

# ENERGIZE MISSOURI WATER

MISSOURI DEPARTMENT OF NATURAL RESOURCES

WATER AND WASTEWATER  
ENERGY LOANS



## PROGRAM MANUAL

American Recovery and Reinvestment Act of 2009  
State Energy Program

Mail Form to:  
Missouri Department of Natural Resources  
1101 Riverside Drive  
P.O. Box 176  
Jefferson City, MO 65102-0176



**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES

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## **I. Introduction**

This document is meant to serve as a guide for applicants when preparing their applications under the WWW Energy Loan Program.

The following are examples and explanations on how to fill out each of the supporting documents (forms) that must be included in an application.

### **1. List of Supporting Documents**

Applications must contain all of the elements listed below to be considered complete and eligible for funding.

<b>Form A</b>	<b>Applicant Information</b>
<b>Form B</b>	<b>Project Information</b>
<b>Form C</b>	<b>Energy Usage Information</b>
<b>Form D</b>	<b>Efficiency Measures</b>
<b>Form E</b>	<b>Energy Metrics</b>
<b>Form F</b>	<b>Project Budget</b>
<b>Form G</b>	<b>Project Partners</b>
<b>Form H</b>	<b>Waste Stream</b>
<b>Form I</b>	<b>National Environmental Policy Act</b>
<b>Form J</b>	<b>National Historic Preservation Act</b>

## II. Form A – Applicant Information

This document should be the cover page of your submitted application. The form contains a summary of all important aspects of an application. **The signature pages MUST be signed** (Page A-1 and A-4) by an authorized individual to be considered complete.

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### Applicant Information

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**Applicant Full Name:** provide name of the entity applying for funds.

**DUNS Number:** applicant must obtain a Dun and Bradstreet (D & B) Data Universal Numbering System (DUNS) number. A DUNS number is a unique identifier used by the federal government to track distribution of federal funds. To obtain a DUNS number, visit <http://fedgov.dnb.com/webform> or call the D&B Government Customer Response Center (866) 705-5711.

**NAICS Code:** provide the 2007 North American Industry Classification System (NAICS) code number that the applicant organization is classified under (if applicable).  
<http://www.naics.com/search.htm>

**Mailing Address:** this is the mailing address for the applicant. The mailing address must reach the contact person listed in the Applicant Information section. Provide:

**Mailing Address**

**City**

**ZIP Code + 4** (nine digits)

**Primary Contact Name:** name of contact person representing the applicant. This person will be the primary point of contact with the WWW Energy Loan Program.

**Title of contact:** provide the title for the contact person.

**Email address:** provide the email address for the contact person.

**Telephone number:** provide the telephone number for the contact person.

**Fax number:** provide the facsimile number for the contact person.

**Facility Ownership:** indicate whether the applicant owns, rents (or leases) the facility. If other, please explain.

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### Financial Background

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Applicants are required to provide sufficient financial background so that an accurate financial status of the applicant can be determined. Required documents include:

**3 years of federal income tax returns (private entities).**

**3 most recent audit reports (public/municipal entities).**

**Current balance sheet (no more than six months old).**

**Current cash flow statement.**

**Taxpayer ID Type:**

**FEIN Number:** provide the applicant’s federal employer identification number (EIN). This number, also sometimes referred to as a tax identification number, is a nine-digit code that businesses use to identify themselves for tax reporting, banking, and other purposes.

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**Applicant Signature**

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An authorized representative of the applicant’s entity must sign and date the page (Signature on Page A-1). Applications that have not been signed will not be considered for funding.

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**Project Information**

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**Project Title:** provide a name for the proposed project.

**Primary Activity:** identify the primary function of the drinking water or wastewater system

**Project Site Address:** this is the address where the project will take place. Provide:

**Site Address**

**City**

**ZIP Code + 4** (nine digits)

**Size of Facility (sq. ft.):** provide the square footage of facility receiving energy efficiency improvements.

**Natural Gas Utility:** provide the name of the gas utility (investor-owned, municipality, co-op) that currently supplies gas to the proposed project site.

**Electric Utility:** provide the name of the electric utility (investor-owned, municipality, co-op) that currently supplies electricity to the proposed project site.

