which will require removal from the site of approximately 12,000 cubic yards of soil. Soil will be tested for contaminants and relocated to an appropriate approved site. Any run off will be contained on site by appropriate filter barriers. There are no surface water bodies in proximity to this site. There are not expected to be any adverse effects to threatened and endangered species, wetlands, floodplains, cultural resources or visual resources as a result of the construction of the new building. EECBG funding will go towards the purchase and installation of the following equipment and building material:

Building Envelop
• Wall Panels - 3 inch thick metal faced panels and 6 inches of internal insulation, for a wall R-value of R-42.
• Roof - Roof will be insulated to R-30. About two-thirds of the roof will be a green vegetative roof to delay peak air conditioning loads and to control storm water runoff from the building. The other third of the roof will be a white reflective ENERGY STAR roof.
• Windows - The windows are thermal-break aluminum with double glazed, low E tinted glass. The overall window U-value will be 0.40 or lower.

Heating, Ventilation and Air Conditioning
• Energy-efficient water-loop heat pump system.
• Gas-fired condensing boiler that is 90+ percent efficient.
• Two-way control valves at each heat pump to reduce pumping energy requirements by not pumping water through the heat pumps unless they are on.
• Heat-recovery wheel to condition incoming ventilation air.
• Ventilation air fans controlled by CO2 sensors.
• Smart control system to control building temperature. This system will allow the manager to remotely put unoccupied rooms in an unoccupied mode and to control the building's peak demand.

Lighting
• Energy-efficient light fixtures will be used throughout the building.
• Occupancy sensors control lighting in the common areas.

Plumbing
• Humidity recovery system to reclaim heat.

After a thorough review of the submitted information, it has been determined that the project will not have a significant impact to human health and/or environment. Therefore, the project has been categorically excluded under CX B5.1 "actions to conserve energy" from further NEPA review.

NEPA PROVISION

Insert the following language in the award:

You are required to:
Prior to the expenditure of Federal funds to implement any of the above activities, the City of Philadelphia has the affirmative responsibility to ensure they are in compliance with Sec. 106 of the National Historic Preservation Act (NHPA), consistent with DOE's 2009 letter of delegation of authority regarding the NHPA. If applicable, the sub-recipient must contact the State Historic Preservation Officer.

The recipient is required to obtain the necessary permits regarding all actions involved with the proposed project.

Note to Specialist :

EF-2a prepared by Logan Sholar.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/22/10
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager

PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Minnesota Department of Commerce, Office of Energy Security **STATE:** MN

PROJECT TITLE : SEP Residential Ground Source Heat Pump Installations

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE FOA 0000052	DE-EE0000164	GFO-10-623-001	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

This determination is for the following projects listed below:

Minnesota Department of Commerce, Office of Energy Security SEP ARRA EE0000164
Residential Ground Source Heat Pump Rebate Program:

Anderson
- Address- 18989 329th Place, Isle, MN 56342
- Borefield- N 46.29055, W 93.53437

King
- Address- 3769 Wescott Hills Drive, Eagan, MN 55123
- Borefield- N 44.81999, W 93.13125

Nyberg
- Address- 3740 Brighton Way, Arden Hills, MN 55112
- Borefield- N 45.05405, W 93.18068

High
- Address- 2190 Kelzer Pond Drive, Victoria, MN 55386
- Borefield- N 44.85767, W 93.67485

Morri
- Address- 3719 Centerville Road, Vadnais Heights, MN 55127
- Borefield- N 45.05471, W 93.06601

Monson
- Address- 13645 Greenwood Trail North, Stillwater, MN 55082
- Borefield- N 44.97344, W 92.83036

Alexander
- Address- 8051 Kimberly Lane North, Maple Grove, MN 55082
- Borefield- N 45.10149, W 93.50185

Landis

• Address- 33011 Spruce Road, Motley, MN 56466
•Borefield- N 46.32224, W 9.67326

Korsa
• Address- 12070 210th Street West, Lakeville, MN 55044
•Borefield- N 44.64418, W 93.3093

Every project under this determination is less than or equal to 7 tons, The exchange fluid for these projects is a mixture potable water and food-grade propylene glycol. The MN GSHP rebate program requires contractors to be licensed and/or bonded as applicable under state or local requirements. All electrical work must be performed by a licensed electrician working for a licensed electrical contractor. The ground-loop installers for these projects are IGSHPA-certified.

