

**U.S. Department of Energy**

**WEATHERIZATION ANNUAL FILE WORKSHEET**

**Identification: EE0000195**

**State: MO**

**Program year: 2011**

**Budget period: 07/01/2011 - 06/30/2012**

**II.3 Subgrantees**

Grantee	City	Tentative	
		Funding	Units
01-Community Services, Incorporated of Northwest Mo.	Maryville	381,794.00	50
02-Delta Area Economic Opportunity Corporation	Portageville	184,822.00	35
03-East Missouri Action Agency	Park Hills	479,795.00	113
05-Economic Security Corporation of Southwest Mo.	Joplin	326,640.00	50
06-Green Hills Community Action Agency	Trenton	242,025.00	34
07-Central Missouri Community Action	Columbia	203,804.00	39
08-Urban League of Metropolitan St. Louis	St. Louis	983,015.00	140
09-Jefferson-Franklin Community Action Corporation	Hillsboro	224,074.00	42
10-Kansas City Housing & Community Development Department	Kansas City	1,670,558.00	251
11-Community Action Agency of St. Louis County	St. Louis	973,737.00	345
12-Missouri Ozarks Community Action, Inc.	Richland	396,025.00	65
13-Missouri Valley Community Action Agency	Marshall	400,461.00	54
14-North East Community Action Corporation	Bowling Green	312,207.00	52
15-Northeast Missouri Community Action Agency	Kirksville	244,442.00	36
16-Ozark Action, Inc.	West Plains	406,267.00	100
17-Ozarks Area Community Action Corporation	Springfield	984,463.00	200
18-South Central Missouri Community Action Agency	Winona	376,098.00	85
19-West Central Missouri Community Action Agency	Appleton City	344,291.00	55
<b>TOTALS</b>		<b>9,134,518.00</b>	<b>1,746</b>

**II.4 WAP Production Schedule**

Total Units (excluding reweatherized)	1,711
.....	.....
Rewatherized Units	35
.....	.....

**U.S. Department of Energy**

**WEATHERIZATION ANNUAL FILE WORKSHEET (cont)**

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<b>Average Unit Costs, including Reweathering, Subject to DOE Program Rules</b>		
VEHICLE & EQUIPMENT AVERAGE COST PER DWELLING UNIT (DOE RULES)		
A	Total Vehicles & Equipment (\$5,000 or more) Budget	\$0.00
B	Total Units Weatherized	1,711
C	Total Units Reweatherized	35
D	Total Dwelling Units to be Weatherized and Reweatherized (B + C)	1,746
E	Average Vehicles & Equipment Acquisition Cost per Unit (A divided by D)	\$0.00
AVERAGE COST PER DWELLING UNIT (DOE RULES)		
F	Total Funds for Program Operations	\$7,236,571.00
G	Total Dwelling Units to be Weatherized and Reweatherized (from line D)	1,746
H	Average Program Operations Costs per Unit (F divided by G)	\$4,144.66
I	Average Vehicles & Equipment Acquisition Cost per Unit (from line E)	\$0.00
J	Total Average Cost per Dwelling (H plus I)	\$4,144.66

**II.5 Energy Savings**

Method used to calculate energy savings:

WAP algorithm

Other (describe below)

The Missouri Department of Natural Resources Division of Energy (MDNR/DE) estimates that, for the Program Year 2011/2012 funding, a total of 1,746 homes will be weatherized. For these homes, it is estimated that 46,346 mmBtu/year of energy will be saved.

Method for calculating energy savings is as follows:

For determining the energy savings by fuel type, data from the Oak Ridge National Laboratories' report "Estimating the National effects of the US Department of Energy's Weatherization Assistance Program with State Level Data: A Metaevaluation Using Studies from 1993 to 2005" (ORNL/CON-493).

Average energy savings for gas heated homes 30.5 mmBtu/yr/home

Average energy savings for electric heated homes 6.6 mmBtu/yr/home

Average energy savings of electricity for non heating purposes 2.1 mmBtu/yr/home

Average energy savings for homes with combined gas heating and electric baseload savings 32.6 mmBtu/yr/home

Data collected from the Missouri Weatherization agencies, Homes Complete Summary PY 2008.

Percent of homes with electric savings only 22%

Percent of homes with gas savings only 16%

Percent of homes with both gas and electric savings 62%

## U.S. Department of Energy

## WEATHERIZATION ANNUAL FILE WORKSHEET (cont)

Identification: EE0000195

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.22 x 1746 homes x 6.6 mmBtu/yr/home = 2,535 mmBtu/yr  
 .16 x 1746 homes x 30.5 mmBtu/yr/home = 8,521 mmBtu/yr  
 .62 x 1746 homes x 32.6 mmBtu/yr/home = 35,290 mmBtu/yr  
 Estimated PY 2011/2012 savings 46,346 mmBtu/yr

Estimated energy savings: 46,346.00 (MBtu)

Estimated prior year savings:

Actual:

If variance is large, explain:

## II.6 Training, Technical Assistance, and Monitoring Activities

The goals of the Missouri Low Income Weatherization Assistance Program are to provide effective management of federal and other funding; continuation of improved weatherization services; increased energy efficient housing; long-term reduction in utility bills; economic revitalization; job creation; and comfort and safety of those served. Section II.6 herein describes specific training and technical assistance activities.

Local weatherization agencies and the Missouri Department of Natural Resources' Division of Energy (DNR/DE) had formed a past work group that assessed training needs and concluded that: training should be on-going, training should be mandatory depending on job classification and certification requirements, voluntary in other instances, training should include theory and hands-on approach, training should be provided on a regional basis, training should include a combination of training options, training should include conferences and workshops, and training should include peer exchange. The DNR/DE encourages the network of local agency weatherization technicians to be trained in building science principals, building diagnostics, combustion heating systems, Energy-Related Mold and Moisture, and whole house best practices approach to cost effective energy efficiency measures. Technicians are required to demonstrate competency in knowledge and performance skills in these disciplines through the Building Performance Institute (BPI) testing and certification program.

Training providers are listed on the DNR/DE website with available training courses which focus on the following: BPI Building Analyst Building Science for Home Weatherization Training, Weatherization Inspector/Auditor Training, Auditing Mobile Homes, Combustion Systems, HVAC Service Technician, EPA Certified Renovator, Lead Safe Work Practices, OSHA 10, DOE Energy-Related Mold and Moisture, the Manufactured Home Energy Audit (MHEA) and the National Energy Audit Tool (NEAT) are available as part of the Weatherization Assistant.

On or after April 22, 2010, agencies and contractors addressing activities that disturb lead-based paint in target homes and child occupied facilities must follow the Environmental Protection Agency's (EPA) Renovation, Repair, and Paint (RRP) Final Rules (Section 402 (c) (3) of TSCA. New crewmembers and contractors are required to be trained within a six-month period. However, they cannot work on a home(s) with lead paint until becoming a Certified Renovator or being trained on site by a Certified Renovator.

Refresher training is required every 5 years. Training activities will include efforts on certification for Missouri weatherization technicians. It is important to provide a mechanism by which technicians may be certified in accordance with the Building Performance Institute (BPI). BPI has established technical standards and testing protocols for trade professionals to ensure efficiency and durability of the buildings they work on and the comfort and safety of the people who live in them. BPI-certified technicians are required to demonstrate competency in the knowledge and performance skills necessary to inspect, diagnose and troubleshoot building performance issues.

Beginning in program year 2005 each weatherization agency was required to have at least one BPI-certified auditor, Building Analyst I, on staff as part of a quality assurance program. Any subgrantees without the required trained and certified energy auditor must submit a corrective action plan to the DNR/DE before the DNR will award a subgrant for the subsequent program year. Details regarding state program oversight and T&TA funding are contained in the standard federal 424 form: Federal Assistance Budget information

## U.S. Department of Energy

## WEATHERIZATION ANNUAL FILE WORKSHEET (cont)

Identification: EE0000195

State: MO

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Budget period: 07/01/2011 - 06/30/2012

Section A and B. Each subgrantee will be awarded a portion of T&TA funds based on the subgrantee's budgeted need and as approved by the DNR/DE. Local agency T&TA funds may only be used to pay for the cost associated with: crew member and contractor related training courses, BPI related training courses related to certification and re-certification, local and State LIWAP-related meetings and training conferences, regional and national LIWAP-related meetings and training conferences, training on computers and software related to LIWAP operations, and LIWAP training or assistance provided between local agency subgrantees.

Effectiveness of Training and Technical Assistance: DNR/DE plans to implement the use of surveys of training participants to rate course content, effectiveness of instruction and applicability to improved weatherization services, NEAT/MHEA audit results, and savings to investment ratio, cost and quality of home energy retrofit, housing quality monitoring inspections, and implementation of best practices and work quality standards.

## MONITORING ACTIVITIES:

DNR/DE monitoring activities span four distinct but interrelated areas of program operations:

1. Housing quality inspections
2. Production and expenditure reviews
3. Fiscal and program operations
4. Oversight of federal/state requirements and regulations

Implementing the MDNR/DE monitoring system involves:

## A. Desk Monitoring

A Subgrantee is required to submit monthly reports to the DNR/DE that include the client's names, job numbers and other required information. The DNR/DE has implemented a web-based database known as, "MoWAP" to assist with reporting, tracking, data retention, etc. MoWAP assists with client file review (procedural and technical). The reporting, budget preparation, etc. is also performed through MoWAP. In addition, MoWAP electronically interfaces the subgrantee reimbursements directly into the State Accounting System (SAM II). With the MoWAP stem, DNR/DE can determine compliance with:

- The federally designated expenditure categories
- Actual expenditures versus planned expenditures
- Overall expenditure rates by each Subgrantee
- Characteristics of completed homes
- Numbers of completed units per month
- Numbers of persons and households by WAP targets

Reimbursement to a Subgrantee is based on clear, accurate reporting of expenditures and clients served. DNR/DE provides each Subgrantee with an analysis of the monthly report. This includes feedback concerning specific problems a Subgrantee may be experiencing in its operations or in its compliance with grant requirements. Information collected is also used to target selected items for monitoring during field visits to a Subgrantee.

## B. Procedural Monitoring

DNR/DE will visit each Subgrantee at least once each program year to review procedural, fiscal and compliance issues. DNR/DE will conduct a thorough review of the procedures of the Subgrantee by using a standardized and extensive monitoring protocol. A risk assessment has been performed for the subgrantee agencies. Based on this assessment, the DNR/DE and DNR Internal Audit program have determined the various levels of procedural monitoring based on risk. If a subgrantee agency is determined as low risk, a review of 5% of client files for the program year will be reviewed during the procedural monitoring, with a minimum of 5 files reviewed. If a subgrantee agency is determined as medium risk, a review of 9% of client files for the program year will be reviewed during the procedural monitoring, with a

## U.S. Department of Energy

## WEATHERIZATION ANNUAL FILE WORKSHEET (cont)

Identification: EE0000195

State: MO

Program year: 2011

Budget period: 07/01/2011 - 06/30/2012

minimum of 10 files reviewed. If a subgrantee agency is determined as high risk, a review of 18% of client files for the program year will be reviewed during the procedural monitoring, with a minimum of 15 files reviewed.

DNR/DE will review Subgrantee compliance with federal/state regulations and requirements as specified in the Missouri WAP Annual and Master files, the Missouri WAP Competitive Procurement Standards, and the DNR General Terms and Conditions for Federal Subgrants. Annual independent audits will be reviewed to ensure audit financial schedules match financial reports submitted during the year.

#### C. Housing Quality Monitoring

A variety of items are reviewed by DNR/DE housing quality monitors during on-site visits.

1. DNR/DE will schedule an on-site visit(s) to a Subgrantee as necessary, but at least once per program year, to inspect the quality of work on the homes completed. A representative sample of completed homes will be inspected to determine whether or not the work reported and materials installed are in compliance with WAP standards. DNR/DE has developed a risk assessment strategy which will be implemented in determining the number of homes to be inspected at each subgrantee agency. For agencies determined as low risk, a minimum of 5% of the total homes completed will be inspected. For agencies determined as medium risk, a minimum of 7.5% of the total homes completed will be inspected. For agencies determined as high risk, a minimum of 10% of the completed homes will be inspected.

DNR/DE will have the option to inspect additional houses when implementing new measures, or when other concerns arise. Inspection checklists are used to assist DNR/DE with on-site inspections. Additional information may be obtained or requested from the Subgrantee client files to document the findings of the monitoring visit. DNR/DE will inspect the following:

- Compliance with allowable WAP measures

- Quality of work

- Accuracy of the report concerning the amount of material installed on the home

- Assurance that the initial energy audit and final inspection are appropriate, accurate and complete

- Crew and contractor compliance with OSHA 10 and LSW training requirements

- Worksite for compliance with required health and safety equipment, personal protection gear, and reference materials

2. DNR/DE may also perform follow-up reviews of homes where additional work or corrective measures were required as a result of a past DNR/DE inspection.

3. Selected materials will be inspected to insure they meet federal specifications.

4. Pre-audits may be done to determine accuracy.

#### D. Independent Monitoring

##### Independent Fiscal Audit Review

A Subgrantee is required to have an annual fiscal audit, in accordance with OMB Circular A-133. This audit shall document expenditures and compliance with regulations and requirements. The independent auditor shall use the schedules found in the WAP audit guide to present the required financial data. Findings are compared to the subgrant and monthly reports.

DNR/DE added several new positions to the WAP. Four new staff members work on WAP administration, desk monitoring and on-site fiscal and procedural monitoring. Two new staff members were hired for technical monitoring and technical assistance. DNR/DE has also hired several new staff in the Fiscal Section that provide valuable assistance to the weatherization program. This includes assistance with fiscal and procedural monitoring, reporting, tracking and review of expenditures.

In addition, DNR/DE has utilized available contract monitoring services for additional fiscal and procedural

**U.S. Department of Energy**

**WEATHERIZATION ANNUAL FILE WORKSHEET (cont)**

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monitoring and awarded primary, secondary, and tertiary contracts for technical monitoring services procured through an RFP process.

**Client Education**

Client education is an effective method of improving the impact of WAP measures. These efforts include fact sheets, brochures, the State DNR/DE WAP website, and one-on-one contact. Subgrantees play a vital role in expanding client education activities at the local level. Local activities include client workshops, providing Energy Saver booklets, client interviews and instruction when auditing and final inspecting the home, the explanation of information found in EPA's Renovate Right and Mold pamphlets, and local newspaper articles and radio and television spots.

**II.7 DOE-Funded Leveraging Activities**

Federal regulations allow weatherization funds to be used for leveraging activities. Under leveraging, subgrantees work at developing relationships with property owners, utility companies and other entities that generate non-federal resources for the program. Examples of some of the leveraging partnerships are donations from some local/national hardware and lumber stores, local realtors, etc. All Weatherization subgrantees participate in leveraging and partnership activities, although not all of them charge expenditures to the leveraging category for these activities. Non-federal resources are used to supplement the program and expand energy efficiency services and/or increase the number of dwelling units completed for weatherization eligible clients.

Subgrantee agencies are encouraged to budget an amount of funds the agency actually believes it will be able to use, not to exceed 5% of its grant allocation, for leveraging purposes. Subgrantee requests for leveraging must include specific planned leveraging activities; targeted partners (e.g., landlords, utilities, other agencies); and estimated outcomes including dollar amounts. If agencies do not initiate meaningful leveraging activities, the funds may be considered as state carryover, and may be redirected to other agencies.

**II.8 Policy Advisory Council Members (names, groups, agencies)**

17-Ozarks Area Community Action Corp	Mr. Todd Steinmann, Weatherization Director
12-Missouri Ozarks Community Action, Inc. /	Mr. David Miller, Executive Director
Boone Electric Cooperative	Mr. Chris Rohlfing
06-Green Hills Community Action Agency /	Ms Terri Henderson, Weatherization Director
Vacancy	
Missouri Gas Energy	Ms. Pam Levetzow
Office of Public Counsel /	Mr. Marc D. Poston
16-Ozark Action, Inc.	Mr. Terry Sanders, Weatherization Director

**II.9 State Plan Hearings (send notes, minutes, or transcript to the DOE office)**

<u>Hearing Date</u>	<u>Newspapers that publicized the hearings and the dates that the notice ran.</u>
04/12/2011	Jefferson City News Tribune (3/29/2011) and Columbia Tribune (3/29/2011)

**II.10 Adjustments to On-File Information**

PY 2009 is the first year of the new 5-year WAP grant from the US DOE to DNR. The funding included is

**U.S. Department of Energy****WEATHERIZATION ANNUAL FILE WORKSHEET (cont)****Identification: EE0000195****State: MO****Program year: 2011****Budget period: 07/01/2011 - 06/30/2012**

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regular PY 2009, 2010 and supplemental Weatherization funding, and the grant period for this funding began July 1, 2009 and will end June 30, 2011. PY 2011 is the third year of the 5-year WAP grant from the US DOE to DNR. Because Congress has not yet passed a budget and is currently operating under a Continuing Resolution, it is uncertain the actual amount of LIWAP funding that Missouri will be receiving. However, DOE has instructed the state to operate under the assumption that Missouri will be receiving the same amount of funding that was allocated in PY 2010 (\$4,703,704). Due to the Subgrantee's focus on expending ARRA funding, DNR/DE anticipates a sizeable amount of regular DOE carry-over from the previous two program years. The subgrantees have submitted carryover plans with their PY 2011 budgets and production schedules which give a detailed explanation on how the carryover will help them continue weatherization services while ramping down the ARRA funding. The grant period for this funding will begin on July 1, 2011 and end June 30, 2012.

DNR/DE periodically, but no less frequently than every 180 days, will evaluate subgrantees' rates of production and expenditure. If DNR/DE analysis shows that any subgrantee's rates of production and expenditure are substantially behind schedule, DNR/DE may recapture funds and redistribute them to other subgrantees with rates of production and expenditure on schedule or exceeding scheduled performance. Prior to recapture, subgrantees will be allowed to explain factors that contributed to low performance and present an action plan explaining actions the subgrantee has taken or will take to correct performance. The DNR/DE plans to utilize the \$6,572 average cost per home, including any inflationary adjustments. The tentative allocations and number of homes are based on new funding distributed to subgrantees along with estimated carryover from the previous two program years.

**II.11 Miscellaneous**

See attachment.