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**Applicant Background**

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Answers each question and provide justification or details as necessary to explain your answer. The intent is to develop a complete applicant background.

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**Applicant Signature**

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An authorized representative of the applicant’s entity must sign and date the application cover page (Signature on Page A-4). Applications that have not been signed will not be considered for funding.

### III. Form B – Project Information

This form allows the applicant to submit a more detailed description of the proposed energy efficiency project. Applicants should fill out all of the sections and provide sufficient information on the most important and relevant aspects of the proposed project:

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#### Project Information

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**Proposed Project Start Date:** provide the proposed start date for the project.

**Proposed Project Completion Date:** provide the estimated completion date for the project. All projects must be completed within 18 months of execution of loan agreement.

**Brief Project Description:** provide a short description of the proposed energy efficiency improvement(s). The description must fit within the allocated area.

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#### Metrics Activity

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Details for completing the metrics activity portion of the application cover page can be found in **Section V. Form E – Energy Metrics** of this Program Manual.

Note that all calculations in this program manual use kWh. To calculate energy savings resulting from approved natural gas projects, the applicant is to use the following conversion:

1 Therm  $\approx$  29.30 kWh.

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#### Financial Information

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**Loan Funds Requested:** provide the dollar amount of the requested.

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#### Project Narrative and Benefits

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**Flood Impacted Communities:** In order to apply for no interest loans, flood impacted communities must provide a narrative description documenting flood impacts. The description must include photographs or a statement detailing why photographs are not available.

Provide a description of the proposed project, including:

- Brief applicant background.
- Goals and objectives.
- Statement of work (required tasks and activities).
- Information on the proposed project location, licenses and permits required (if applicable).
- Current status of the project.

Discuss the merits of the project per the evaluation criteria provided in the WWW Energy Loan Program Guidelines:

- Identify expected project outcomes including job creation/retention, energy savings, greenhouse gas (GHG) emission reductions, etc.
- Identify any additional benefits to the community, such as economic, environmental, etc.

*If necessary, applicants may add up to one additional page (one-sided) for their project description.*

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### **Project Timeline**

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Provide a proposed timeline for project milestones or events. Examples of possible milestones or events include:

- Identify equipment.
- Procure contractor/subcontractor.
- Purchase equipment and materials.
- Equipment arrives on site.
- Begin installation or construction.
- Project completion.

#### IV. Form C – Energy Usage Information

This form allows the applicant to submit information about past energy usage and costs.

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##### Energy Usage

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Provide information regarding the total annual energy cost and usage of the facility. The applicant should refer to past utility bills and statements, or receipts and invoices to identify and calculate energy costs and annual energy use.

**Total paid for the last 12 months (\$):** means the dollar amount the applicant paid for energy in one year.

**Total usage for the last 12 months:** means the amount of energy used by the applicant in one year.

Provide the annual energy cost and usage for the energy sources listed below. Leave a column blank if it is not applicable.

Electricity  
Natural Gas  
Gasoline  
Oil  
Kerosene  
Propane  
Wood  
Coal  
Other (list)

## V. Form D – Efficiency Measures

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### Energy Efficiency Measures

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Applicants must provide information on the proposed retrofits and upgrades by completing the table on Form D:

Applicants must include a **copy of the manufacturer’s specifications for every proposed piece of equipment** for which funds are being requested.

**Equipment:** identify both the proposed and existing equipment. List the proposed equipment to be purchased and installed at the project site. Also identify the existing equipment that will be replaced including the equipment year, horsepower (HP), efficiency, and quantity being replaced.

(A) **Equipment Cost (\$):** provide the cost of purchasing one unit of the proposed equipment.

(B) **Number of Units:** provide the number of equipment to be purchased and installed.

(C) **Installation Cost (\$):** provide the labor costs related to installing all units of equipment.

(D) **Annual Energy Savings (kWh):** provide the expected annual energy savings (in kWh) to be achieved by replacing existing equipment with the proposed equipment.

(E) **Average Utility Rate (\$/kWh):** provide the average annual utility rate that was paid to the utility company during the previous year for facility operations. This number shall be the same for all equipment.