No wetlands or flood plains or coastal zones will be impacted by any of the projects on this list. All project information has been submitted to the local SHPO in the State of MN in regards to state permitting. As part of the requirements within the program all SHPO consultation and permitting must be completed before construction activities can occur. Every project has submitted a waste management plan for all waste generated by the projects.

DOE has reviewed the information for the proposed projects and determined that these projects do not pose a significant impact to human health and/or environment. Therefore these project are Categorically Excluded under B5.1 "Actions to Conserve Energy".

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

This EF-2A was completed by Logan Sholar on 9-20-10

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/22/10
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager

PMC-EF2a

(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: State of North Carolina - Subrecipient Robeson County **STATE:** NC

PROJECT TITLE: Greenhouse Gas to Energy Projecs

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000771	GFO-10-634-002	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

Robeson County is proposing to use EECBG funding to expand the existing landfill gas collection system and construct an electricity-generating facility onsite. The gas collection system construction will consist primarily of installing 24 new extraction wells, approximately 9,000 linear feet of HDPE piping, a condensate removal vessel and 4 isolation valves. EECBG funding will also be used for the electricity generating facility which will have an estimated capacity of 1.4MW. The generators will be housed in a building or container where there will be electrical controls for the engines and switchgear equipment to convert the electricity into the proper voltage for distribution on the power line. Minimal grading/site preparation is anticipated. Utility work will be required to provide power and light for the facility and to meter and transfer the generated electricity onto the grid. Specifically, EECBG funds will be used to provide the necessary capital for purchase of equipment and construction of a fully functional electricity generating facility that will be fueled by landfill gas. Construction items include but are not necessarily limited to concrete pads, building/enclosure, equipment placement, utilities, and SCADA system installation. Equipment includes but is not limited to the engine-generator unit, switch gear, controls, transformer and radiator. The closed landfill is approximately 79 acres. The entire landfill property totals 485 acres. The methane recovery system is and will be constructed within the landfill footprint with the exception of the flare station and treatment skid, which is in place on the landfill property just to the south of the scales and east of the landfill, occupying approximately 0.1 acres, and the electricity generating station which will occupy approximately 2 acres.

Potential environmental impacts of the project and associated actions include:

• Air Quality – Air quality should improve as a result of the proposed project. Methane gas that is currently being vented directly into the atmosphere will be captured and used to produce electricity.

• Water Quality – State of NC requires a Sedimentation and Erosion Plan if more than one (1) acre is being disturbed. Landfill closure guidelines require a stormwater management plan be in place. Robeson County currently has an NPDES permit for the facility as well as an approved Erosion & Sedimentation Control Plan for the landfill facility which will cover the planned construction activities. The proposed project is not expected to have adverse effects to water quality.

• Ground Disturbance – The proposed 24 extraction wells are standard vent wells that are required as part of the closure of the landfill. The collection system piping is to be trenched 2 feet deep into areas of the landfill that have not had final closure construction performed. The areas of the landfill where gas is being collected have intermediate soil cover 1-2 feet deep. Closure construction will be performed at a later date when the landfill reaches capacity. The condensate collection vault will be approximately 13.5 feet deep and will allow condensate to drain by gravity to the landfill Leachate collection system. The collection system expansion pipe trenching will disturb approximately a 4 foot

wide strip along the trench line, which will be approximately 9,000 total feet in length, for a total of 36,000 square feet on the landfill footprint. The site work for the electricity generation facility is expected to disturb less than 1 acre (43,560 square feet).

• Noise – The power generation system will be totally enclosed within a sound suppressing container. The site is a low density, rural area with no occupied structure within 100 yards. Adverse effects from noise will be negligible.

• Visual – The proposed project will occur at a closed landfill in a rural area that is surrounded by wooded areas. Adverse visual effects are not expected as a result of the proposed project.

• Threatened and Endangered Species – The proposed project will occur on a partially closed landfill that is fenced. The site is graded and graveled. There will be no adverse effects to threatened and endangered species or critical habitat as a result of the proposed project.

• Permits – No new solid waste or wastewater permits will be needed. The landfill is not regulated by the Clean Air Act's New Source Performance Standards (NSPS) at this time due to the design capacity being below the threshold. Therefore, no Title V Operating Permit from the NC DENR's Division of Air Quality is required. The Division of Air Quality will be notified prior to construction of electricity generating equipment onsite. The North Carolina Department of Environment and Natural Resources (NCDENR) does not require a special permit for installation of a landfill gas extraction wells.

DOE has assessed potential impacts from all phases of the proposed project. After a thorough review of the information submitted for the proposed project, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed project will result in a reduction in the use of conventional fossil fuels; therefore it is hereby Categorically Excluded B5.1 "actions to conserve energy," from further NEPA review.

NEPA PROVISION

Insert the following language in the award:

You are required to:

The recipient is required to obtain the necessary permits for all actions involved with the proposed project.

Note to Specialist :

EF-2a prepared by Logan Sholar.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/22/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2/04/02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: State of North Carolina - Columbus County **STATE:** NC

PROJECT TITLE: Landfill Gas Utilization - Columbus County

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000771	GFO-10-634-001	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

Columbus County is proposing to use EECBG ARRA funding for completion of Phase II of the Landfill Gas project. Phase II, utilization of collected landfill gas, will include – purchase and installation of a 250kW generator, installation of an onsite greenhouse and planning for Phase III , a bio-fuels incubator in conjunction with a Southeastern Community College (SCC) program. Columbus County is requesting $544,500 to fund the implementation of Phase II. The EECBG funding will be used for Phase II only as described above. Phase I will be completed before EECBG grant funds are acquired. The proposed project will occur on the closed landfill which takes up 30 acres of the 200 acre landfill property. Additional acreage will be minimal – less than ¼ acre for a flare station and electrical generator. Possibly up to another ¼ acre will be used to establish a greenhouse that will be heated by waste heat from the generator.

Potential environmental impacts of the project and associated actions include:

• Air Quality – Air quality should improve as a result of the proposed project. Methane gas that is currently being vented directly into the atmosphere will be captured and used to produce electricity. An air permit is required from the NC DNR Division of Air Quality.

• Water Quality – State of NC requires a Sedimentation and Erosion Plan if more than one (1) acre is being disturbed. Landfill closure guidelines require a stormwater management plan be in place. The proposed project is not expected to have adverse effects to water quality.

• Ground Disturbance –Generators will be located in a small, metal shell building. The generator building will be ~1,200 sq ft. The greenhouse will be 7,150 sq ft. This includes a 400 sq ft "head house". The proposed project will occur on land that is a closed landfill and previously disturbed. There will be no adverse effects to threatened and endangered species, critical habitat, wetlands, floodplains, or cultural resources as a result of the proposed project.

• Noise – The generator will be located inside an enclosed structure and mufflered, which should minimize the noise. The site is a low density, rural area with no occupied structure within 100 yards. Adverse effects from noise will be negligible.

• Visual – The proposed project will occur at a closed landfill in a rural area that is surrounded by wooded areas. Adverse visual effects are not expected as a result of the proposed project.

• Threatened and Endangered Species – The proposed project will occur on a partially closed landfill that is fenced. There will be no adverse effects to threatened and endangered species or critical habitat as a result of the proposed

project.

• Permits – The air permit for flaring has been applied for and is pending approval. No further action is needed other than processing by the state. Air permitting for the engine has not been submitted, but will be obtained before operation. The solid waste permit application is mostly complete. It is needed for the collection system only and is actually a modification of the post closure permit for the landfill. Turn-around time on the solid waste permit is generally short.

DOE has assessed potential impacts from all phases of the proposed project. After a thorough review of the information submitted for the proposed project, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed project will result in a reduction in the use of conventional fossil fuels; therefore it is hereby Categorically Excluded B5.1 "actions to conserve energy," from further NEPA review.

NEPA PROVISION

Insert the following language in the award:

You are required to:

The recipient is required to obtain the necessary permits for all actions involved with the proposed project.

Note to Specialist :

EF-2a prepared by Logan Sholar.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/22/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a

(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: State of North Carolina - Subrecipient Rockingham County **STATE:** NC

PROJECT TITLE: BizFuel

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000771	GFO-10-634	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

Rockingham County is proposing to use EECBG ARRA funding to complete a landfill gas capture system that will eventually be used to generate electricity. The EECBG funding will be used to install an electric blower, a gas collection system, and a flare to burn off any excess gas. The proposed landfill gas collection system will be installed on two out of three closed landfill cells and will also pull gas out of the currently open sub-title D landfill's leachate system. This project is the first phase of a renewable energy project that will utilize landfill methane as its energy source. Electricity generation will be phase II of the project. Phase II of the project consists of installing multiple generators and replacing the existing connection to the grid. Phase II will feed electricity onto EnergyUnited's 12.5 kV distribution lines, which will transport to the grid. There will be no new transmission lines necessary for this project. The existing distribution lines will need to be rebuilt. The proposed project will occur on the closed landfill which takes up 30 acres of the 715 acre landfill property and no additional acreage will be used.