(F) **Total Cost (\$) = ((A) Equipment Unit Cost (\$) x (B) Number of Units) + (C) Installation Cost (\$)**

**Simple Payback:** calculate the amount of time it will take to recover the project’s investment through reduced or avoided energy costs. This is calculated by dividing the total project cost (\$) by the annual dollar savings (\$/year).

$$\text{Simple Payback (years)} = \frac{\text{Total Cost (\$)}}{\text{Annual Dollar Savings } \left( \frac{\$}{\text{year}} \right)}$$

$$\text{Annual Dollar Savings } \left( \frac{\$}{\text{year}} \right) = \text{(D) Annual Energy Savings (kWh)} \times \text{(E) Average Utility Rate } \left( \frac{\$}{\text{kWh}} \right)$$

*Applicants may add as many additional tables as necessary to list all of the proposed equipment to be purchased.*

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## **Bundled Simple Payback**

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Under the WWW Energy Loan Program applicants have the opportunity to bundle energy efficiency measures to meet the simple payback requirement.

**(A) Total Cost:** sum the total cost of column (F) from the Efficiency Measures table.

**(B) Sum of Annual Energy Savings x Average Annual Utility Rate:** sum the annual energy savings from column (D) and multiply by the average annual utility rate from column (E) in the Efficiency Measures table.

**Bundled Simple Payback:** the amount of time it will take to recover the project's investment through reduced or avoided energy costs. This is calculated by dividing the total cost (\$) by the annual energy savings (kWh) multiplied by average annual utility rate (\$/kWh).

$\text{Bundled Simple Payback (years)} = \frac{\text{Total Cost (\$)}}{\text{Annual Energy Savings (kWh)} * \text{Average Annual Utility Rate } \left(\frac{\$}{\text{kWh}}\right)}$
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## VI. Form E – Energy Metrics

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### Jobs Created or Retained

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Full-time equivalent (FTE) is a metric used by U.S. Office of Management and Budget (OMB) to convert full-time, temporary and part-time jobs into comparable metrics. FTEs are calculated as total hours worked in jobs created or retained divided by the number of hours in a full-time schedule, as defined by the applicant. Jobs created means a new position created and filled or an existing unfilled position that is filled as a result of Recovery Act funding. Jobs retained means an existing position that is now funded by the Recovery Act, i.e. a job for which the wages or salaries are either paid for or will be reimbursed with Recovery Act funding. Jobs created and retained must be reported in full-time equivalents, or FTE. For further information please see OMB SEP Notice 10-07 [http://www1.eere.energy.gov/wip/pdfs/wap10-14\\_sep10-07\\_eecbg10-08.pdf](http://www1.eere.energy.gov/wip/pdfs/wap10-14_sep10-07_eecbg10-08.pdf).

For each labor activity, provide the requested information:

**(A) Proposed Start Date:** provide the date the labor activity is anticipated to begin.

**(B) Proposed Completion Date:** provide the date the labor activity is anticipated to be completed. Projects must be completed within 18 months of execution of loan agreement.

**(C) Working Days between Start Date and Completion Date (days):** provide the number of working days between the start date and completion date.

**(D) Cumulative Hours on a Full-Time Schedule (hrs):** provide the cumulative hours on a full-time schedule by multiplying the (C) working days between start date and completion date by 8 hours.

**(E) Hours Worked on Labor Activity (hrs):** provide the total number of hours worked on the labor activity.

**(F) Full-Time Equivalent (FTE):** convert full-time, temporary and part-time jobs into comparable metrics. FTEs are calculated as total hours worked in jobs created or retained divided by the number of hours in a full-time schedule. Provide the number of FTE positions by dividing (E) the total number of hours worked on the labor activity by (D) number of quarterly hours. For example, an electrician works 78 hours on the project in a reporting quarter. Assuming a full time schedule of 520 hours in the quarter (40 hours/week x 13 weeks/quarter), the electrician would be reported as 0.15 FTE (78 hours/520 hours).

$$\text{Full - Time Equivalent (FTE)} = \frac{\text{(E) Hours Worked on Labor Activity (hrs)}}{\text{(D) Number of Quarterly Hours (e.g. 520)}}$$

Example:

1. An activity will begin Jan. 4, 2010 and be completed by March 31, 2010. Working days between Jan. 1 and March 31, 2010 are 63 days, and workers have 8-hour days.

Quarterly hours in a full-time schedule = 65 days x 8 hours/day = 520 hours

If workers spend 1,250 hours working on installing an approved energy efficiency measure, then the number of full-time equivalents equal:

$$\text{FTEs} = \frac{1,250 \text{ hrs}}{520 \text{ hrs}} \text{ or } 2.40 \text{ FTEs}$$

2. An activity will begin Oct. 3, 2010 and be completed by March 25, 2011.

Project spans two reporting quarters on a full-time schedule = 2 x (65 days x 8 hours/day) = 1,040 hours.

If workers spend 1,160 hours working on installing an approved energy efficiency measure, then the number of full-time equivalents equal:

$$\text{FTEs} = \frac{1,160 \text{ hrs}}{1,040 \text{ hrs}} \text{ or } 1.12 \text{ FTEs}$$

*Applicants should add the FTEs and report them on the “Energy Metrics” section of Form A.*

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### **Annual Energy Savings and GHG Emissions Reduced**

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Annual energy savings (kWh) represents the difference between the current energy use of equipment, a facility or a building, and the estimated future energy use of that equipment, facility or building.

**(A) Annual Energy Savings (kWh):** provide the expected annual energy savings (in kWh) to be achieved by replacing existing equipment with the proposed equipment.

$$\text{Annual Energy Savings (kWh)} = \text{Current Energy Use (kWh)} - \text{Estimated Future Energy Use (kWh)}$$

*Applicants should add the total annual energy savings and report on them on the “Energy Metrics” section of Form A.*

**(B) GHG Emission Factor (MT CO<sub>2</sub>e/kWh):** this GHG emission factor is provided in the table and was derived from eGrid for SERC Midwest Region.

GHG emission reductions are tied to energy savings. One way to simplify the GHG calculation is to assume that all energy savings are reductions in electricity usage. This electricity reduction then is converted into emission reductions based upon the electricity emission profile for the sub-region. See SERC Midwest using Environmental Protection Agency (EPA) eGrid data (<http://cfpub.epa.gov/egridweb/view.cfm>):

**(C) GHG Emissions Reduced (MT CO<sub>2</sub>e):** provide the GHG emissions reduced by multiplying (A) annual energy savings (kWh) by (B) GHG emission factor (0.00083462 MT CO<sub>2</sub>e/kWh).

$$\text{GHG Emissions Reduced (MT CO}_2\text{)} = \text{(A) Annual Energy Savings (kWh)} \times \text{(B) 0.00083462} \left( \frac{\text{MT CO}_2\text{}}{\text{kWh}} \right)$$

*Applicants should add the total GHG emissions reduced and report on them on the “Energy Metrics” section of Form A.*

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**Cost-Effectiveness**

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Cost-effectiveness (MMBtu/\$1,000) represents a measure of how effective grant dollars are in achieving a given result. To calculate a project’s cost-effectiveness, divide the annual energy savings by the total funding requested, and then multiply by a conversion factor as shown in the equation below:

For each line item, provide the requested information:

**(A) Annual Energy Savings (kWh):** provide the expected annual energy savings (in kWh) to be achieved by replacing existing equipment with the proposed equipment.

**(B) Conversion Factor:** energy consumption is expressed in BTU equivalent to allow for consumption comparisons among fuels that are measured in different units. The conversion factor provided in the table (0.003413) allows converting electricity units from kWh to MMBtus.

**(C) Funding Requested (\$):** provide the total dollar amount that the applicant is requesting under the WWW Energy Loan Program.

**(D) Cost-Effectiveness (MMBtu/\$1,000):** provide the cost-effectiveness of the project by multiplying the (A) annual energy savings (kWh) by (B) conversion factor and dividing it by (C) funding requested.

$$\text{Cost Effectiveness} \left( \frac{\text{MMBtu}}{\$1000} \right) = \frac{\text{Annual Energy Savings (kWh)}}{\text{Funding Requested (\$)}} \times 0.003413 \left( \frac{\text{MMBtu}}{\text{kWh} - \$1000} \right)$$

*Applicants should report the total cost-effectiveness on the “Energy Metrics” section of Form A.*

## VII. Form F – Project Budget

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### **Budget Summary**

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The budget summary table provides a snapshot of the proposed budget for the project, as well as how the different budget items will be funded by the WWW Energy Loan Program. For each line item, provide the information requested.

#### **Equipment and Materials:**

**Loan Funds Requested (\$):** provide the total amount of requested WWW Energy Loan Program funds that will be utilized for the purchase of eligible equipment and materials necessary for the proposed project.

#### **Direct Labor/ Contractual Services:**

**Loan Funds Requested (\$):** provide the total amount of requested WWW Energy Loan Program funds that will be utilized to pay for direct labor or contractual services necessary for the proposed project.

#### **Other:**

**Loan Funds Requested (\$):** WWW Energy Loan Program funds requested for other costs not included in the above categories. The Department reserves the right to not provide loan funds for other costs not included in the above categories.

#### **Total:**

**Loan Funds Requested (\$):** provide the total amount of requested WWW Energy Loan Program funds. This is the sum of funding requested for equipment and materials, direct labor and contractual services, and other costs, as applicable.

**Other budget items:** explain the other budgeted items.

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### **Detailed Budget**

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**Equipment/Materials:** list all equipment and materials to be purchased for the project.

**Quantity:** list quantity of equipment and materials required.

**Unit Cost (\$):** cost per unit.

**Total Cost (\$):** provide the total dollar amount for each item, this can be calculated as:

<b>Total (\$) = Quantity (units) × Unit Cost (\$/unit )</b>
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**Loan Funds Requested (\$):** provide the dollar amount of WWW Energy Loan Program funds requested for the particular equipment/material.

*If additional rows are required to list the equipment, please include a table with the additional items as an attachment.*

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### **Direct Labor/Contractual Services**

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The direct labor/ contractual services table lists all applicable costs for design, technical assistance, and installation of energy efficiency measures. For each line item, provide the information requested.

**Title/Job Classification:** list the title/job classification of the laborer or service provider.

Examples of job classifications include:

- Electrician.
- Sheet metal worker.
- HVAC technician.
- Plumber.

**Number of Hours:** list the number of hours that the proposed laborer or service provider will be working on the project.

**Billing Rate (\$/hr):** hourly billing rate for the proposed laborer or service provider.

**Total Cost (\$):** provide the total dollar amount for each laborer or service provider, this can be calculated as

$$\text{Total Cost (\$)} = \text{Billing Rate} \left( \frac{\$}{\text{hour}} \right) \times \text{Number of Hours (hours)}$$

**Loan Funds Requested (\$):** provide the dollar amount of WWW Energy Loan Program funds requested for the direct labor or contractual services.

## VIII. Form G – Project Owners and Partners

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### Project Partners

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If the applicant proposes to use funds from the Department to pay a partner(s) for the cost of providing goods or services, then the applicant must select partner(s) through a competitive procurement process. Please see Exhibit A, Missouri Department of Natural Resources General Terms and Conditions, item E, Procurement Standards, and Exhibit B, Program Specific Terms and Conditions, item 6, Procurement Conditions, for more information.

**Name of Partner:** begin by entering the name of the lead applicant in the first box. In the following boxes list the name of any partners.

**Address:** provide the address, city and zip code + 4 (nine digits) of the partner.

**FEIN:** provide the applicant's federal employer identification number (EIN). This number, also sometimes referred to as a tax identification number, is a nine-digit code that businesses use to identify themselves for tax reporting, banking, and other purposes.

**Proposed Role:** provide the proposed role of the partner in the project.

**Proposed Allocation of Loan Funds:** provide the proposed amount of funding from the WWW Energy Loan Program to be allocated to each partner.

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### Description of Partnership Structure

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The applicant must provide a description of the partnership structure that has been formed for purposes of this project:

- Describe the responsibilities of each partner.
- Describe the area of the project that will be implemented by each partner.
- Provide any other pertinent information.

## **IX. Form H– Waste Stream**

Prior to the expenditure of federal funds to dispose of sanitary or hazardous waste, the Missouri Department of Natural Resources is required to provide documentation to U.S. Department of Energy (U.S.DOE) demonstrating that an adequate disposal plan has been prepared for sanitary or hazardous waste generated by the proposed activities.

Applicants are therefore required to submit information on the expected waste stream of the proposed project. Sanitary or hazardous waste includes, but is not limited to, old light bulbs, lead ballasts, piping, roofing material, discarded equipment, debris, asbestos, etc.

Applicants should:

- Indicate if the proposed project will generate a waste stream.
- Describe the identified waste stream, if applicable.
- Provide an estimated quantity of waste that will be generated by type.
- Describe the proposed methodology for waste handling and disposal. For example, how would mercury or sodium vapor lamps be disposed of? How will potentially hazardous material (e.g. asbestos containing materials, polychlorinated biphenyl (PCBs), etc.) be handled and disposed of?)

## X. Form I – National Environmental Policy Act

The National Environmental Protection Act of 1970 (NEPA), as amended (42 U.S.C. 4371, *et seq.*) requires federal agencies to consider the potential environmental impacts of their proposed actions. Awards issued under WWW Energy Loan Program will be funded pursuant to a grant from U.S. DOE to the Missouri Department of Natural Resources. U.S. DOE must comply with NEPA when awarding grants to states. Accordingly, Subgrantees may not take action using federal funds for projects that may have an adverse effect on the environment prior to U.S. DOE providing a final NEPA determination regarding the selected projects.

For more information regarding NEPA see U.S.DOE's NEPA Web site:  
<http://www.gc.energy.gov/NEPA/>

Based on a review of the list of activities that funds can be utilized for under the State Energy Program (SEP), U.S. DOE has determined that projects that meet certain criteria and conditions will likely be classified as categorical exclusions and will not require a NEPA review.

### ***The following activities are considered Categorical Exclusions from NEPA:***

1. Funding energy efficiency retrofits, provided that:
  - Projects Are Limited To: installation of insulation; installation of energy efficient lighting; HVAC upgrades; weather sealing; purchase and installation of ENERGY STAR appliances; replacement of windows and doors; high efficiency shower/faucet upgrades; and installation of solar powered appliances with improved efficiency.
2. Development, implementation, and installation of onsite renewable energy technology that generates electricity from renewable resources, provided that:
  - Projects Are Limited To:
    - Solar Electricity/Photovoltaic - appropriately sized system or unit on existing rooftops and parking shade structures; or a 60 KW system or smaller unit installed on the ground within the boundaries of an existing facility.
    - Wind Turbine - 20 KW or smaller.
    - Solar Thermal - system must be 20 KW or smaller.
    - Solar Thermal Hot Water - appropriately sized for residences or small commercial buildings.
    - Ground Source Heat Pump - 5.5 tons of capacity or smaller, horizontal/vertical, ground, closed-loop system.
    - Combined Heat and Power System - boilers sized appropriately for the buildings in which they are located.
    - Biomass Thermal - 3 MMBTUs per hour or smaller system with appropriate Best Available Control Technologies (BACT) installed and operated.
3. Development, implementation and installation of energy efficient or renewable energy-powered emergency systems (lighting, cooling, heat, shelter) installed in existing buildings and facilities.

4. Installation of alternative fueling pumps and systems (but not underground storage tanks) installed on existing facilities (other than a large biorefinery); purchase of alternative fuel vehicles.
5. Development and implementation of training programs.
6. Development and implementation of building codes and inspection services, and associated training and enforcement of such codes in order to support code compliance and promote building energy efficiency.
7. Implementing financial incentive programs such as rebates and energy savings performance contracts for existing facilities or for energy efficient equipment, provided that the incentives are not so large that they would be deemed to be grants that create projects that would not otherwise exist. (For example, giving a wind farm that cost \$100 million a sum of \$50 million and calling it a rebate would not fall within this Bounded Category).

**Categorical Exclusions are not absolute.** A project activity that falls within a categorical exclusion may require additional NEPA review if it involves “extraordinary circumstances” that may affect the significance of its environmental effects. “Extraordinary Circumstances” are defined as “unique situations presented by specific proposals, such as scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; or unresolved conflicts concerning alternate uses of available resources within the meaning of section 102(2)(E) of NEPA [42 U.S.C. §4332(e)].

**Applicants proposing projects that fall within the categories included above will not be required to submit any NEPA documentation at this time.**

Applicants proposing projects in support of other activities NOT listed above may also qualify for categorical exclusion status. However, this determination cannot be made without a NEPA review. **Therefore, all applicants proposing projects NOT included in the list above must submit a completed EF-1 Environmental Questionnaire (Exhibit E).**

If DOE determines that NEPA requires the preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS) for a proposed project, the **applicant will be responsible for paying the cost of preparing an EA or EIS.** Preparation and review of NEPA documents can require 6-24 months. Accordingly, applicants should carefully consider whether such programs are consistent with the objectives of the ARRA and will allow the expenditure of funds by the Jan. 31, 2012 deadline.

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### **Applicability of NEPA to the Proposed Project**

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All applicants must fill out Form I, by selecting the box applicable to their project:

- The proposed project is categorically excluded from NEPA because it falls within the following category and does not involve "extraordinary circumstances" within the meaning of 10 C.F.R. Section 1021.410.

- Funding energy efficiency retrofits, provided that projects are limited to: Installation of insulation; installation of energy efficient lighting; HVAC upgrades; weather sealing; purchase and installation of ENERGY STAR appliances; replacement of windows and doors; high efficiency shower/faucet upgrades; and installation of solar powered appliances with improved efficiency.
- Development, implementation, and installation of onsite renewable energy technology that generates electricity from renewable resources, provided that projects are limited to:
  - Solar Electricity/Photovoltaic - appropriately sized system or unit on existing rooftops and parking shade structures; or a 60 KW system or smaller unit installed on the ground within the boundaries of an existing facility.
  - Wind Turbine - 20 KW or smaller.
  - Solar Thermal - system must be 20 KW or smaller.
  - Solar Thermal Hot Water - appropriately sized for residences or small commercial buildings.
  - Ground Source Heat Pump - 5.5 tons of capacity or smaller, horizontal/vertical, ground, closed-loop system.
  - Combined Heat and Power System - boilers sized appropriately for the buildings in which they are located.
  - Biomass Thermal - 3 MMBTUs per hour or smaller system with appropriate Best Available Control Technologies (BACT) installed and operated.
- The proposed project falls within the categories listed above but may involve "extraordinary circumstances" within the meaning of 10 C.F.R Section 1021.410.
- The proposed project is not categorically excluded.

If the project involves “extraordinary circumstances” or if the project is not categorically excluded, then the applicant must **provide the reasons** for this. In addition, the applicant **must fill out Exhibit D – Environmental Questionnaire (EF-1)** when the project is not categorically excluded.

## XI. Form J– National Historic Preservation Act

Prior to the expenditure of federal funds to alter any structure or site, the Missouri Department of Natural Resources is required to comply with the requirements of Section 106 of the National Historic Preservation Act (NHPA). Section 106 applies to historic properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP).

In order for the department to evaluate whether or not a proposed project requires additional submittals of information, **all applicants are required to provide background information on their proposed project sites by filling out Form J.**

**All Applicants MUST include a photo of the façade of the existing facility as well as a map showing its exact locations as attachments to Form J.**

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### Description of Project Site

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Applicants MUST indicate if their proposed project involves a building or structure included in the NRHP or one eligible for inclusion in the NRHP.

If the applicant is unsure whether the building is included, it must request a record search from the Missouri State Historical Preservation Office (SHPO) by contacting:

#### State Historic Preservation Office

<http://www.dnr.mo.gov/shpo/index.html>

P.O. Box 176, Jefferson City, MO 65102

800-361-4827 / 573-751-7858

E-mail: [shpo@dnr.mo.gov](mailto:shpo@dnr.mo.gov)

**If the proposed project involves a building or structure listed on or eligible for the NRHP, the applicant must submit additional information by completing Item 5 of the EF-1 Environmental Questionnaire (Exhibit D of the Program Guidelines).**

Applicants MUST provide information on the proposed project site by completing the following table:

Site Name	Site Address	Age of Original Structure (Year of Completion)
<b>A</b>	<b>B</b>	<b>C</b>

**A** Include the name of the facility where energy efficiency work will be performed.

**B** Provide the address for said facility, including street address, city, county and ZIP code + 4.

**C** Provide the estimated year of original construction completion.