Potential environmental impacts of the project and associated actions include:

• Air Quality – Air quality should improve as a result of the proposed project. Methane gas that is currently being vented directly into the atmosphere will be captured and used to produce electricity. An air permit is required from the NC DNR Division of Air Quality.

• Water Quality – State of NC requires a Sedimentation and Erosion Plan if more than one (1) acre is being disturbed. Landfill closure guidelines require a stormwater management plan be in place. The proposed project is not expected to have adverse effects to water quality.

• Ground Disturbance – All staging areas for the project would occur within the existing landfill footprint. Total disturbance for Phase I is estimated at 55,000 square feet. A metal shell building will be constructed within the landfill footprint on previously disturbed land to house the generators which comprises the ground disturbance for Phase II. All aspects of the proposed project will occur on land that is a closed landfill and previously disturbed. There will be no adverse effects to threatened and endangered species, critical habitat, wetlands, floodplains, or cultural resources as a result of the proposed project.

• Noise – The generators will be located inside an enclosed structure, which should minimize the noise. The site is a low density, rural area with no occupied structure within 100 yards. Adverse effects from noise will be negligible.

• Visual – The proposed project will occur at a partially closed landfill in a rural area that is surrounded by wooded areas with no nearby residences. Adverse visual effects are not expected as a result of the proposed project.

• Threatened and Endangered Species – The proposed project will occur on a partially closed landfill that is fenced. There will be no adverse effects to threatened and endangered species or critical habitat as a result of the proposed project.

• Permits – The existing NC Department of Natural Resources air permit will need modification, and the electric generators may qualify as a New Source under the federal Clean Air Act. A permit for emissions from the proposed generators will be applied for before Phase II has begun.

DOE has assessed potential impacts from all phases of the proposed project. After a thorough review of the information submitted for the proposed project, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed project will result in a reduction in the use of conventional fossil fuels; therefore it is hereby Categorically Excluded B5.1 "actions to conserve energy," from further NEPA review.

NEPA PROVISION

Insert the following language in the award:

You are required to:

The recipient is required to obtain the necessary permits for all actions involved with the proposed project.

Note to Specialist :

EF-2a prepared by Logan Scholar.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/22/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: City of Winston-Salem **STATE:** NC

PROJECT TITLE : Little Creek Rec Center

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	EE0000769	GFO-10-635	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The City of Winston-Salem is proposing to use EECBG funding to install a ground source heat pump system that will serve the heating and cooling needs for the existing Little Creek Recreation Center. The ground source heat pump system will be a vertical, closed loop system with a capacity of 18 tons. There will be 6 boreholes needed drilled to a depth of 300ft. The state certified and licensed driller will follow IGSHPA and NGWA regulations during installation. The system will use HDPE piping that is heat fused and all wells will be fully grouted with a thermally enhanced bentonite grout. The refrigerant used in the system will be a non-toxic, food grade propylene glycol and water mixture. Excess dirt from well-holes will be either smoothed into grass or hauled away. Basic mechanical permits required by city building codes will be obtained.

The geothermal well field portion of the installation will occur in a mowed, grassy lawn area at the rear of the building between the building and an adjacent wooded area. The proposed project location is in a developed residential area. SHPO has assessed the proposed project and responded stating that there will be no adverse effects to historical resources. There are not expected to be any adverse effects to threatened and endangered species, wetlands, floodplains, or cultural resources as a result of the proposed project.

After a thorough review of the information submitted for the proposed project, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed project will result in a reduction in the use of conventional fossil fuels; therefore it is hereby Categorically Excluded B5.1 "actions to conserve energy," from further NEPA review.

NEPA PROVISION
Note to Specialist :

EF-2a prepared by Logan Sholar.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/22/10
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Illinois Department of Commerce & Economic Opportunity **STATE:** IL

PROJECT TITLE : Tuscola North Plant 100 kW Wind Turbine Installation

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	EE0000119	GFO-10-633	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

Illinois Department of Commerce & Economic Opportunity would use $263,000 of ARRA DOE funding to purchase and install a 100 kilowatt wind turbine on 120-foot self-supporting tower for its waste water treatment plant in Tuscola, Illinois.
The electricity generated by the wind turbine will be used for on-site power needs. The project site is on the grounds of the waste water treatment facility and is previously disturbed land. The project site is flat and surrounded by farmland. The area has abundant wind resources and this project is estimated to generate 172,000 kWh annually.
The U.S. Fish and Wildlife Service has reviewed the project and determined that the wind turbine is not likely to adversely affect threatened or endangered species.
The Illinois Historic Preservation Agency has determined that the project would have no affect on historic properties.
No FAA clearance is required due to the distance from a public airport and the height of the structure (below 200 feet).

The wind turbine will require a special use permit from the City of Tuscola.
In view of the information provided by the State and recipient, DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion B5.1.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF-2a prepared by Neil Sullivan.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/22/10
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a
(2.06.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: City of Long Beach **STATE:** CA

PROJECT TITLE : Municipal Energy Efficiency Retrofits

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000866	GFO-10-636	EE0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The City of Long Beach, California proposes to use EECBG funding for the purchase and installation of their Municipal Energy Efficiency Retrofits Project which will include individual and whole system lighting change-outs, HVAC equipment updates, glazing/window tinting, and cool roof installations. Upon completion the Municipal energy efficiency retrofits will save money, reduce the City's electricity use, reduce greenhouse gas emissions and will support green jobs and a market for energy efficient products/supplies.

Cool roofing installation will include the cleaning of existing roofing materials on identified buildings and the installation of ICE Coating which is a highly reflective, heavy build, elastomeric roof coating comprised of a nanotechnology-engineered blend of acrylic latex polymer. This material is asbestos free which can be used as either a new coating or as a restoration coating over compatible and properly prepared existing coatings. Additionally, this project has already applied for and received a building roof replacement (BRR) permit.

All buildings identified for cool roofing installation have been reviewed by the state SHPO and were determined as not meeting federal, state, or local designations as historical landmarks; a copy of this documentation was attached with the EF-1 submittal in the PMC. Additionally, the City of Long Beach has an established Waste Management Plan in place for this project and its associated activities.

There would be no or negligible impacts to biological resources, cultural resources, wetalnds, or other sensitve habitats as this project will be located across a highly developed, urbanized area.

Based on the information above, this project is Categorically Excluded from further NEPA review under CX B 5.1, Actions to Conserve Energy.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF-2a prepared by Bill Knapp.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/21/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager

PMC-EF2a

(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: WA Dept. of Commerce

STATE: WA

PROJECT TITLE : Venoil Bio-Refinery

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000139	GFO-09-155-016	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The Washington Department of Commerce is proposing to use ARRA funding for the purchase and installation of a skid mounted glycerin distillation system at an existing industrial facility. The existing facility is a biodiesel manufacturing facility which is being developed and converted into a biodiesel refinery and glycerin recycling facility. The glycerin recycling facility will use by-products from existing biodiesel plants and other currently unusable materials and refine them into high quality glycerin and co-products. The system will process crude glycerin into technical grade glycerin, and separate salts, partially reacted triglycerides, alkylated esters, methanol, and water. The new system will not be creating a new product or chemicals but rather recycling a mixture of a byproduct left over from the production of biodiesel and separating them into renewable commodities. The glycerin will be purified to a technical grade non-toxic substance well regarded in the commodities market. The methanol will be sold back to the biodiesel producers as recycled methanol. The water being distilled will be used at the facility. The un-reacted vegetable oil will be used as the feedstock to make a bio-fuel for energy recovery back into a low pressure Johnstone oil heater. The salts will be purified into an organic nutrient for feed and fertilizer. The overall project includes site preparation, storage, material handling, testing, and quality assurance around glycerin purification and energy recovery.

The glycerin distillation system is designed to be easily integrated with the existing facility. This integration calls for plumbing, electrical, and distribution to be coupled with the existing structure, steam lines, and tank storage. The equipment will be mechanically integrated into the facility by connecting the needed plumbing to tanks that store raw material and finished product. Pumps and valves will be electrically integrated into the facility with various electrical wiring and communications cable. The system will be installed on a 50 x 50 foot existing concrete pad under the facility's existing permits. A 50 x 50 foot steel canopy and building will be assembled to house the system, and all activities for this project will take place in an interior location. Detailed drawings will be provided to the local fire marshal as required.

Consultation was sought from the State of Washington Department of Archaeology and Historic Preservation and concurrence was obtained that no historic properties will be affected by this project. The recipient confirms that the system and equipment will not produce water emissions or new air emissions. There will be no ground disturbance since the project is planned for an existing and heavily industrialized site.

Based on the above information, these actions are categorically excluded under CX number B5.1 "actions to conserve energy."

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF-2a prepared by Neil Sullivan.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/21/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager