



# **West Virginia Weatherization Assistance Program**

**State of West Virginia  
Development Office**

**PART I - MASTER FILE**  
**PY 2018 - 2019**



# **State of West Virginia Development Office**

## **U.S. Department of Energy Program Year: 2018-2019 State Plan Master File**

### **V. MASTER FILE**

#### **V.1. Eligibility**

The West Virginia Weatherization Assistance Program (WV WAP) will ensure that every dwelling weatherized meets both client eligibility and building eligibility requirements as detailed in *Sections V.1.1 and V.1.2*.

##### **V.1.1 Approach to Determining Client Eligibility**

###### **Definition of Income Used to Determine Eligibility:**

The WV WAP will determine eligibility of a dwelling unit based on the amount of household income and the conformity of that income to criteria established by the Low-Income Home Energy Assistance Act of 1981, 42 U.S.C. 8621. All subrecipients in the WV WAP will use 200% of the poverty guidelines and definition of poverty as stated in DOE WPN 18-3 Poverty Income Guidelines and Definition of Income, dated February 21, 2018, and published in the Federal Register January 18, 2018 as updated by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2). The WV WAP data management system calculates a twelve (12) month income period needed to create an annualized income equivalent for comparison to the poverty guidelines. Annualized income may be calculated using less than twelve (12) months of income information. At least one (1) month of recent income is necessary for the database management system to calculate the annualized income for eligibility determination. In addition, family units that have received cash assistance payments under Title IV or XVI of the Social Security Act, or applicable State or local law paid during the twelve-month period preceding application, will be eligible for weatherization pursuant to 10 CFR Part 440.22.

###### **Eligibility Procedures:**

The State of West Virginia Development Office (WVDO) has established an extensive intake/application process involving obtaining information from prospective program participants before a decision can be made on their eligibility for weatherization assistance. Each applicant must provide all the items outlined as “mandatory data fields” in the application

process/form. All prospective applicants will be required to identify and provide verification of the amount and source of the total income for their household in compliance with the U.S. Department of Health and Human Services 2018 poverty guidelines as identified in the Federal Register. WVDO will use the Definition of Income provided in DOE WPN 18-3 Poverty Income Guidelines and Definition of Income regarding cash receipts, exclusions, proving eligibility, and consideration of child support. Additional data fields included in the state data management system require the collection and reporting of household demographic and residence specific information including whether the applicant rents or owns his/her home, among other information. All applicants are required to sign their application and certify to the validity of the information provided. Falsification of an application is subject to ineligibility.

WVDO developed *WVWPN 13-9 - WAP Application and Review Queue Management Policy* which provides specific and detailed guidance on how the subrecipients are to utilize the various functions of the database management system. This ensures there is consistency among the WV WAP Network on how a client proceeds through the various stages of the weatherization process, including the intake process. This policy will remain in effect for PY 2018 – 2019.

#### **Income Verification Procedures:**

The eligibility documentation is maintained in the database management system and may be supplemented with a physical client file. All eligibility documentation is to be reviewed for compliance by the subrecipient prior to weatherization services being provided, and then entered into the database management system for eligibility calculation. If six (6) months or more has lapsed between the date of application and the date weatherization services is scheduled to begin on a particular job, the income of that client must be re-verified as per WV WAP requirements. WVDO provides a secondary review of eligibility documentation and process by selecting a sample of weatherization dwellings during the monitoring process. WVDO issued *WVWPN 13-5 - Income Eligibility Policy* on November 19, 2013, to provide updated uniform guidelines on the definition of income and determining income eligibility. WVDO also provides to the WV WAP Network the Poverty Income Guidelines and Definition of Income document as revised by DOE each program year to supplement the *Income Eligibility Policy*. For PY 2018 – 2019, WVDO released WxBulletin 17-10 – DOE WPN 18-3 Poverty Income and Definition of Income to the subgrantees on February 21, 2018, immediately after receipt of the WPN per guidelines stated in WPN 18-3.

All fifty-five (55) counties of West Virginia are eligible for weatherization services and are intended to be served by the WV WAP. Any West Virginia resident who meets client eligibility requirements and whose dwelling meets building eligibility requirements (also in compliance with 10 CFR 440.18(e)(2)(iii) regarding “Reweathering”) would be eligible to receive weatherization services. As per DOE requirements and 10 CFR 440.16(b), priorities are given to certain sectors of the eligible population. The WV WAP has also incorporated some priority features to enhance the DOE required priority eligible population categories and allow for

reasonable, efficient, and effective implementation of the WAP, including all funding sources. These priorities and the process followed are described in *Section V.3 Priorities*.

#### **Qualified Aliens Eligibility for Benefits:**

The steps in the application/intake process detailed in the previous *Eligibility Procedures Section* ensure DOE weatherization services shall only be provided to eligible populations. These same procedures and parameters including income eligibility are utilized for West Virginia's Low-Income Home Energy Assistance Program (LIHEAP) Weatherization services.

### **V.1.2 Approach to Determining Building Eligibility**

#### **Reweatherization:**

The WV WAP has procedures in place to comply with DOE regulations and 10 CFR 440.18(f)(2)(iii) regarding "Reweatherization." Prior to any weatherization activity, a unit must be evaluated to determine whether previous weatherization services were provided after **September 30, 1994**. If services have been provided *after this date* with DOE funds, the unit is not eligible for additional weatherization services with DOE funds.

The following actions must be taken on each unit prior to weatherization services to ensure the homes that have received weatherization services after September 30, 1994, are not reweatherized:

1. Each client's address must be entered into the data management system to identify whether the client's home has been weatherized during or after 2007 (length of WV WAP historical records with searchable addresses);
2. Each client's name must be entered into the data management system's "Old Weatherization Data" module to check if the client has previously been reported as a completion during 1996 to 2007 (length of WV WAP historical records with client names only). If the client's name is found in the data management system as having had weatherization services, the subrecipient will verify with the client if they are living at the same address as when they received weatherization services in the past. If the client verifies that this is the same address, then the dwelling is ineligible for weatherization services.
3. A secondary verification occurs as each client must be asked whether their home has been weatherized after September 30, 1994.
4. If a dwelling passes the first two (2) verification steps, a third verification step is performed as a visual inspection of each home must be completed by an auditor to identify whether previous weatherization measures have been performed. If the home was completed after September 15, 2011, subrecipients are required to place



standardized tags on specified areas of dwellings after completing the weatherization process. This procedure is outlined in the *WAP Weatherized Unit Tagging Procedure as Amended February 9, 2012*.

5. If there is no documented, verbal, visual, or physical evidence of previous weatherization services, the subrecipient may proceed with weatherization services on the dwelling.
6. Subrecipients may provide services to a dwelling unit previously weatherized **prior to September 30, 1994**, as noted in the American Reinvestment and Recovery Act of 2009, and *DOE WPN 18-1, Application Instructions Section V.1.2*. A reweatherized unit falls into the category of time indicated above and described under 10 CFR 440.18(f)(2)(iii). DOE gives subrecipients the flexibility to revisit those homes weatherized prior to September 30, 1994, that may not have received the full complement of weatherization services, including the use of an advanced energy audit or addressing health and safety concerns.
7. The DOE-issued *Weatherization Program Notice 12-7 Disaster Planning and Relief* allows for additional work to be done on homes due to natural disasters. In the event of a declared Federal or State disaster, allowable expenditures under WAP include:
  - The cost of incidental repairs to an eligible dwelling unit if such repairs are necessary to make the installation of weatherization materials effective.
  - The cost of eliminating health and safety hazards, elimination of which is necessary before the installation of weatherization materials (10 CFR 440.18(d)(9); 10 CFR 440.18(d)(15).
  - To the extent that the services are in support of eligible weatherization (or permissible “Rewaterization”) work, such expenditure would be allowable.

In the event of a declared Federal or State disaster, weatherization crews may return to a unit reported as a completion to DOE that has been “damaged by fire, or act of God to be reweatherized, without regard to date of weatherization” as per 10 CFR 440.18(f)(2)(ii). Local authorities must deem the dwelling unit(s) salvageable as well as habitable and if the damage to the materials is not covered by insurance or other form of compensation.

- Debris removal from a dwelling unit that is not to be weatherized would not be an allowable cost.
- Weatherization personnel can be paid from DOE funds to perform functions related to protecting the DOE investment. Such activities include: securing weatherization materials, tools, equipment, and weatherization vehicles, or protection of local subrecipient weatherization files, records and the like during the initial phase of the disaster response.

- Using DOE funds to pay for weatherization personnel to perform relief work in the community as a result of a disaster is not allowable.
- Local agencies may use weatherization vehicles and/or equipment to help assist in disaster relief provided the WAP is reimbursed according to the *DOE Financial Assistance Regulations*, 10 CFR Part 600 and 2 CFR 200.

WAP rules require that priority be given to identifying and providing weatherization assistance to elderly persons, persons with disabilities, families with children, high residential energy users, and households with high energy burdens as per 10 CFR 440.16(b). However, it would be permissible to consider households located in the disaster area as a priority as long as the households are eligible and meet one (1) of the priorities established in regulation, and are free and clear of any insurance claim or other form of compensation resulting from damage incurred from the disaster.

As referenced in #4 above, WVDO developed and implemented a *Weatherized Unit Tagging Procedure* policy on September 15, 2011, (amended on February 9, 2012) to identify dwellings as “Weatherization Completions” and maintain compliance with DOE’s *Reweathering Policy*. WV WAP’s *Weatherized Unit Tagging Procedure* requires the placement of a permanent and standardized tag on each completed dwelling unit including the following information:

- a. Subrecipient Name
- b. West Virginia Weatherization Assistance Program
- c. Sequential Number
- d. “DO NOT REMOVE” indication
- e. Initials of subrecipient Quality Control Inspector and date of Quality Control Inspection (indicated in permanent marker)

There are specific locations in the dwelling outlined in the policy where the subrecipients are to attach the tags in an effort to make as permanent as possible. The subrecipient is to attach two (2) tags in different locations in each dwelling in case one (1) would become detached. The subrecipient must also maintain a picture of the tag and its location in the dwelling unit as a Portable Document Format (PDF) in the data management system. Failure to adhere to the policy could result in the dwelling unit not being deemed as a “Completion” and in turn all associated costs could be disallowed. The procedure implemented also maintains sufficient accountability of the subrecipient (and specific Quality Control Inspector) providing the weatherization services on a particular dwelling.

### **Eligible Structures:**

Subrecipients shall ensure that weatherization services are being provided to low-income persons that live in standard types of housing, i.e., single-family, rentals, manufactured housing, and multifamily buildings. Subrecipients will exercise caution when approaching non-traditional type dwelling units including, but not limited to, shelters and apartments over businesses. WVDO will seek guidance from the WV DOE Project Officer as necessary if the WV WAP approaches a non-traditional dwelling. Weatherization of non-stationary campers and trailers that do not have a mailing address associated with the eligible applicant will not be allowed, even if utilizing a post office box. For procedures regarding structures that require deferral of services due to the structure being deemed at least temporarily ineligible, refer to the *Deferral Process* in a following segment of this section.

WVDO will disallow partial weatherization of a dwelling if turned in as a completion. A dwelling will only be deemed a completion if all measures called for from the audit have been completed, the unit has been reviewed and signed off on by a certified Quality Control Inspector, and all required documents are uploaded into the database management system. The Quality Control Inspector signature date will constitute the date of completion with no further work allowed on the dwelling. All required documents must be uploaded into the database management system on or prior to the Quality Control Inspection form date.

If in very rare and extreme circumstances, a client does not allow a subrecipient to complete the Quality Control Inspection in order to deem the dwelling as a completion, or the crew must halt weatherization for unforeseen circumstances with the client/dwelling (crew safety concern, death of a client, dwelling is vacated and/or sold, etc.), the subrecipient must notify WVDO. In cases where weatherization work was started but cannot be completed, signed and dated documentation must be entered into the client file as to why the weatherization work was stopped. Allowable expenses can be submitted, but the dwelling will not be counted as a completion. This option will be extremely rare in occurrence and only approved if all reasonable options to complete weatherization work including the final Quality Control Inspection have been attempted. WVDO will also pursue all other possible remedies including non-DOE funding sources for work performed, if allowable.

### **Historic Preservation**

As noted in DOE Weatherization Program Notice 10-12, DOE in coordination with the Advisory Council on Historic Preservation (ACHP) and the National Conference of State Historic Preservation Officers (NCSHPO), has developed a Prototype Programmatic Agreement (PA) to address historic preservation requirements for the WAP. The WV WAP is evaluating all National Historic Preservation Act (NHPA) Section 106 reviews utilizing guidelines set forth in a Letter of Understanding with the West Virginia Division of Culture and History State Historic Preservation Office (SHPO). All measures that fall outside the WAP, exempt from NHPA Section 106 review are being approved by West Virginia SHPO (WVSHPO). WVDO has one (1) staff member trained to perform Historic Preservation reviews, approvals, and to provide guidance to WV WAP

subrecipients. A second staff member is scheduled to attend Section 106 Essentials training, April 10-11, 2018, in Albuquerque, NW, for Section 106 Certification.

WVDO will continue to work very closely with our WVSHPO and to utilize the Prototype PA to overcome the challenges before us while still meeting all guidelines of the NHPA. This relationship has built a strong partnership that proves advantageous to our respective organizations and also to the West Virginia families that we strive to serve.

West Virginia's State Energy Program (SEP) Office has not been able to negotiate a SHPO PA and consequently our state does not have an official DOE Historic Preservation PA. As a result, beginning in PY 2010, our state Weatherization Program Office worked with WVSHPO to negotiate, draft and agree to a one (1) year Letter of Understanding for Historic Preservation Section 106 review compliance for weatherization activities. In subsequent years, renewed letters were executed. On December 1, 2014, WVDO began a new three (3) year Letter of Understanding with WVSHPO, through November 27, 2017. In March 2017, WVDO requested the Letter of Understanding start date begin April 1, 2017, and run through March 31, 2020. The WVSHPO approved this letter on April 25, 2017. This puts the renewal date just prior to the start of the DOE Program Year, which begins July 1.

#### **Rental Units:**

The WV WAP may provide weatherization to rental units, including multiple dwelling units (MDUs). The WV WAP has procedures that address the protection of renters' rights as per 10 CFR 440.22(b)(3) and 440.22(c)-(e). No rented dwelling unit can be weatherized without first obtaining the written permission of the owner (or his/her agent) of the dwelling unit. Completion of the "Weatherization Rental Release and Agreement" form is mandatory for multifamily rental units only.

The "Weatherization Rental Release and Agreement" form is designed to assure the following:

1. That the benefits of weatherization assistance shall reside primarily with the low-income tenants;
2. For a period of two (2) years from the date of signature on the "Weatherization Rental Release and Agreement" form, the rent shall not be raised because of the increased value of dwelling unit(s) due solely to weatherization assistance provided under this program;
  - Should a rental increase occur and the tenant perceive it to be due solely to the weatherization services provided, the tenant would notify the applicable subrecipient who would then contact WVDO, or the tenant may contact WVDO directly.
  - WVDO will instruct the tenant to file a written complaint with WVDO detailing the situation and the perceived reason for the rent increase.

- WVDO will work with the subrecipient and make contact with the landlord and notify that a complaint has been filed, and provide the landlord with a copy of the complaint. The landlord will have the opportunity then to appeal the complaint.
  - WVDO will obtain all pertinent information applicable to the dwelling and the weatherization services received and will review all of the information provided, seeking guidance from DOE and/or legal counsel as needed.
  - WVDO will work to resolve the situation in a way agreeable to all parties. WVDO encourages the use of alternative dispute resolution procedures including arbitration.
3. That no undue or excessive enhancement shall occur to the value of the dwelling unit;
  4. That no landlord contributions are allowed for single-family housing;
  5. That if an owner of the dwelling unit qualifies for WV WAP, no landlord contribution is expected; and
  6. For multifamily buildings, that a landlord outside the poverty guidelines of the WV WAP understands the requirements set forth by the “Weatherization Landlord Owner Investment” form which mandates a landlord contribution of twenty-five percent (25%) of the total cost of the various weatherization measures to the subrecipient performing the work.

In the event that all possible negotiations with the landlord have been attempted yet the landlord refuses contribution, the dwelling may still be weatherized with proper documentation and approval from WVDO.

All multifamily units will follow the established client prioritization protocols as established in single-family weatherization, unless otherwise determined by WVDO. Multiple dwelling units are defined as buildings containing five (5) units or more and can be weatherized if sixty-six percent (66 %), (fifty percent (50%) for duplexes and quadraplexes) of the occupants qualify for weatherization assistance pursuant to Federal Regulation 10 CFR 440.22. Weatherization services provided to multifamily dwelling units will also be supported by WVDO’s *Multiple Dwelling Unit Policy and Guidance* implemented in February 25, 2011, which was updated to adhere to DOE WPN 16-5 Multifamily Weatherization and WPN 16-6 Weatherization of Rental Units. The “West Virginia Multifamily Owner Agreement” which is similar to the owner agreement described above, but is adapted for multifamily units, which adheres to DOE WPN 16-5.

#### **Deferral:**

The WV WAP developed and implemented a WV WAP *Deferral Policy* on August 21, 2012, to assist in the decision to defer weatherization assistance on an eligible dwelling in attempt to

standardize the procedure throughout West Virginia. As per the policy, a deferral does not mean that weatherization assistance will never be available, but that work must be postponed until the problems at the home can be resolved. Subrecipient crews and contractors are expected to pursue all reasonable options on behalf of the client, within program guidelines. After an on-site visit has been conducted, if conditions warrant and the subrecipient determines that the home meets one (1) or more of the following deferral conditions, a letter must be sent to the client outlining the conditions present at the dwelling and the justification for deferral. The reason for deferral must be selected and documented in the database management system and the database management system automatically generates the deferral letter with the proper justification to be submitted to the client.

Possible deferral conditions include but may not be limited to the following:

- a. Structurally unsound dwelling that is not suitable and adaptable to weatherization services, and the WAP does not have the resources to do necessary repairs;
- b. Electrical or plumbing hazards that cannot be resolved prior to or as part of weatherization services;
- c. The presence of raw sewage around or in any part of the dwelling;
- d. The presence of a dead animal, or animal feces, in an area where program staff must install weatherization measures;
- e. Excessive debris and clutter around the dwelling that limits access to the dwelling;
- f. Pets unchained or running loose that would be distracting or unsafe to program staff;
- g. The client is uncooperative, abusive, or threatening to the crew, or there is an apparent threat of violence or abuse to any program worker, or any household member, during the weatherization process;
- h. The presence or use of any controlled substance in the dwelling during the weatherization process;
- i. Environmental hazards, such as serious moisture problem, known excessive radon, friable asbestos, excessive lead paint, or other environmental hazards that cannot be resolved prior to or as part of the weatherization services;
- j. Evidence of substantial infestation of rodents, insects, bats, or other harmful/objectionable animals that are difficult to control;
- k. Major remodeling is in progress, limiting the proper installation of weatherization measures;

- l. Substantial standing water in or around the crawl space or basement area limiting the proper completion of weatherization measures;
- m. Dwelling resident has a medical condition that prohibits the installation of insulation and/or other weatherization measures;
- n. No cost-effective or appropriate health and safety measures can be done to the house resulting in minimal energy savings;
- o. Customer in arrears with utility vendor, gas service has been shut off, or electric service has been shut off;
- p. Client refusal of primary energy conservation measure ( $SIR \geq 2$ );
- q. Client refusal of health and safety measure(s) necessary for client safety;
- r. Income verification needed;
- s. Updated utility information needed; and
- t. Other conditions not listed above that prohibit complete weatherization.

There are several steps detailed in the WV WAP *Deferral Policy* outlining the subrecipient and/or client's responsibilities after the aforementioned deferral letter is generated in order to possibly complete weatherization for a client that was originally deferred. These steps involve allowing the client to correct the identified issues or barriers to weatherization and providing the subrecipient with documentation that issues have been addressed. There is also a procedure in place in the event that issues are not addressed or no response is received from the client. Once reasons for deferral are resolved, the application is re-activated within the data management system. Depending on the timing of the correction of deferral issues, eligibility criteria including income verification and prioritization status may need refreshed. The WV WAP Deferral Policy outlines the timing parameters in more detail. All applicable steps must be followed and all required documentation retained.

### **V.1.3 Definition of Children**

In terms of prioritizing households including children, the State of West Virginia has defined "children" as those eighteen (18) years old and under in compliance with 10 CFR 440.3.

### **1.4 Approach to Tribal Organizations**

In accordance with Federal rule, the State of West Virginia recommends that tribal organizations not be treated as local applicants eligible to submit an application to operate a

Weatherization Assistance Program. In accordance with 10 CFR 440.16(f), low-income Native Americans will receive benefits equivalent to assistance provided to other low-income persons within the State as eligible individual applicants under program guidelines.

## **V.2 Selection of Areas to be Served**

The method used to select each area to be served by a weatherization project will be as follows:

1. All fifty-five (55) counties in West Virginia will be served by the WV WAP.
2. Selection of weatherization subrecipients or qualified entities is made pursuant to 10 CFR 440.15.
3. Subrecipients in the State operate the WAP in service areas designated by specific counties, barring any unforeseen circumstances necessitating service area alteration. Subrecipients may contract with one another in efforts to more efficiently and effectively provide weatherization services to all counties within a subrecipient's service area.
4. In the event that WVDO determines that a subrecipient fails to meet WV WAP Grant Agreement requirements, options include (but are not limited to) allocating the funds to other eligible subrecipients or qualified entities in the State.

**Redistribution Provision:** As necessary through the administration and management of this award, WVDO may move funds between cost categories, functions, and activities to fully expend the monies during the budget period, which could include moving funds between subrecipients. All budget alterations or revisions will be in accordance with 2 CFR 200.308(e) and all other applicable Federal rules and regulations. Parameters and criteria outlining situations in which a subrecipient would have an allocation reduced, receive an additional allocation, or need to move funds within their own budget are laid out in the subrecipient WV WAP Grant Agreements, following all applicable Federal rules and regulations.

## **V.3 Priorities**

The WV WAP will give priority to identifying and providing weatherization assistance to elderly persons (60 years of age or older), persons with disabilities, and households with children (18 years of age or younger). Priority can also be given to households with a high-energy burden which has two (2) components to its definition. Clients can be considered high energy burden if:



- a. Fifteen percent (15%) or more of the household income is utilized to pay for energy usage; and/or
- b. Clients are eligible for the Energy Crisis Intervention Program (ECIP), an emergency heat services component of the LIHEAP funding the WV WAP receives from the West Virginia Department of Health and Human Resources (DHHR).

Priority can also be given to clients considered high energy users. Clients will be considered high energy users if \$2,100 or more is expended by the client on residential energy annually, which will be calculated within the database management system utilizing utility bill information.

These priorities are weighted the same with regards to the points they receive except for ECIP eligibility allowing for comprehensive weatherization services to be provided within a reasonable amount of time from when the client received emergency heat services, increasing the efficiency and cohesiveness between the programs.

Another factor considered when prioritizing clients in order to have a reasonable and equitable system is the time spent on the Waitlist; however, clients only receive one (1) point per year and therefore it will be ensured that time on the Waitlist does not outweigh other factors within the prioritization system.

The WV WAP has also incorporated priority features to enhance the DOE required priority eligible population categories and allow for reasonable, efficient, and effective implementation of the WAP. Such prioritization features allow for consideration of timing of services provided by other funding sources.

There are utility funds that supplement the WV WAP, and Federal and non-Federal resources are blended in order to serve more low-income clients as well as in some cases provide services in addition to those the traditional WAP is able to provide. There are situations in which clients eligible for certain utility program funding may receive additional priority in order for the utility funds to be expended effectively and within the proper time periods. This allows the WV WAP to continue to obtain these funds for future program years.

Finally, there could be instances in which clients are given priority as part of a multifamily project completion. Clients in an identified eligible multifamily dwelling may not all be at the top of the prioritization list, and therefore additional priority could be given to the clients in order for the project to be completed. However, WVDO requires advance planning from subrecipients for the completion of multifamily dwellings and ensures that multifamily projects do not supplant services provided to single-family dwellings, which are the large majority of completions for the WV WAP.

WVDO has developed a point system to rank clients using the aforementioned prioritization criteria in the data management system that tracks all clients, dwellings, and weatherization

work. The WV WAP subrecipients must adhere to this prioritization list and point system within the data management system unless otherwise directed or approved by WVDO.

WVDO may modify the prioritization system throughout the Program Year within the parameters of the program in instances including, but not limited to, adjusted rules and regulations or additional funding sources identified. The intent of the prioritization system will always remain consistent on serving low-income clients as efficiently and effectively as possible, working to reduce energy costs, as well as to expending all funding sources within the proper timeframes and in compliance to all applicable rules and regulations. Subrecipients do not have the ability to manipulate or alter the prioritization system or criteria without written approval from WVDO.

WVDO implemented *WAP Priorities for Service Delivery* on July 1, 2014, which will remain in place for PY 2018 – 2019. WVDO modified the database management system to ensure clients are being prioritized properly and effectively. The database management system only allows those clients highest on the priority list (based on the previously described point system) to be selected for service by a particular subrecipient, unless otherwise approved by WVDO. The system allows for a reasonable “pool” of high priority clients a subrecipient must select from so that there is flexibility built into the system, while also ensuring all clients served are high priority clients. Due to the number of high priority clients that will be available for a subrecipient to select from, WVDO does not anticipate any issue with all counties in West Virginia being provided weatherization services in an efficient and effective manner throughout the year. However, this process will be monitored throughout the year by WVDO and adjusted if necessary.

Subrecipients shall ensure that weatherization services are being provided to low-income persons that live in standard types of housing, i.e., single-family, rentals, manufactured housing, and multifamily buildings. Housing type is not a recognized priority and is not factored into the WV WAP prioritization process. WVDO will monitor the system through completion and deferral review to ensure eligible clients are not discriminated against due to housing type.

#### **V.4 Climatic Conditions**

West Virginia is the 41st largest of the 50 United States with a total area of 24,230 square miles. Within its boundaries, elevations reach as high as 4,863 feet above sea level (Spruce Knob in Pendleton County) and as low as 240 feet above sea level (Potomac River on the Virginia border).

The International Energy Conservation Code (IECC) has defined two (2) distinct climate zones that cover West Virginia. These climate zones help approximate the performance of a building within each zone due to the effects of heating- cooling demand, precipitation, and relative humidity.

Due to the variations in climate throughout the state, each energy audit shall be adjusted to most accurately model the climactic conditions of the individual location. Likewise, each energy audit shall indicate the model climate used represented as locations included in the DOE approved auditing software (the Weatherization Assistant software as described in *V.5.2 Auditing Procedures*). At the present time, Zone 1 is identified as Charleston, WV, and Zone 2 is identified as Elkins, WV, in the DOE approved auditing software. These two (2) zones are utilized by all WV WAP subrecipients, with one (1) exception; the subrecipient that covers the four (4) counties in the northern panhandle of West Virginia (Brooke, Hancock, Ohio, Marshall) uses Zone 3 identified as Pittsburgh, PA, as that location more closely fits the subrecipient's local climate profile.

A rough map of the IECC climate zones and the additional zone is included as an attachment with this application.

Cooling Degree Days (CDD) and Heating Degree Days (HDD) data is submitted as an attachment to the application. A summary of the data for all three (3) zones is as follows:

Zone 1 – Charleston, WV:

CDD – 1011

HDD - 4718

Zone 2 – Elkins, WV:

CDD – 307

HDD – 6438

Zone 3 – Pittsburgh, PA:

CDD – 740

HDD – 5637

Based on the cooling degree days and dual climate zones, the WV WAP has included specific cooling measures under certain circumstances as detailed under *Section V.7 Health and Safety*.

The HDD and CDD data used for analysis was obtained from the link below.

- National Climatic Data Center (using information from the NOAA)  
<http://ggweather.com/normals/>

## **V.5 Type of Weatherization Work to Be Done**

### **V.5.1 Technical Guides and Materials**

All measures and incidental repairs performed on client homes will meet the specifications, objectives and desired outcomes outlined in the Standard Work Specifications (SWS) for Home Energy Upgrades. WVDO partnered with Community Housing Partners Energy Solutions

Training Center (CHP) to develop the WV WAP Standard Work Specifications (WV WAP SWS) utilizing the “Deck of Cards” model. This document functions as a combination standards and field guide. These field standards meet or exceed the minimum standards outlined in the national SWS. The document references the appropriate SWS for the procedure being described and clearly states with narrative and photographs the required specifications for that procedure. It functions as in-field instructional reference guide for program supervisors and technicians and has replaced all previous field guides or standards.

WVDO submitted the WV WAP SWS for Single Family Homes and WV WAP SWS for Manufactured Housing on December 23, 2015. WVDO received DOE approval on January 7, 2016. WVDO is currently updating the WV WAP SWSs in preparation to submit for DOE review and approval prior to the three-year time limit, which is January 7, 2019. A link to both documents is provided:

[https://www.dropbox.com/sh/edmdfrf6ocsih6t/AADH01\\_uD5MxC1m9PXnoGWExa?dl=0](https://www.dropbox.com/sh/edmdfrf6ocsih6t/AADH01_uD5MxC1m9PXnoGWExa?dl=0)

WVDO develops and distributes West Virginia Weatherization Program Notices (WV WPN) and West Virginia Weatherization Bulletins (WV WxBulletin) to provide additional guidance on specific requirements and major program updates and/or changes. These notices are in supplement to DOE Weatherization Program Notices and are the basis of the WVDO Field and Administration Guide (F&A Guide) which was revised and made available to all subrecipients in February 2017. The revised F&A Guide is updated when new WV WAP Policies are distributed and/or new DOE guidelines mandate programmatic or field/technical changes. WVDO developed West Virginia WxNOW in the 3<sup>rd</sup> Quarter of PY 2016 – 2017, and will send the informative newsletter to subrecipient staff each quarter. WxNOW provides information pertaining to various weatherization policy, field/technical, monitoring, and training topics that are relevant and important to the day-to-day operations at the subrecipient level. Topics are determined from monitoring findings, DOE policy or news releases, training/conference notifications, etc.

Prior to the start of PY 2016 – 2017, WVDO provided all subrecipients with the WV WAP SWS Single Family and Manufactured Housing manuals which include technical requirements and expectations of work quality for field work including: diagnostic testing; installation of energy conservation, health and safety and incidental repair measures; and final Quality Control Inspections. WVDO provided both electronic and physical guides based on preference of each subrecipient. WVDO confirms receipt and acknowledgment of those requirements through execution of DOE WAP Grant Agreements with subrecipients, with a signature on behalf of the subrecipient serving as proof of receipt.

The specifications for work to be inspected are referenced in the subrecipient DOE WAP Grant Agreement. Contractors hired by the subrecipient must have agreements that include the same technical requirements referenced above. The work of the contractor must be consistent with all WV WAP standards and requirements.

Additional training as necessary on WV WAP SWS is provided to subrecipients as detailed in *Section V.8.4 Training and Technical Assistance* to ensure consistent compliance throughout the network.

All weatherization work is being performed in accordance to the DOE-approved energy audit procedures and 10 CFR 440 Appendix A.

#### **Potential Pilot Project:**

Potential Pilot Project language below was included in the PY 2017 – 2018 WV WAP State Plan but the project was not pursued due to continued complicating factors. However, WVDO is including the language again for PY 2018 – 2019 as an option, if barriers can be overcome.

All weatherization work is to be performed in accordance to the DOE approved energy audit procedures and 10 CFR 440 Appendix A with one (1) exception upon various levels of approval from DOE. The WV WAP continues to have interest in pursuing a pilot project of photovoltaic (PV) solar installations in weatherization, focusing on multifamily apartment buildings. WVDO understands the need to follow the weatherization process including intake and eligibility procedures, proper procurement and energy audit procedures for the Savings-to-Investment Ratio (SIR) of one (1) or greater, as well as performing all the traditional weatherization work. The project is currently estimated at a little more than 65 KW total of PV at a preliminary budget for the installed cost of roughly \$125,000 for the four (4) buildings in the complex identified.

Although WVDO is interested in pursuing other DOE grant opportunities for such projects, WVDO is also interested in pursuing the opportunity through the regular formula weatherization funds as well. WVDO understands this could be a lengthy, multi-level application and approval process with many barriers for this type of pilot project. However, WVDO wanted to include the language in this application so that the WV WAP may have the opportunity to move forward in looking into the feasibility of the opportunity, working closely with the WV DOE Project Officer and other DOE experts.

WVDO is aware there are multiple challenges a project of this nature presents and understands items including but not necessarily limited to the following need to be considered and addressed during the process with DOE guidance and approval:

- Performance of a proper environmental review as applicable;
- Performance of proper energy audit procedures to provide required justification for installation of measures;
- Consideration of collaboration of other funding sources to address the potential high cost of a project that could inhibit the SIR for the project if only funded with DOE funding, along with consideration of regular weatherization items that would also be installed if deemed cost effective; and

- Addressing in collaboration with DOE the questions and challenges of leasing versus purchasing equipment.

### **Other Renewable Energy Systems:**

Assistance under the WAP may be provided for renewable energy systems. Any renewable energy system measures implemented by a subrecipient must have WVDO written approval prior to work being performed. A site-specific Weatherization Assistant energy audit must be included as part of the client file which will be reviewed by WVDO as part of the approval process.

10 CFR §440.18 (Allowable Expenditures) incorporates the renewable energy system provisions and specifies a ceiling of \$3,000 per dwelling for labor, weatherization materials, and related matters, subject to annual adjustments. As per DOE WPN 18-1 Section 3.1.1, the percentage increase in the Consumer Price Index (CPI) for the previous 12-month period (October 2016 – September 2017) was 2.2 percent (2.2%); therefore, the PY 2018 adjusted average for renewable energy measures is **\$3,623 with a SIR greater than one (>1). (last year \$3,598)**

*The adjusted average for renewable energy measures is not a separate average, but part of the overall adjusted average expenditure limit of \$7,261. (last year - \$7,212)*

Because the total average cost per unit exceeds the renewable measures allowance, the major effects of the regulation are to provide criteria and a procedure for integrating renewables into the WAP, and to establish a process for evaluating petitions to use new or innovative renewable energy systems in the WAP.

10 CFR 440.21(c)(1)(i-iv) specifies performance and quality standards criteria for renewable energy systems. Paragraph (c)(2) establishes a procedure for submission and action on petitions by manufacturers requesting the Secretary of Energy to certify a new technology or system as an eligible renewable energy system.

Approved renewable energy systems will be listed in Appendix A of Part 440, Standards for Weatherization Materials.

### **V.5.2 Energy Audit Procedures**

<u>Unit Types</u>	<u>Audit Procedures and Dates Most Recently Approved by DOE</u>
Single-Family	National Energy Audit Tool (NEAT) approved by DOE November 15, 2016.
Multifamily	- 1-5 Units, individually heated/cooled, garden style apartments - NEAT audit with 3 or less stories - Small MDU less than 25 units, individually heated/cooled - NEAT audit Sampling*

- MDU greater than 25 units – DOE Project Officer Approval  
Mobile Home      Manufactured Home Energy Audit Tool (MHEA) approved by DOE  
November 15, 2016

*\*Audit Sampling:* To ensure a true representation of the building, an audit(s) must be completed on apartments with different configurations and heat loss characteristics (ex: 1 bed. bottom floor, 1 bed. middle floor, 1 bed. top floor, 2 bed. bottom floor). An audit of at least twenty-five percent (25%) of the total number of units in each building must be conducted. Each audit must include photo documentation of existing conditions (ex: insulation levels, venting, etc.).

WV WAP uses the Weatherization Assistant software as its energy audit tool. The Weatherization Assistant energy audit software was developed by Oak Ridge National Laboratory specifically for the use for the Weatherization Assistance Program. There are two (2) components to the Weatherization Assistant software: The National Energy Audit Tool (NEAT) for single family houses and the Manufactured Home Energy Audit (MHEA) for mobile homes.

As per 10 CFR 440.21(i), WVDO submitted the Weatherization Assistant audit procedures to DOE for approval for use in the WV WAP for another five (5) years on February 17, 2016. WV WAP received approval from DOE on November 15, 2016, for the Weatherization Assistant audit.

As per 10 CFR 440.21(h), WVDO included within the submittal of audit procedures the DOE determined list of general heat waste (GHW) reduction weatherization materials from DOE WPN 13-5 and plan to incorporate the usage of the identified GHW materials as guided by DOE WPN 13-5 and any other applicable DOE guidance. Based on GHW costs and effects on individual and cumulative SIRs, WVDO is evaluating not to include the GHW in the audit.

Each subrecipient must have at a minimum one (1) energy auditor with a good working knowledge of NEAT and MHEA or an approved contract in effect with another subrecipient to perform energy audits. Some subrecipients have obtained the Home Energy Professional Energy Auditor certification, and WVDO will continue offer the training and certification to subrecipients during PY 2018 – 2019 to improve and enhance the audit process. For multifamily units, until MulTEA is implemented and subrecipient auditors can acquire accredited training, WVDO has a procedure in place, *Multiple Dwelling Unit Policy and Guidance*. As mentioned in *Section V1.2.*, WVDO's *Multiple Dwelling Unit Policy and Guidance* has been revised as guided by DOE WPN 16-5 Multifamily Weatherization and WPN 16-6 Weatherization of Rental Units. WVDO will continue to seek input and guidance from the DOE Project Officer on the *Multiple Dwelling Unit Policy and Guidance* on an "as need" basis.

Multifamily units are defined as buildings containing five (5) units or more and can be weatherized if sixty-six percent (66%), (fifty percent (50%) for duplexes and quadraplexes) of the occupants qualify for weatherization assistance pursuant to Federal Regulation 10 CFR 440.22. The majority of eligible units in West Virginia are considered to be primarily garden style apartments, with less than twenty-five (25) units per structure, three (3) stories or less

where the units are individually heated and/or cooled and have exterior access. Hence, these dwellings will be the focus of the WV WAP's multifamily weatherization efforts. Each multifamily unit (including those that have less than five (5) units) must meet the previously mentioned audit procedures and all other procedure and documentation requirements set forth in the WV WAP *Multiple Dwelling Unit Policy and Guidance*. Prior to commencing weatherization of the building, WVDO must review and approve of the project. A minimum twenty-five percent (25%) audit sampling must be completed on apartments with different configurations and heat loss characteristics for each building to be weatherized.

Due to increased and more complicated requirements and procedures, any multifamily project *greater* than twenty-five (25) units would have to be submitted for review and approval to the DOE Project Officer prior to commencing weatherization.

### **V.5.3 Final Inspection**

Quality Control Inspectors (QCIs) working for, or contracted by the WV WAP must possess the knowledge, skills, and abilities in the National Renewable Energy Laboratory (NREL) Job Task Analysis (JTA) for Quality Control Inspectors. This applies to all individuals who perform an evaluation and sign off on work performed in homes, including subrecipient final inspectors and WVDO monitoring staff.

Certified subrecipient QCI's are required to perform a final inspection of each dwelling unit before it can be reported as a completion. The final inspection must be performed by the certified QCI using the WV WAP mandated "QCI form" (attachment to application) and certify that the work has been completed in a professional manner and is in accordance with the priority determined by the audit procedures required by 10 CFR 440.21. To be in compliance with DOE WPN 15-4, during PY 2018 – 2019, only those who possess the Home Energy Professional (HEP) QCI certification may perform inspections and sign off on work performed in homes. All subrecipients except for one (1) have demonstrated QCI competency by receiving certification as an HEP QCI. One (1) subrecipient currently has contracted with an out of state vender to perform Quality Control Inspections. This subrecipient does have a staff member currently in QCI training. Any subrecipient without a QCI on staff will ensure a certified QCI outside the agency performs all inspections until the certification is achieved.

The credentials of each subrecipient QCI are maintained in the database management system. WVDO will review the system periodically to ensure QCI credentials remain up-to-date as well as during the annual monitoring process. WVDO has set up or reviewed/approved all training and certifications of QCI staff (as described in *Section V.8.4 Training and Technical Assistance Activities*) thereby ensuring the validity of all credentials. WVDO will continue to either set up any additional certifications for the Weatherization Network, or review and approve that the proper certification is sought and obtained and all procedures followed prior to reimbursement for any training/certification expenses.



WVDO revised the standardized QCI form in 2016, which was based on DOE's example of a quality assurance document, modified to meet the needs of the WV WAP. The revised form was submitted to the subrecipients for use in PY 2016-2017.

The form and the associated policy provide uniform guidelines and practices for final inspections of units at the subrecipient level to ensure such are performed correctly and thoroughly prior to being submitted as a completed unit. Signatures are required on the form certifying the unit had a final inspection and met all required standards. The inspection includes an assessment of the Weatherization Assistant audit performed and confirms that measures called for on the Work Order were appropriate signifying the proper SIR.

In regards to DOE WPN 15-4 compliance, WVDO will ensure through the monitoring process described in *Section V.8.3 Monitoring Activities* that work performed by the subrecipient meets the criteria outlined in the WV WAP SWS.

If during the monitoring process, it is discovered a subrecipient QCI is not inspecting units using the standards adopted by the State and consistent with the WV WAP SWS, WVDO will initiate a Quality Improvement Plan (QIP) process with the subrecipient, also described in *Section V.8.3 Monitoring Activities*. WVDO will work with the subrecipient to identify the best course of action to address whatever deficiencies may exist in the Quality Control Inspection process including both internal steps a subrecipient can take, as well as external training and technical assistance WVDO can provide or obtain. Depending on the nature and severity of the issues found, WVDO may take disciplinary or punitive actions including but not limited to the monitoring of any job a subrecipient is attempting to turn in as a completion, disallowing of costs/completions, and repayment of funds.

Due to staffing limitations of certain subrecipients, the WV WAP instituted a combination of the two (2) DOE Prescribed QCI Policies of Independent QCI and Independent Auditor/QCI. At this time, not all subrecipients have the staff to have a separate Auditor and QCI. For such subrecipients, WVDO will increase the monitoring efforts of completed dwelling units as per DOE WPN 15-4. For subrecipients that have an independent QCI, WVDO will monitor at least five percent (5%) of completed dwelling units. For subrecipients that have an Auditor that also performs the functions of QCI, WVDO will monitor at least ten percent (10%) of completed dwelling units. This percentage will increase based on issues identified and/or capacity of WVDO staff. WVDO will work with the subrecipients and make all reasonable efforts with the funding available to train and certify enough staff to separate the Auditor and QCI duties at the subrecipient level where it is possible to do so. As stated in *Section V.8.4 Training and Technical Assistance Activities*, WVDO will continue to offer additional QCI training and certifications as funding allows throughout the PY. Except for extremely extenuating circumstances, the QCI will not have performed any other work on the completed dwelling unit. WVDO will utilize the monitoring process to ensure the integrity, impartiality, and quality of the inspection process.

## **V.6 Weatherization Analysis of Effectiveness**

WVDO performs a variety of analysis of the WV WAP (statewide, subrecipient specific, objective/measure/process specific, etc.) at different times throughout a program year. Some data collection and analysis is performed on a routine basis for general oversight purposes; however, WVDO also investigates specific issues as they arise using different tools and database reports. Program production, goal attainment, and expenditure rates are tracked on a monthly basis for each subrecipient at the State level on a statistical analysis tool. These statistics are analyzed periodically, and the appropriate feedback and technical assistance is provided to those subrecipients not meeting goals, benchmarks, or compliance expectations. The subrecipients use the same statistical analysis tool for tracking their own production and expenditures to further ensure routine evaluation of local programs and reevaluation of goals when necessary.

A monthly “Dashboard” outlining the status of the weatherization program statewide was developed by WVDO and is submitted to the Weatherization Network after all reports have been submitted, data reviewed, and funding requests approved. This spreadsheet displays a wide range of summary information including expenditure numbers, health and safety percentages, completion data, and average job cost. WVDO developed supplemental spreadsheets to the “dashboard” which breaks down information in a more detailed manner. It provides a detailed line item breakdown of expenditures per funding source and average job cost. It also displays dwelling type served and fuel type served.

WVDO works to establish production and expenditure benchmarks and includes as necessary and feasible in the subrecipient WAP Grant Agreements to increase accountability and ensure proper program management.

The WV WAP utilizes the database management system to track all weatherization work performed on any dwelling. The database management system coupled with the aforementioned statistical analysis tool and other statistical spreadsheets facilitate a review/analysis process essential for program management and oversight. The review process in various forms including desk-top review, serve as routine procedures to ensure compliance, as well as an initial monitoring process to confirm that measures are performed and tracked according to program standards, and that diagnostic and health and safety tests are performed and documented correctly. This process allows for the identification of trends that may convey a training or technical assistance need, or specific jobs that may need to be monitored due to documentation of measures.

As mentioned in the *State Plan Annual File*, during PY 2015 – 2016, WVDO developed and implemented a system to estimate annual energy savings for all funding sources as per 440.14(c)(4). The process entails utilizing data from the “Weatherization Assistant Recommended Measures Output Report.” The WV WAP has the capability to compare productivity and associated energy savings data from the individual subrecipients and has the capability to analyze by measure. In PY 2018 – 2019, the WV WAP will continue to collect

program year data and WVDO will pursue any additional development needed of the database management tool reporting capabilities to be able to utilize the data effectively in the future. WVDO performs a review of the Weatherization Audit Tool usage by each subrecipient during monitoring visits to ensure material and fuel costs are up to date in the “Setup Libraries” ensuring the system is performing accurate cost effectiveness evaluation.

As stated in section *V.8.3 Monitoring Activities*, WVDO also tracks the most significant deficiencies of subrecipients in a “Root Cause Analysis” spreadsheet that displays trends of the subrecipients’ performance over a period of several years. This analysis is another contributing factor to the identification of training and technical assistance activities and priorities. For PY 2018 – 2019, WVDO will continue to track Strengths, Weaknesses, Best Practices, and Other Needs for more efficient analysis from more information readily available and organized. The collection and analysis of the data, and the improvement of tools and processes each year keeps WVDO on a path of continuous improvement with regards to support, guidance, and oversight which in turn will keep the subrecipients on the same path regarding the weatherization services provided and management of the program.

During the monitoring process, WVDO confirms the subrecipient has internal evaluative processes in place to facilitate improvement as needed (ex: Quality Control Inspector) to identify issues internally at the subrecipient level. This subrecipient process can assist WVDO in identification of training and technical assistance needs. Also, as discussed in *V.8.3 Monitoring Activities*, WVDO also ensures through the monitoring process that identified deficiencies are corrected through a Quality Improvement Plan (QIP) and WVDO follows up and verifies the correction through desk-top monitoring or on-site follow-up visits as necessary.

A final piece of analysis of a segment of the WV WAP is performed by a third party as part of evaluation of one (1) of the utility/leveraged programs that supports the WV WAP. As discussed in the *State Plan Annual File*, one (1) of the programs that has supplemented the WV WAP since 2012 is funding received from American Electric Power (AEP) for comprehensive weatherization services for customers within AEP’s service territory. A third-party company is brought in to evaluate the program each year by analysis of data, surveys of participants and program managers, and site visits of a sample of dwellings served by the program.

## **V.7 Health and Safety**

The *WV WAP Health and Safety Plan* is included as an attachment. A “Material Identification Chart” is also included as an attachment as part of the *WV WAP Health and Safety Plan* which assists in identification of health and safety, incidental repair, and ancillary materials/measures.

## **V.8 Program Management**

### **V.8.1 Overview and Organization**

Midway through PY2016 – 2017, the former administering agency of the WV WAP, the West Virginia Office of Economic Opportunity (WVOEO), and all its functions were merged into the West Virginia Development Office (WVDO). Therefore, the WV WAP is now administered by WVDO. As the former WVOEO had been, WVDO is an agency under the West Virginia Department of Commerce.

WVDO also administers the Community Services Block Grant (CSBG); Emergency Solutions Grant (ESG); Housing Opportunities for Persons with AIDS (HOPWA); Low-Income Home Energy Assistance Program (LIHEAP); LIHEAP Application Intake; West Virginia's Appalachian Regional Commission (ARC) program; the Community Development Block Grant (CDBG); Disaster Recovery (DR) funds; West Virginia's Land and Water Conservation Fund (LWCF); Neighborhood Stabilization Project (NSP); the Flex-E Grant; Main Street; ON TRAC; Neighborhood Investment Program (NIP); Community Participation Program; Waste Coal funds; Local Economic Development/ Certified Development Communities (LED/CDC) grants; and Intergovernmental Review, as well as participates in Broadband development initiatives.

The division of WVDO in which the WV WAP – in addition to the other programs listed in the preceding paragraph – operates is West Virginia Community Advancement and Development (WVCAD). The WV WAP and these other programs are overseen by the WVCAD Director. The WVCAD division's programs and functions are subdivided among four (4) units/groups – *Sustainability, Infrastructure, Compliance, and Resiliency*). The *Compliance Unit* subsumes the monitoring functions of several programs contained in the other three (3) units, including the monitoring functions of the WV WAP. An organizational chart of WVCAD is provided as an attachment.

With this arrangement, WV WAP staff straddle two (2) of the three (3) units/groups of WVCAD – *Sustainability* and *Compliance*. In the *Sustainability Unit*, WV WAP staff include a Program Manager supervised by a non-WAP Sustainability Manager. In the *Compliance Unit*, WV WAP staff include an Assistant Manager/Monitor (1) and three (3) additional monitoring staff supervised by a non-WAP Compliance Manager. The guidance previously provided by a Program Development Manager is still provided by the same individual in his new position of Deputy Director, but with less time spent. The Database Systems Specialist position is vacant; those duties related to the WV WAP, primarily Historic Preservation reviews, have been assigned to the Program Manager. Administrative staff assist with filing and forwarding subrecipients' training requests.

The WV WAP is not responsible for the State Energy Program, which is administered by the West Virginia Division of Energy (WVDOE). WVDOE is also a division under the West Virginia Department of Commerce. The WVDOE merged with WVDO in PY 2017 -2018.

The WV WAP is administered utilizing all applicable Federal rules and regulations including 10 CFR Part 440 as well as any additional rules and regulations that come into effect due to the Federal implementation of the OMB Circular 2 CFR 200 - Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (2 CFR 200.); DOE specific regulations codified in Part 910 of 2 CFR and Department of Health and Human Services (HHS) specific regulations codified in 45 CFR Part 75; all applicable provisions of Treasury Circular Number 1075, and State of West Virginia Executive Order 12372 (Intergovernmental Review Procedure); and all other state rules and regulations that apply including West Virginia Purchasing Procedures. The WV WAP also follows all DOE specific guidance as provided through DOE WPNs and WAP Memorandums. The WV WAP incorporates these requirements as applicable into subrecipient WAP Grant Agreements and Memorandums of Understanding, as well as into any operations manuals or guidance created.

### **V.8.2 Administration Expenditure Limits**

For PY 2018 – 2019, the statutory ten percent (10%) of administrative funds will be divided evenly between the subrecipients and WVDO. WVDO will retain 5 percent (5%) of the grant for administrative costs and 5 percent (5%) will be made available to program subrecipients, as per DOE guidance in DOE WPN 18-1.

As per DOE WPN 18-1: ***“The Grantee may allow Subgrantees who receive less than \$350,000 of new DOE appropriated funds, to use up to an additional 5 percent of their subgrants for administration. This is permitted only if the Grantee has determined that such Subgrantee requires the additional amount to effectively implement the administrative requirements of the Program.”*** The WV WAP has eleven (11) of twelve (12) subrecipients that receive less than \$350,000 of new DOE appropriated funds and therefore WVDO has allowed an increase to those subrecipients’ administrative funds to 10 percent (10%) of each subrecipient allocation. Overall, the WV WAP will be below the 15 percent (15%) allowable for administrative funds for these special cases with the WV WAP utilizing 12.35 percent (12.35%) of funds overall for Pass-through entity and subrecipient administrative expenses.

A separate budget category is permitted by DOE for financial audits. The cost of these audits was previously charged to the already over-burdened administrative cost category and sometimes resulted in financial audits of less than adequate quality. WVDO is providing relief to the subrecipients by allowing these charges to be covered by a separate category, if the subrecipients meet the threshold contained in 2 CFR 200. These costs will be actual costs of the weatherization portion of the audit.

## **V.8.3 Monitoring Activities**

### **Introduction**

Monitoring is one of the most significant and intricate procedures undertaken by WVDO. WVDO must adhere to multiple funding bodies' guidelines as well as construct and adhere to state-specific guidelines and protocols structured in a way to facilitate successful and functional program management throughout the State of West Virginia. Monitoring is one of the many tools utilized by WVDO in an effort to continually improve the capabilities and effectiveness of the various subrecipients. Monitoring is a systematic process of gathering and evaluating information, as well the physical visitation of sites, in order to support and assess the subrecipients and their programs in terms of performance, capacity, and compliance. As a Pass-through entity of Federal dollars, WVDO ensures that grant funds are expended in accordance with applicable law, including regulations contained in 10 CFR part 440 specifically 10 CFR 440.23(a); 2 CFR 200 specifically 2 CFR 200.331, 2 CFR 910 and 45 CFR Part 75; DOE WPNs including DOE WPN 15-4, and WPN 16-4, and other policies and procedures that DOE may issue. The WV WAP Monitoring Plan will include the following areas:

### **Approach**

WVDO will conduct a monitoring of each subrecipient at least once a year, provide a written report to the subrecipient, and maintain both electronic and physical files related to monitoring which are accessible to DOE during its monitoring visits. The monitoring tools utilized by WVDO are based off tools and templates provided by DOE through *WPN 16-4 Updated Weatherization Assistance Program Monitoring Guidance* and *WAP Memorandum 015 - Weatherization Financial Toolkit – 2 CFR 200 Regulations and Procurement Procedures*. WVDO has revised monitoring tools and forms to reflect the updated guidance as well as WV WAP SWS references. WVDO has also developed a monitoring module of the database management system to be used for formation of monitoring reports, QIPs, and other monitoring process aspects.

WVDO will also conduct periodic off-site, desk-top monitoring utilizing the database management system used to track all weatherization work, at times coupled with the statistical management tool and related analytical spreadsheets used to track production, expenditures, and other performance indicators. This process will serve as a pre-monitoring activity as well as routine review and oversight as needed. The desk-top monitoring activity is utilized to confirm that measures are performed and tracked according to program standards, and that diagnostic and health and safety tests are performed and documented correctly. It is also used to ensure all documentation for a client and dwelling are maintained and completed properly and accurately. This process allows for the identification of trends that may convey a training need, or specific jobs that may need to be monitored due to documentation of measures. The development of the database management system over the last several programs years greatly increased WVDO desk-top monitoring capabilities to increase efficiency and effectiveness of monitoring, as well as to

reduce expenses. WVDO will continue to use these enhanced capabilities for the current Program Year.

The monitoring performed by WVDO will be broken down into three (3) components which may be performed at different times if necessary and may have differing frequency depending on quality of subrecipient performance in each focus area. The monitoring will include the following focus areas and details:

### **Programmatic and Management Monitoring**

- Subrecipient Production Analysis and Review (ensuring benchmark and yearly goal completion)
- Financial/Administrative Components
- Inventory (Equipment and Materials)
- Warehouse
- Rolling Stock
- Eligibility processes and compliance
- “Reweathering” compliance
- Compliance with all WVDO mandated forms, processes, and policies
- Database management system usage and reporting
- Reporting and funding requests
- Client Files and related documentation
- Health & Safety Components (Safety meetings/Lead Safe Work [LSW] Practices, documentation/Warehouse & Vehicle Safety/Health and Safety percentage)
- Energy Education
- Training & Technical Assistance
- Procurement Practices
- Client Prioritization methods
- Utility (leveraged) fund usage, documentation, and reporting
- Insurance coverage
- Subrecipient personnel qualifications/certifications and associated work performed
- Subrecipient internal corrective action procedures (for reduction of deficiencies)

### **Field/Technical Monitoring**

- Program Overview (Client File Review, Work Orders, Documentation of measures, etc.)
- Compliance with all WVDO mandated field/technical forms, processes, and policies (ex: Quality Control Inspection form and process)
- Rental unit/Multifamily documentation and process compliance
- Energy Audits (Process and Documentation - Weatherization Assistant Audit Program Libraries, inputs/usage, adherence to guidance, etc.)

- Weatherization of Units (all work performed on dwellings – HVAC, shell measures including insulation and air sealing, baseload measures, etc.)
- Zonal and Pressure Diagnostics on all dwelling types
- Health & Safety (HVAC, LSW compliance, ASHRAE 62.2 2016 ventilation requirements, mold/moisture, electrical, etc.)
- Final Inspections/Quality Control process and documentation
- Client interaction and client education process

Field monitoring incorporates all new DOE mandated regulations, e.g., ASHRAE 62.2-2016 (and any applicable updates when implemented), Zonal Pressure Diagnostic standards, and Combustion Appliance Zone testing compliance. Also, in compliance with DOE WPN 15-4, all field monitoring inspections will be performed by a certified HEP QCI and the monitoring inspection form will include a signature of the monitor(s), to supplement the client file and subrecipient QCI form.

Field monitors will utilize DBA FACS Pro as the monitoring tool. DBA FACS Pro is programmed to randomly pull clients to increase transparency for monitoring visits through the Monitoring/Training Module.

## **Fiscal Monitoring**

- Financial Policies and Procedures
- Cash Management
- Procurement policies and practices
- Financial management of Material Inventory
- Financial management of Property and Equipment
- Contracts/Sub-awards
- Payables/Receivables/Expenses Management
- Invoicing and Reporting accuracy
- Review of Funding Requests and specific line items/expenses for accuracy and proper documentation
- Bank records and reconciliation
- Financial Statements
- Internal Controls
- Financial Management of utility (leveraged) funds
- Single Audits (See A-133 Financial Audits (2 CFR 200 Subpart F))

## **A-133 Financial Audits (2 CFR 200 Subpart F)**

WVDO will verify when the audit was submitted to the Federal Clearinghouse (FAC), and note this on the “Annual Audit Chart,” maintained by the WVDO Fiscal Compliance Monitor. If the subrecipient did not submit the audit to the FAC by the deadline as per Federal regulations, WVDO mails a reminder letter to the subrecipient.



The WVDO Fiscal Compliance Monitor will review all audits using the “WVDO Pass-through entity Audit Review Checklist.” An “Audit Review Summary” is completed for the audit, and maintained on WVDO’s shared drive. Depending on the results of the review, WVDO forwards to the subrecipient either (1) a letter indicating no findings, or (2) a letter requesting a Corrective Action Plan (CAP). The subrecipient has six (6) weeks to submit a CAP if applicable.

If a subrecipient has not submitted the CAP within the deadline, the CAP “Reminder E-mail” will be forwarded to the Executive Director. Upon receipt of the CAP, WVDO will review and forward to the subrecipient either the (1) “CAP Acceptance E-mail” or (2) another correspondence requesting modification to the CAP. As per 2 CFR 200, as a Pass-through entity, WVDO is required to follow-up/issue a management decision for Federal award findings related to the programs WVDO administers.

Currently, all WAP subrecipients expend more than \$750,000 in Federal funds in a fiscal year and thus are required to have a Single Audit.

### **Desk-Top Monitoring**

WVDO will also conduct periodic off-site, desk-top monitoring utilizing the database management system used to track all weatherization work, at times coupled with the statistical management tool and related analytical spreadsheets used to track production, expenditures, and other performance indicators. This process will serve as a pre-monitoring activity as well as routine review and oversight as needed. The desk-top monitoring activity is utilized to confirm that measures are performed and tracked according to program standards, and that diagnostic and health and safety tests are performed and documented correctly. It is also used to ensure all documentation for a client and dwelling are maintained and completed properly and accurately. This process allows for the identification of trends that may convey a training need, or specific jobs that may need to be monitored due to documentation of measures. The development of the database management system over the last several programs years greatly increased WVDO desk-top monitoring capabilities to increase efficiency and effectiveness of monitoring, as well as to reduce expenses. WVDO will continue to use these enhanced capabilities for the current Program Year.

### **Desk-Top Monitoring Schedule**

Desk-top monitoring will be performed on a quarterly basis. Desk-top monitoring will be conducted through the DBA FACS Pro Monitoring/Training Module. Field Monitors will choose a single item to review. Examples of desk-top monitoring items include: Deferrals, QCI Form completion, Income verification, etc. Jobs will be chosen at random by the DBA FACS Pro Monitoring Module and the reviewing monitor(s) will be on a rotating quarterly basis.

Subrecipients will receive e-mail notification once the desk-top monitoring has been completed. The notification will have instructions on how to respond to the monitoring. The individual issues will be addressed per subrecipient with required actions for compliance if applicable.

## Monitoring Staff

Monitoring will be performed by several WVDO staff members with differing credentials and areas of expertise to effectively monitor all the various components of the WV WAP as outlined above. Monitoring staff members may monitor more than one (1) component. The monitoring process and the different components are managed and overseen by a Compliance Manager. The WV WAP Manager reviews and approves each report. The current WVDO monitors are as follows:

### *Programmatic and Management Monitors (Administrative Monitors):*

- 1 Weatherization Assistance Program Manager
- 1 Weatherization Assistance Assistant Administrator

**Qualifications:** The qualifications of the Programmatic and Management Monitors (Administrative Monitors) include extensive experience with the weatherization program (both at the Pass-through entity level and subrecipient level) as well as certifications and education that benefit the monitoring team as they oversee and evaluate the subrecipient management of the weatherization program. The staff members have experience in management and finance/accounting.

### *Field Monitors (Technical Monitors):*

- 3 Weatherization Specialists (Field/Technical)

**Qualifications:** The qualifications of the Field Monitors (Technical Monitors) include extensive experience with the weatherization program as well as extensive building science knowledge. The Field/Technical monitors have several BPI certifications (including HEP QCI), Weatherization Assistant Training Certificate, as well as multiple WV WAP specific certifications that are now superseded by HEP or other state/national certifications, but still provide a strong foundation of knowledge; (Energy Auditor, Quality Control Inspector, multiple HVAC certifications) as well as attendance to regional and national energy conferences. As previously stated, all field monitoring inspections will be performed by a certified HEP QCI at the Pass-through entity level.

### *Fiscal/Financial Monitors:*

- 1 Weatherization Assistance Program Assistant Manager
- 1 Compliance Unit Manager

**Qualifications:** The qualifications of the Fiscal/Financial Monitors include education (bachelor's and master's level) and experience in the accounting, finance, and management fields, as well as knowledge of Federal financial requirements. Some of the monitoring staff experience is specifically with the Weatherization Assistance Program both on the Pass-through entity and subrecipient levels. The Fiscal/Financial monitors will also utilize WVDO's Chief Financial Officer (CFO) and experienced accounting staff as additional resources during the monitoring activities as needed.

WVDO staff have received multiple 2 CFR 200 Uniform Guidance trainings and will seek additional training on the new regulations if necessary. WVDO will pursue additional certifications as identified and/or needed as the Program Year progresses.

### **Monitoring Expenditures:**

Monitoring staff members will be paid out of the Training and Technical Assistance (T&TA) budget category with the exception of the Program Development Manager, the Fiscal Monitor, and WAP Manager who will be paid out of the Administrative budget category given the nature of their work in relationship to the organization and other programs they work within. A percentage of the Fiscal Monitor will be paid out of the T&TA budget category. WVDO has budgeted \$16,185 out of DOE funds for travel expenses related to monitoring activities. These funds will be supplemented by LIHEAP funds.

### **Monitoring Schedule:**

The monitoring schedule will follow a basic plan of one (1) or two (2) Programmatic, Field, and Fiscal monitoring visits performed per month for the twelve (12) subrecipients. This varies throughout the year due to when WVDO starts the monitoring process for the Program Year. In coordinating the monitoring schedule WVDO also considering holidays, subrecipient leave time, etc.; therefore, some months have one (1) visit, and some have two (2).

WVDO will strive to set the monitoring schedule for the Program Year within the first quarter (July-September) of the DOE grant cycle. WVDO will disseminate a preliminary schedule to the Weatherization Network and ask subrecipients to confirm the proposed monitoring dates for their organization or ask for different dates if conflicts exist.

If conflicts arise after the final monitoring schedule is set for the Program Year, WVDO asks that subrecipients inform WVDO as soon as possible. At a minimum, subrecipients must notify WVDO within 48 hours of the receipt of the official monitoring notification.

WVDO avoids scheduling visits during back-to-back weeks when possible so that WVDO monitoring staff can work to finalize reports and adequately prepare for the next visit. This plan is only tentative as visits to a subrecipient could increase if there are serious deficiencies identified. The scheduling of the subrecipients will depend in part on when their last visit occurred as well as reasonably taking into consideration geographic location and time of the year. Also, any subrecipients that had major or repeated deficiencies identified from the PY 2017 – 2018 monitoring process and have not had a follow-up visit (due to deficiencies being identified toward the end of PY 2017 – 2018) will be first priority in PY 2018 – 2019, with additional reviews scheduled as necessary until deficiencies are corrected.

## **Pre-Monitoring Procedures**

WVDO will provide timely notification of monitoring to subrecipients and complete some parts of the monitoring prior to arriving onsite for monitoring. Those activities include:

- Distribution of official notifications of monitoring at least thirty (30) days prior to on-site monitoring by e-mail to Executive Director/CEO, CFO/Finance Director, and WAP Coordinator. Official notifications will direct the subrecipient how to prepare for the review and WVDO's expectations. The subrecipient should confirm receipt of the notification and respond within 48 hours if the dates for monitoring need to be changed for any reason.
- During the week before the scheduled on-site visit, the WVDO monitoring team will confirm arrival times and arrange any necessary logistics.
- An assigned field/technical monitor will contact the subrecipient with a job monitoring pool to schedule jobs to be monitored at least one (1) week prior to on-site monitoring.
- Monitors will conduct desk-top reviews of relevant information to increase efficiency on-site.

## **Visit**

A typical visit can be expected to require three (3) to five (5) days on-site. The on-site visit process will include the following:

- An entrance interview during which any concerns or questions about the review can be discussed between WVDO and subrecipient staff.
- Requests of documentation for review including, but not limited to, subrecipient policies and procedures, program documents, client files, and financial records.
- Conducting interviews with program staff regarding program operations and job functions.
- Conducting interviews with administrative and fiscal staff.
- Inspecting completed weatherized dwelling units.
- Inspecting Weatherization assets including but not limited to warehouse(s), material inventory, tools, equipment, and vehicles.
- Offering a daily update to the subrecipient regarding the progress of the review and issues that have already been found.

The staffing and credential make up of a subrecipient will determine the number of completed dwelling units needing to be visited by WVDO as per DOE WPN 15-4. For subrecipients that have an independent QCI, WVDO will monitor at least five percent (5%) of completed dwelling units. For subrecipients that have an Auditor that also performs the functions of QCI, WVDO will monitor at least ten percent (10%) of completed dwelling units. This percentage will increase based on issues identified and/or capacity of WVDO staff. WVDO will also review units "in progress" beyond the five (5) or ten (10) percent completed units respectively, in order to assess: quality and

compliance; appropriate and allowable materials; appropriateness and accuracy of energy audits; final inspections; safe work practices, such as lead safe weatherization protocols; and other factors that are relevant to on-site work.

An important continued focus of WV WAP subrecipient monitoring for PY 2018 – 2019, will be the supplemental components to the Weatherization Program, including but not limited to the utility partnership programs, and LIHEAP components including the Energy Crisis Intervention Program (ECIP), the Electrical Upgrade Component, and the Weatherization Related Home Repair Component. These projects provide additional funding for the WV WAP, enable additional work to be done on a large percentage of weatherized homes, and make possible the weatherization of some homes that may have had to be deferred because of necessary repairs that are outside the scope of the DOE WAP. WVDO will also monitor any other components that are developed and approved as additional appropriate LIHEAP measures. Monitoring of the supplemental components will be part of the standard monitoring process (unless determined necessary to do otherwise) focusing on the correct utilization, tracking, and accountability of the supplemental component funds. WVDO will take advantage of desk-top monitoring opportunities as appropriate for additional components of the WV WAP.

Upon the completion of each monitoring visit of any of the three (3) components, an Exit Conference is held between the members of the subrecipient (as selected by the subrecipient management) and the monitoring staff to discuss strengths, weaknesses, deficiencies, call-backs, and monitor recommendations. As per DOE WPN 16-4, within thirty (30) days after each visit, WVDO will prepare a written report for the subrecipient that describes the current monitoring assessment (identification any deficiencies, recommendations, commendations, and best practices) and any corrective actions as part of a QIP, if applicable. A draft of this report is provided during the Exit Conference and then finalized by WVDO staff following the visit. A subrecipient typically has thirty (30) days to respond with a QIP unless the nature and severity of findings deem a more expedient response. If the subrecipient does not respond within the required time limit, the subrecipient is notified and disciplinary or punitive actions may be taken if the subrecipient does not comply with the requirement to submit a QIP.

#### **Process of Corrective Action, Discipline and/or Removal of a Subrecipient from the WAP**

WVDO has a system in place to review each QIP provided by the subrecipients either approving of the plans made or requiring additional information or actions. Regardless of monitoring focus, WVDO follows up with each subrecipient to ensure that the corrective actions outlined in the plan have been implemented either through a subsequent monitoring visit and/or desk-top review, or requiring the submission of documentation confirming the corrections. WVDO will offer and provide training and technical assistance if requested and appropriate response to a QIP. If a subrecipient's response is to contest an identified deficiency, WVDO will either sustain or revise its initial deficiency and provide additional guidance or instructions.

WVDO increases visits (both the number of units reviewed and the frequency of monitoring visits) to the subrecipient until it can be assured deficiencies are resolved. If necessary, WVDO

has implemented a system of monitoring every potential job prior to submission as a completion for a subrecipient if sustained compliance cannot be demonstrated. If significant deficiencies are discovered, such as health and safety violations, poor quality installation of materials, major measures missed, then the subrecipient must take appropriate corrective action(s) to resolve the outstanding issues in a timely manner. If health and safety issues are found that present an immediate danger to people in the home, the subrecipient must immediately resolve the issues.

If subrecipient noncompliance or repeated unresolved deficiencies (based on a minimum of two (2) monitoring visits at a subrecipient) will be reported to the DOE Project Officer. Sensitive or significant noncompliance deficiencies, such as waste, fraud, or abuse must be reported to DOE immediately by WVDO.

Once the deficiencies are corrected and procedures are put in place to prevent reoccurrence, WVDO will resume the original percentage sampling of that particular subrecipient's work in subsequent monitoring visits.

If repeated monitoring and technical assistance do not correct identified noncompliance issues or if a subrecipient continuously fails to respond to an identified deficiency, WVDO will begin the process of disciplinary action which will include the imposition of additional requirements. Subrecipients will be informed of the nature of additional requirements, the reason why additional requirements are being imposed, the actions needed to remove the additional requirement, and the time allowed for completing the actions, if applicable. Depending on the type of noncompliance issues, actions and additional requirements may include but are not necessarily limited to:

- Withholding disbursement of grant funds until noncompliance issues are corrected
- Disallowing completions that do not meet program standards
- Placing the subrecipient on an "At Risk" status
- Suspending part or all of the program for the subrecipient
- Asking the subrecipient to voluntarily relinquish the program
- Removing part or all of the program from the subrecipient
- Requiring payments as reimbursement rather than advance payments
- Requiring all weatherized dwelling units to be inspected by a third party before being turned in for completions
- Requiring additional, more detailed reporting
- Establishing additional prior approvals

Once the noncompliance issue that caused WVDO to take disciplinary action and impose additional requirements is resolved, WVDO will promptly remove the additional requirements. The subrecipient will be notified of the removal in writing.

If a subrecipient wishes for WVDO to reconsider the imposition of additional requirements, the subrecipient must provide in writing within two (2) weeks of being informed of additional requirements the following:

- Detailed reason why WVDO should reconsider imposing additional requirements
- Evidence that the issue of noncompliance has been satisfactorily resolved
- A plan to prevent similar issues of noncompliance going forward

Within thirty (30) days of receiving the above information from a subrecipient, WVDO will either sustain or remove the additional conditions and disciplinary actions imposed.

### **WAP Grant Award Termination**

If WVDO determines that all remedies for noncompliance and training and technical assistance opportunities have been exhausted in an effort to correct an issue of noncompliance, or definitive waste, fraud, or abuse were uncovered during the course of monitoring, the subrecipient's WAP grant awards will be terminated. WVDO will provide the subrecipient with written notification of termination and cause of termination.

If a subrecipient wishes to contest a termination action, they must provide WVDO with information and documentation showing that the cause of termination had been remedied or conditions as understood by WVDO that caused the termination were not accurate within one (1) week of being informed of the termination action. WVDO will respond in thirty (30) days either sustaining or reversing the termination action.

### **Tracking & Analysis**

The subrecipient monitoring process from notification to final approval and confirmation of corrective actions is tracked by WVDO to final resolution in a "Monitoring Log." WVDO also tracks the most significant deficiencies in a "Root Cause Analysis" spreadsheet to evaluate and analyze trends of the subrecipients' performance. In PY 2016 – 2017, WVDO added the tracking of Strengths, Weaknesses, Best Practices, and Other Needs for more efficient analysis from more information readily available and organized. This process continues to allow for the identification of training and technical assistance needs and is an evaluative tool used to keep both WVDO and the subrecipients on a path of continuous improvement.

### **V.8.4 Training and Technical Assistance Approach and Activities**

Training & Technical Assistance (T&TA) funding is used to pay salary, travel, and operational costs for WVDO staff to provide monitoring/T&TA to subrecipients. Subrecipient expenses for participation in T&TA activities (including special conference attendance) will be funded from DOE T&TA and/or other funds including LIHEAP. T&TA activities are intended to maintain or increase the efficiency, quality, and effectiveness of the WAP at all levels and are designed to

maximize energy savings, minimize production costs, improve program management and field “quality of work,” and/or reduce the potential for waste, fraud, abuse, and mismanagement.

WVDO assesses training needs regularly as part a constant process as the PY progresses. This process and the related training plan are flexible and WVDO incorporates information from the process into the training plan as needed. WVDO assesses T&TA needs of its subrecipients through these avenues:

- WVDO monitoring efforts
- Internal trend analysis
- Training Needs Assessment Surveys
- Prompts in subrecipient grant applications
- Communication with national experts regarding new technologies and/or standards/practices
- Communications with DOE Project Officer
- Guidance as provided by the Department of Energy (DOE) including industry-wide initiatives and future program requirements (certifications, health and safety implementation, etc.)
- Monitoring visits from the DOE Project Officer, DOE contracted representatives, or the Office of Inspector General

## **Overview**

The WV WAP supports subrecipients to seek appropriate trainings pursuant to achieving required certifications and to enhancing their credentials and skill in work practices associated with weatherization work. Trainings and certifications have and will continue to be provided by Interstate Renewable Energy Council (IREC) accredited and certified Weatherization Training Centers (WTCs) within close proximity to West Virginia. There are no IREC WTCs within the State of West Virginia; in several proximal states, there are either IREC-accredited WTCs or IREC-certified individuals who are not attached to WTCs. The WV WAP is prohibited from encouraging subrecipients to choose one (1) vendor among equivalent potential vendors of the State of West Virginia. Therefore, the emphasis in helping subrecipients to plan trainings will be in providing timely notifications of training opportunities offered by a variety of relevant entities; asking subrecipients to choose the providers whom they deem will best meet their training needs; and then helping subrecipients to schedule trainings which meet them.

Training and certification will continue to be offered to the Weatherization Network in PY 2018 – 2019 for recertifications as well as for additional staff. Training priorities have been identified in concert with subrecipients via several mechanisms as bulleted above. In particular, the WV WAP is paying attention to subrecipient needs for HEP QCI recertifications and CEUs as the program enters PY 2018 – 2019. Also, with the upcoming revisions to Energy Auditor (EA) and Quality Control Inspector (QCI) positions , WVDO will encourage and approve all available



trainings for the EA classification. CAZ and Duct Testing (both Tier 2) are some of the trainings planned for gaining CEUs toward QCI.

**Other major areas of focus this Program Year:** In addition to the effort at training, certifying and recertifying QCIs and EAs as described above, there are several other planned areas of focus for training and credentialing subrecipient staffs. Four (4) other areas of first priority include: (1) Providing guidance on the ASHRAE 62.2-2016 ; (2) Keeping up Lead Renovator Certifications and Lead Renovator Refresher Certifications; (3) Providing guidance on the WV WAP Standard Work Specifications (WV WAP SWS) functioning as the West Virginia Weatherization Standards/Field Guide, changes and updates; and (4) Helping subrecipients to establish training and testing dates for HVAC Technician and Electrical licenses pursuant to W. Va. Code 21-16-1, *et seq.*, and W. Va. Legislative Rule 42-34-1, *et seq.*

Three (3) areas of second priority include: (1) Providing ongoing training and recertification of Energy Educators; (2) Providing training in the use of Weatherization Assistant 8.9 for effective NEAT and MHEA analyses; and (3) Connecting subrecipients to HVAC Advanced trainings.

Ongoing training priorities which are regularly needed for the continuance of expert provision of weatherization services, but which at the time of writing are less urgent, fall into two (2) general categories – other Home Energy Professional (HEP) certifications and New Hire/Basic Weatherization trainings. (A) In the first category, in addition to the HEP QCI and EA designations already discussed, the other two HEP certifications conferring industry and DOE recognition of competencies for energy upgrade professionals are (1) HEP Retrofit Installer/Technician, and (2) HEP Crew Leader. Several subrecipients have attended Retrofit Installer/Technician and other subrecipients plan to do so in the upcoming PY 2017 – 2018. Fewer have attended Crew Leader; yet depending on funds availability, the WV WAP will continue to support efforts toward subrecipient staff achieving Crew Leader certification as part of the full suite of four HEP certifications that designate someone as a Home Energy Professional (HEP). (B) In the second general category of ongoing training priorities, trainings in basic building and weatherization techniques include a collection of New Hire Requirements (including online offerings, such as Retrofit Installer Technician and HVAC Fundamentals), various basic weatherization (including online offerings), and Builders Boot Camp.

### **Descriptions:**

#### HEP QCI/HEP EA (Tier 1)

As previously mentioned, WVDO will be offering additional HEP QCI training and certification opportunities as well as HEP EA training and certification as funding allows. WVDO understands that some subrecipients need more than one (1) certified QCI due to size, service territory, and jobs requiring completion, and/or crew make-up.

As of April 1, 2018, all program personnel (Pass-through entity and subrecipient) performing inspections on completed dwelling units were HEP QCI Certified. All twelve (12) subrecipient

weatherization providers had at least one (1) HEP QCI Certified staff, and several had more than one (1). One (1) subrecipient currently is using an out of state certified HEP QCI to ensure that all dwelling units completed are inspected by a certified HEP QCI. This subrecipient does have a staff member currently in training to become HEP QCI certified.

Also, as previously mentioned, WVDO encourages subrecipients to pursue the HEP EA certification even though it is not yet a requirement due to the value of the knowledge and certification given the importance of the position to a strong program. WVDO will also fund opportunities during PY 2017 – 2018 for Pass-through entity and subrecipient staff to retain their current HEP certifications by obtaining Continuing Education Units (CEUs).

#### ASHRAE 62.2-2016 (Tier 2)

Although this is a Tier 2 training, its recent revisions warrant its priority status. Some subrecipients have likewise identified it as a germane topic for updated training. Moreover, in the most recent monitoring visit by a U.S. DOE Field Monitor in PY 2016 – 2017 (November 2016), the Field Monitor determined multiple instances of misunderstandings by clients and subrecipient staff about proper equipment to meet the ASHRAE 62.2-2013 standard; its proper installation; and its proper use. Monitorings for PY 2017 – 2018 showed a continued need for ASHRAE 62.2 2016 training, as several subrecipients received Field Deficiencies even after attending training.

The WV WAP will seek appropriate resources for providing this training to subrecipients, as well as review monitoring reports to determine which subrecipients may need additional targeted assistance in implementing ASHRAE 62.2-2016 standards.

#### Lead Renovator and Lead Renovator Refresher Certifications (Tier 1)

In order to become a certified lead renovator, subrecipient staff must complete training from an EPA-accredited training provider. These trainings were developed to educate professionals in home and other fields about the lead safe work standards contained in U.S.C. 2681 et seq., and 40 CFR 745.80 et. seq., and the EPA 2008 Lead-Based Paint Renovation, Repair and Painting (RRP) Rule (amended in 2010 and 2011).

Recertification is required every five (5) years. Currently, the WV WAP requires that each subrecipient have at least one EPA Lead Renovator certified staff person. All twelve (12) subrecipients have certified lead renovators on staff. Several subrecipients have identified these trainings as priorities for the PY 2018 – 2019.

#### State Weatherization Standards (Tier 1)

The WV WAP Network will be utilizing the DOE approved WV WAP SWS during PY 2018 – 2019. WVDO Field Monitors have continued to update the WV WAP SWS Single Family and Manufactured Home SWSs in preparation for DOE approval prior to January 7, 2019. (WV SWS

Expiration Date) Any additional variances identified will be sought utilizing the proper DOE approval process. The WV WAP will undertake a review and survey of priority work practices in the SWS to be addressed in trainings from which subrecipients could maximally benefit. Also, based on individual subrecipient requests, specific focal areas for WV WAP SWS training; technical assistance; or clarification will be provided as needed.

WVDO will document the verification of receipt and usage of the WV WAP SWS by the subrecipient as required by DOE WPN 15-4, using the subrecipient WAP Grant Agreements.

#### HVAC Technician Certification Class 1(Tier 1):

During the 2015 West Virginia State Legislature, an addition to the existing state requirements for HVAC businesses and technicians was added (W. Va. Code 21-16-1, *et seq.*, and W. Va. Legislative Rule 42-34-1, *et seq.*). As of January 1, 2016, all individuals working on heating systems were required to have a HVAC Technician License from the West Virginia Commissioner of Labor. Individuals in West Virginia who engage in the business of installing, erecting, testing, repairing, servicing or altering heating, ventilating and air conditioning equipment or systems to heat, cool or ventilate residential structures, are required to have an HVAC Technician License when the project exceeds \$1,000.

With this new State requirement, the former administering agency, WVOEO, decided to re-certify the subrecipient HVAC Technicians, using the West Virginia Contractors Licensing Board regulations. Normally, individuals seeking to obtain an HVAC Technician Certification are required to sit for an HVAC exam. However, the West Virginia Contractors Licensing Board grandfathered (or opted out of the exams) those applicants who presented satisfactory evidence of having at least two thousand hours (2,000) of experience and/or training working on HVAC systems and at least six thousand hours (6,000) of experience and/or training in HVAC systems and related work which includes other sheet metal industry tasks. The opting out period expired on July 1, 2016.

Those individuals who do not have the required hours can register as an HVAC Technician in Training. Subrecipients must have a 1:1 ratio of Certified HVAC Technicians to Technicians in Training Class 2. Once a Technician in Training has the required hours, unless she/he is still within the opting out phase, the individual must pass the HVAC exam.

All subrecipients were contacted in September 2015, and had at least one (1) person who could be grandfathered in (or opted out). WVDO coordinated with subrecipients to apply for both HVAC Technician and Technician in Training Licensing with the West Virginia Commissioner of Labor. HVAC certifications are renewed every year through the West Virginia Commissioner of Labor. Since September 30, 2016, it is mandated that HVAC work cannot be performed by subrecipient staff who do not have the proper West Virginia HVAC Technician or Technician in Training certification.

Certification will continue throughout the PY 2018 – 2019 as new HVAC Technicians in Training Class 2 are hired and current ones become eligible to apply for HVAC Technician Class 1. Unfortunately, there is a wait period for available slots for testing seats, which has become problematic for some subrecipients. The WV WAP will continue the conversation with necessary entities to try to reduce the wait time.

### Client Education (Tier 2)

Energy Education of clients is one of the most important weatherization processes to ensure the maximum effectiveness of installed weatherization measures. Each subrecipient has identified at least one (1) Energy Educator, several whose certifications have expired however; various subrecipients have identified Client Education as a priority in PY 2018 – 2019. In 2015, the former administering agency, WVOEO, began an effort to recertify all Energy Educators through online training provided by an IREC-accredited WTC. This effort is continuing. This course is designed to assist the student in acquiring adult education skills to establish an effective means of communication between the Energy Educator and the client. The online Client Education course prepares students to develop a strategy for effective client education from pre-approval to quality assurance. Videos and documents are presented to use with clients to ensure that they get the information they need during the client education process. After each topic is presented, a short self-quiz follows each section and feedback is given. A final test consisting of a single multiple choice-true/false exam is given at the end of the course. For certification, the student must pass this final exam. After passing the certification test, the Energy Educator will work with clients to effect change in poor energy conservation habits.

The Energy Educator utilizes a tabletop easel with energy saving and maintenance tips for weatherization measures. The process is intended to be interactive between the Energy Educator and client. A key element of the process is a "contract" called the Energy Savers Partnership Plan, where the client agrees to do certain actions to conserve energy in their home. WV WAP has also received materials and guidance from utilities partners to improve the client energy education process.

Energy Educator Certification will continue to be on an as needed per person basis. An Energy Educator must renew their certification every five (5) years.

### New Hire Requirements (Tier 2)

WVDO has designed a curriculum of online courses and videos, as a requirement for all new hires at the subrecipient level for the WV WAP. This set of trainings will introduce a new employee to the WV WAP and familiarize them with the program and process. Each new hire will be required to complete all courses during the first six (6) months of employment. These trainings are designed as an introduction to the job of the retrofit installer technician which is the entry level position in the weatherization field, and provide a basic understanding of the WV WAP. These trainings will give students an overview of what is expected of a retrofit

installer technician on the job site, knowledge of the use of the basic tools of weatherization, and an understanding of basic building science.

The following is a listing of courses for a new hire retrofit installer technician:

- “This is the World of Weatherization” - Video
- Retrofit Installer Technician – On-line course
- HVAC Fundamentals – On-line course
- Blower Door Basics: Part 1 – Prep & Setup - WxTV
- Blower Door Basics: Part 2 – The Test Process - WxTV
- Blower Door Basics: Part 3 – The Breakdown - WxTV

These courses will be available all year on an “as needed” basis for current, new subrecipient staff, or additional crew staff to be hired in the upcoming PY 2018 – 2019.

### Healthy Homes Specialist (Tier 2)

It has long been known that there is a connection between health and housing. The DOE Weatherization Plus Health initiative is a national effort to enable the comprehensive, strategic coordination of resources for energy, health, and safety in low-income homes. One (1) subrecipient has continued the Healthy Homes program, and one (1) WVDO staff member has renewed the certification. Healthy Homes Specialists must renew their certification every two (2) years and therefore WVDO will monitor the one (1) subrecipient to ensure certifications are retained by staff, if necessary/requested during this Program Year.

### **Approach**

In PY 2018 – 2019, WVDO is pursuing an “as needed, per person” approach as subrecipients anticipate hiring new staff throughout the year; as current certifications and licenses expire at different times throughout the year; and as subrecipients demonstrate and express different specific deficiencies and needs for improvement. Also, there is less need for certified staff in certain positions as subrecipients are now just fulfilling needs for additional staff, already some having recently received certifications (ex: EA, QCI).

WVDO will make available Tier 1 and Tier 2 trainings to the Weatherization Network during the entire year. Subrecipients have requested more flexibility in scheduling training when needed in order to better accommodate production. Instead of a series of set classes, which sometimes takes crews away from production for longer periods that may burden an organization, subrecipients will have the ability to fit trainings into their respective schedules. WVDO will set time frames for completions of required certifications for subrecipients to continue operating the WV WAP and to ensure that subrecipients plan and meet expectations during the year. WVDO also tracks all required licenses needed by subrecipients to properly perform work within the WV WAP (West Virginia HVAC Electrician License, West Virginia Single Family

Dwelling Electrician License, EPA Section 608 Refrigerant Transition Technician Certification, HVAC Contractor License, etc.) and WVDO will ensure that all subrecipients remain current with all WV WAP required licenses.

Attendance for all Tier 1 and 2 trainings is mandatory for the appropriate program personnel unless extenuating circumstances exist and approval is received from WVDO.

WVDO will continue to use a previously implemented *Subrecipient Training Request and Reimbursement Policy*, which establishes uniform guidelines for internal WVDO documentation and tracking of training; technical assistance; workshops; certifications; and licenses within the WV WAP, as well as the funding or reimbursement process for said trainings, as applicable.

Trainings will be determined through direct discussions between the WV WAP staff and subrecipients, assessment, monitoring, internal analysis and requests from subrecipients. All requests for training from subrecipients will be submitted utilizing the WVDO website (currently still at [www.oeo.wv.gov](http://www.oeo.wv.gov)) by submitting a “Subrecipient Training Request Form.”

Trainings will be presented in various venues and settings including traditional classroom settings, on-site/hands-on opportunities, and online/web based sessions.

Subrecipients are required to submit a list designated by quarters of any anticipated WAP-related T&TA needed to meet standards as part of the 2018 – 2019 Grant Application process. This list will ensure at the beginning of the Program Year that an estimated needs list is captured for the subrecipient for proper planning throughout the year. WVDO has reviewed these planning/needs lists and incorporated them into a “Training Event Status Tracking Log” and a “Training Plans and Funds Snapshot,” for the purpose of forecasting subrecipient training needs and priorities for PY 2018 – 2019. Both are updated weekly and, in conjunction with the original planning lists, provide a sound basis for timely discussions with subrecipients about needs, adjustments, and scheduling relevant trainings. A “Training Tracking Chart” has been developed to track each subrecipient’s staff member in a spreadsheet format.

Expirations of certifications and licenses are primarily tracked during program monitoring of subrecipients and in subrecipient grant applications. Also at any time, in its database management system shared with subrecipients, WV WAP staff can generate a table showing this information for any subrecipient or subrecipient staff member. This chart tracks expiration dates on certifications/licenses, and requests from subrecipients on trainings, certifications/licenses and other information needed to plan for upcoming trainings. This chart is updated on a regular basis, as requests for training, certifications/licenses become due, or findings are documented in monitoring reports, and is compared to the database management system that tracks trainings and certifications as entered by subrecipients.

Requested/planned training during the subrecipient application process must be completed as planned barring extenuating circumstances. The “Training Tracking Chart” is reviewed and WVDO and subrecipients work together to complete the requested trainings in a timely

manner. In this way, certification renewals should not lapse and funds are spent by the end of the Program Year.

### **Training Time Line for PY 2018 – 2019**

As has been the practice for several program years, WVDO will continue to pursue an “as needed, per person” approach as subrecipients anticipate hiring new staff throughout the year, and as current certifications and licenses expire at different times during the year.

WVDO will make available Tier 1 and Tier 2 trainings to the weatherization network during the entire year, utilizing WTCs and other sources. These trainings/certification and renewals are:

- HEP BPI Quality Control Inspector (Tier 1)
- HEP BPI Energy Auditor (Tier 1)
- HEP BPI Retrofit Installer/Technician (Tier 1)
- HEP BPI Crew Leader (Tier 1)
- Initial Lead Renovator Certification (Tier 1)
- Lead Renovator Refresher Recertification (Tier 1)
- EPA section 608 Training (Tier 2)
- ASHRAE 62.2-2016 New Rule (Tier 2)
- NREL/BPI and WV WAP SWS (Tier 1)
- HEP CEUs (Tier 1)
- Healthy Homes Specialist CEUs/Recertification (Tier 2)

While Tier 1 and Tier 2 trainings are available during the PY, there is still a need for benchmarks, assessment, and adjustments, to ensure that subrecipients are receiving the necessary training/certifications to operate a weatherization program. Records of trainings, certifications, and licenses are kept in the data management system and supplemented with the information from the *Training Event Status Tracking Log*. The WV WAP staff intend to make a concerted effort to engage in direct conversations with subrecipients to determine and adjust training needs throughout the Program Year.

During the First Quarter of the Program Year, a combination of funding will be utilized for T&TA. DOE funding will be used; however, LIHEAP funding will also be used for training costs, as approved by West Virginia DHHR, West Virginia’s LIHEAP Grantee. The combination funding will support the trainings listed above and these additional trainings:

### **First Quarter – July 1 through September 30, 2018**

- HEP BPI Quality Control Inspector Recertification (Tier 1)
- HEP BPI QCI CEUs (CAZ, Duct testing) (Tier 2)
- HEP BPI Energy Auditor Certification/ Recertification (Tier 1)
- HEP EA CEUs (i.e., Building Analyst) (Tier 1)

- ASHRAE 62.2-2016 (Tier 2)
- Lead Renovator Certification (Tier 1)
- Lead Renovator Refresher Recertification (Tier 1)
- NREL/BPI and WV WAP SWS (Tier 1)
- HVAC Technician Class 1
- HVAC Technician in Training Class 2
- WV WAP State Plan PY 2018 – 2019 Meeting (Tier 2)
- Weatherization Assistant 8.9 software for NEAT/MHEA (Tier 2)

### **Second Quarter & Third Quarter – October 1 through December 31, 2018 & January 1 through March 31, 2019\***

- Energy Educator (Tier 1)
- HEP BPI Energy Auditor Certification/ Recertification (Tier 1)
- New Hire Requirements (Tier 2)
- Retrofit Installer/Technician (Tier 1)
- West Virginia HVAC Electrician License
- West Virginia Single Family Dwelling Electrician License
- West Virginia Journeyman’s Electrician License
- West Virginia Apprentice Electrician License
- Heating Unit Inspection (Tier 2)
- Respirator Fit testing (Tier 2)
- Healthy Homes Specialist CEUs/Recertification (Tier 2)

\*An assessment of the success of Quarter 1 training, regarding scheduling and implementation efforts will determine the objectives for Quarters 2 & 3.

### **Fourth Quarter – April 1 through June 30, 2019**

The Final Quarter activities will continue with trainings and certifications on an as-needed, per person/subrecipient basis.

### **Credentials/Certifications/Licenses**

WVDO places great emphasis on maintaining workforce credentials for both WVDO and subrecipient staff. Credentials, certifications, licenses, and certificates are all tracked for WVDO and subrecipient staff in the database management system. Credentials, certifications, licenses, and certificates are reviewed and training, continuing education, re-testing, etc., is planned and performed as necessary to ensure WVDO and subrecipient staff maintain all necessary credentials.

WVDO has implemented an internal *Standard Operating Procedure-WV WAP Training Policy* to establish uniform procedures for documentation and tracking of certifications, licenses,



training, technical assistance and workshops within the WV WAP, as well as the funding or reimbursement process for said trainings as applicable.

WVDO Weatherization Specialists must maintain proficiency on new methods and techniques pertinent to the WAP. WVDO Weatherization Specialist staff must maintain levels of knowledge aligned with the Weatherization industry as well as State and National Standards, and are also furnished with all State and Federal regulations as they are updated and released. At this time, two (2) WVDO Weatherization Field Specialists are currently certified as HEP QCIs and BPI Certified with Building Analyst and Envelope Professional certifications as well.

The WV WAP understands the direction that the DOE WAP is moving with regards to the requiring of national certifications. The WV WAP participated in the NREL/BPI Pilot Program that was implemented in partnership with WV WAP and DOE. The WV WAP had workers tested on QCI Certifications as well as EA Certifications. As funding allows, the WV WAP will continue to pursue HEP Certifications for subrecipient workers as the incorporation of DOE WAP curricula, certifications, and standards have been incorporated into HEP Certifications. WVDO feels the partnership between DOE/WAP and NREL/BPI is a great step toward standardization and high quality service delivery in the Weatherization and Energy Efficiency industries.

Due to funding and time constraints, WVDO understands that it will not be possible to get all subrecipient staff HEP-certified for each position in this Program Year. However, as outlined above, WV WAP will incorporate the EA into WV WAP requirements and will add additional HEP certifications in subsequent years. In order to be certified at a particular position in the WV WAP, the person must attend the IREC accredited certification training and be able to pass the written test and field test as applicable.

The following are the current defined WV WAP certifications:

1. HEP EA Certification
2. HEP QCI Certification
3. Energy (Client) Educator Certification
4. Environmental Protection Agency (EPA) Accredited Lead Renovator Certification (and Recertification as applicable)
5. HVAC Technician Certification

The following certifications are under consideration as requirements in the future for the respective weatherization staff positions in addition to the certifications listed above:

1. HEP Retrofit Installer Technician Certification
2. HEP Crew Leader Certification

In addition to the HEP-level certifications and other required certifications, the WV WAP will periodically coordinate licensing testing through the West Virginia Fire Marshal's Office, the

West Virginia Contractors Licensing Board, as well as EPA certification testing venues for the following:

1. West Virginia HVAC Electrician License
2. West Virginia Single Family Dwelling Electrician License
3. West Virginia Journeyman's Electrician License
4. West Virginia Apprentice Electrician License
5. EPA Section 608 Refrigerant Transition Technician Certification
6. HVAC Technician License
7. HVAC Technician in Training License

All weatherization programs must also have a West Virginia Residential Contractors License at the subrecipient level, obtained through the West Virginia Contractors Licensing Board. Special projects are constantly being undertaken to ensure that the WV WAP keeps up with state-of-the-art energy conservation and management techniques. The following are additional Tier 2 trainings that will be offered throughout the year as needed, several having already been discussed earlier as priorities for PY 2018 – 2019, especially with regards to the implementation of the *WV WAP Health and Safety Plan*:

1. ASHRAE 62.2 -2016
2. Combustion Appliance Zone (CAZ) Training
3. Lead Safe Work Practices Training
4. OSHA Confined Spaces in Construction Standard Course
5. Healthy Homes
6. Weatherization Assistant Training
7. Duct Blaster
8. Infrared Camera Training
9. Database Management Training
10. Utility Program Training
11. Administrative/Programmatic/Financial Training
12. WV WAP Policy and Procedure Training

There are certain trainings (Tier 1 and 2) that are mandatory for compliance with rules and regulations in performance of the WAP. Currently, each subrecipient must have a certified QCI inspect all completed units, either in-house or through working with another subrecipient. As DOE mandates, additional certifications, trainings will be made available to the subrecipients for compliance.

If a subrecipient does not have such due to losing an employee or another circumstance, then attending one (1) of those trainings would be mandatory or the functions must be contracted out to a subrecipient with certified staff. There is also a requirement that each subrecipient has a certified EPA Lead Renovator on staff as well as staff who have attended periodic mandatory trainings regarding new requirements with health and safety related measures (ASHRAE/CAZ, etc.) and have electrician's licenses to perform those functions. As noted earlier, after

September 30, 2016, it is required that HVAC work not be performed by subrecipient staff who do not have the proper West Virginia HVAC Technician or Technician in Training certification.

Non-compliance with regards to any mandatory training without the written approval from WVDO due to extenuating circumstances could result in a subrecipient not able to perform certain functions with their staff until the requirements are met.

### **Technical Assistance**

The WV WAP will continue to utilize the traditional approaches of on-site program, administrative, fiscal, and in-field technical assistance based on monitoring findings and/or needs of particular subrecipients. T&TA activities are intended to maintain or increase the efficiency, quality and effectiveness of the WAP at all levels. Activities will be designed to maximize energy savings, minimize production costs, improve program management and crew/contractor “quality of work,” and/or reduce the potential for waste, fraud, abuse and mismanagement.

Technical assistance will continue at this time to be provided by WV WAP Specialists. The WV WAP Specialists also perform subrecipient monitoring, so their familiarity with each subrecipient’s operation enables focused attention to specific technical assistance needs of particular subrecipients. The combination of monitoring report findings, discussions at staff meetings, peer exchanges, subrecipient feedback, and research of state-of-the-art energy conservation techniques all help to determine the focus of the technical assistance.

### **Energy Savings:**

As mentioned in the *State Plan Annual File*, during PY 2015 – 2016, WVDO developed and implemented a system to estimate annual energy savings for all funding sources as per 440.14(c)(4). The process entails utilizing data from the “Weatherization Assistant Recommended Measures Output Report.” Data has been collected, and WVDO can compare the productivity and associated energy savings data from the individual subrecipients and has the capability to analyze by measure. In PY 2017 – 2018, the WV WAP collected a full program year of data and, in PY 2018 – 2019, WVDO will continue to pursue any additional development needed of the database management tool reporting capabilities to be able to utilize the data effectively in the future. This data can contribute to identifying areas of training or technical assistance needed for the work being performed in the field.

### **Pass-through entity Assessment:**

Training needs have been identified and are continuously evaluated. The new Field Monitor will need to complete was hired and will attended trainings and conferences at regional and national levels commensurate to the job duties. Current WV WAP staff have likewise received ongoing relevant training.

In addition to training new hires, another top priority is to attend trainings to keep in compliance with any new DOE regulations or guidance and to assist subrecipients to do the same. After that is met, then trainings are scheduled by the greatest need, i.e., the number of subrecipients that need a particular training. At the same time, WVDO will evaluate how many HEP certifications have been obtained to be in compliance, and how many more could be obtained with available funding. WVDO assesses periodically both the needs of the subrecipients as well as funds that are available to meet those needs and will plan accordingly. WVDO also makes assessments at the end of a grant cycle (DOE or LIHEAP), evaluating the amounts budgeted for training during the previous grant cycle relative to what was provided, and comparing to anticipated training needs and funding available for the new grant cycle.

## **V.9 Energy Crisis and Disaster Response Plan**

### **V.9.1 Energy Crisis**

The WV WAP utilizes LIHEAP WAP funds to operate the Energy Crisis Intervention Program (ECIP). The intent of ECIP is to provide emergency heat during the winter heating season. The program addresses non-operable or severely malfunctioning and unsafe heating systems. Any household that is eligible for WAP is eligible for ECIP services. Any household that receives the emergency heating system repairs or replacements from ECIP must apply for regular WAP services. ECIP provides emergency assistance within 72 hours to ensure the household will have heat. Weatherization services will be provided by the end of the program year, unless conditions exist that deems the dwelling ineligible for weatherization services at that time. During the LIHEAP Weatherization Application and Award process, the subrecipients are provided updated ECIP guidance.

### **V.9.2 Disaster Response Plan**

The WV WAP Disaster Response Plan is addressed in *Section V.1.2 Approach to Determining Building Eligibility (#7)* and is in accordance with DOE WPN 12-7 *Disaster Planning and Relief* and all applicable Federal regulations.



# **West Virginia Weatherization Assistance Program**

**State of West Virginia  
Development Office**

**PART II - ANNUAL FILE**  
**PY 2018 - 2019**



**State of West Virginia  
Development Office**

**U.S. Department of Energy  
Program Year: 2018 - 2019  
State Plan Annual File**

**IV.1 SUBRECIPIENTS**

Due to the amount of information needed, this Section is provided as an attachment.

**IV.2 SELECTION of SUBGRANTEES**

Per 42 U.S.C. § 6864(b)(4) and 10 CHR 440.15, the West Virginia Weatherization Assistance Program (WV WAP) conducts a public hearing during the State Plan process. The public, Community Action Agencies, or other public or nonprofit entities can attend and state their interest in becoming a WV WAP provider. WVDO subrecipients are selected on the basis of public comment which is received during the public hearing. Also considered is the potential applicants' and/or current subrecipient's experience in assisting low-income persons, not only through weatherization, but through all low-income assistance programs offered throughout their service areas. WV WAP applicants/subrecipients must also demonstrate the capacity to operate a timely and effective weatherization program. Preference is given to Community Action Agencies that are currently administering an effective weatherization program under Title II of the Economic Opportunity Act of 1964. WV WAP has chosen its subrecipients from qualifying Community Action Agencies throughout the state. WV WAP considers the subrecipient's experience and performance in weatherization or housing renovation activities.

## **IV.2 WAP PRODUCTION SCHEDULE:**

<b>Average Unit Costs, including Reweatherization – Subject to DOE Program Rules</b>	
<b>VEHICLE &amp; EQUIPMENT AVERAGE COST PER DWELLING UNIT (DOE RULES)</b>	
A. Total Vehicles & Equipment (\$5,000 or more) Budget	\$0
B. Total Units Weatherized	395
C. Total Units Reweatherized	0
D. Total Dwelling Units to be Weatherized and Reweatherized (B+C)	395
E. Average Vehicles & Equipment Acquisition Cost per Unit (A divided by D)	\$0
<b>AVERAGE COST PER DWELLING UNIT (DOE RULES)</b>	
F. Total Funds for Program Operations	\$1,930,864
G. Total Dwelling Units to be Weatherized and Reweatherized (from line D)	395
H. Average Program Operations Costs per Unit (F divided by G)	\$4,888.26
I. Average Vehicles & Equipment Acquisition Cost per Unit (from line E)	\$0
J. Total Average Cost per Dwelling (H plus I)	\$4,888.26

Total Units (excluding reweatherized): **395**

Reweatherized Units: **0**

## **IV.3 ENERGY SAVINGS**

The West Virginia Weatherization Assistance Program (WV WAP) will utilize the WAP algorithm to calculate projected energy savings for the purpose of this application. The estimated energy savings for PY 2018-2019 is 11,574 MBtu.

The West Virginia Office of Economic Opportunity (WVOEO) (now West Virginia Development Office) developed and implemented a system to estimate annual energy savings for all funding sources as per 440.14(c)(4). The process entails utilizing data from the “Weatherization Assistant Recommended Measures Output Report.” In PY 2017 – 2018, the WV WAP was able to collect data to compare/report energy savings data. WVDO will continue to pursue any additional development needed of the database management tool reporting capabilities to utilize the data effectively.

<b>Energy Savings</b>		
<b>DOE Program</b>	<b>Amount</b>	<b>Line</b>
Total DOE State Weatherization Allocation	\$2,977,505	(a)
Total Cost associated with Administration, T&TA, Financial Audits, and Insurance	\$504,498	(b)
Subtract the amount entered in line (b) from line (a), for a total Federal (DOE) funds available to weatherize homes	\$2,473,007	(c)
State Average Cost per Home	\$6,261	(d)
Divide the amount entered on line (c) by the amount entered on line (d), for Total Estimated Homes to be Weatherized	395	(e)
Multiply (e) by 29.3 MBTU for Total Annual Estimated Energy Savings resulting from DOE appropriated funds	11,574	(f)

The PY 2018 – 2019 energy saving calculations uses the most recent Metaevaluation of the National Weatherization Assistance Program (ORNL/CON-493).

#### **IV.4 DOE-Funded Leveraging Activities:**

WV WAP will continue to pursue non-Federal resources to supplement the Program through the development or continuation of leveraging projects and partnerships. The WV WAP expects at least a dollar return for every dollar invested in leveraging project activity. Weatherization leveraging activities in WV WAP since 2002 have consistently and successfully produced a greater number of dollars leveraged than expended every year on leveraging activities.

WVDO will have a staff member that will continue to participate in leveraging activities. For PY 2018 – 2019, WVDO plans to utilize **0.01 percent (\$1,000)** of the annual formula DOE allocation for leveraging activities.

Planned activities may include the following objectives as needed to increase the scope of weatherization services to low-income West Virginia households:

- Continued facilitation in the development of utility/WAP projects and partnerships, including supporting representation activities in the West Virginia Public Service Commission if needed for new partnerships. WVDO staff will continue to be involved in technical assistance, planning, and rules development of any negotiated projects or partnerships. Expansion or altering of certain weatherization-utility partnership activity may be negotiated between the utility companies and the local weatherization providers, with WVDO made fully aware of any changes made in this manner, providing input as needed.



- Continued facilitation of the expansion of potential subrecipient leveraging activities by:
  - Assisting subrecipients and West Virginia Community Action Partnership (WVCAP) through the negotiation of partnerships, agreements, and other arrangements;
  - Presentation of arguments and associated activities before state or local agencies, as contained under Section 142 of the Energy Policy Act of 1992 (amended in 2005) and providing training and technical assistance support to WVCAP and subrecipients as part of their active participation in utility rate proceedings and process in West Virginia as applicable; and
  - Continued contact with both the utility industry and the private energy service company network to continuously improve programs.
  
- Continue to provide support and leadership to subrecipients and WVCAP offering tools and resources to assist in weatherization outreach, possibly including fall Energy Awareness activities. Such potential activities may involve:
  - Support in holding leveraging-related meetings;
  - Preparation of statewide weatherization statistical documents;
  - Preparation of public information/energy efficiency data; and
  - Technical assistance in the organization of weatherization site demonstrations at the local subrecipient level to illustrate program technology for policymakers and other partners.

It is anticipated that continued leveraging activities will enable the WV WAP to enhance and expand comprehensive low-income weatherization services and be viewed as a leader in energy conservation technology and a viable partner in conservation projects.

Listed below are the identified funding sources outside of DOE funding for the WV WAP at this time. However, it is a goal of the WV WAP to continue to pursue funding to support and build upon the weatherization program in the State of West Virginia. This pursuit may include but not be limited to grants, foundation funds, and other non-federal partnerships.

### **Current non-DOE Funding Supporting WV WAP**

**Low-Income Home Energy Assistance Program (LIHEAP):** The WV WAP will continue to utilize Low-Income Home Energy Assistance Program (LIHEAP) funds in the operation of the weatherization program. WVDO has worked with the West Virginia Department of Health and Human Resources (DHHR), the LIHEAP Grantee, to identify allowable measures and costs that could be supported by LIHEAP funding outside of DOE regulations and requirements. As per LIHEAP IM 1999-11, Weatherization Grantees “may use some, all or none of the statutory and regulatory provisions that apply to the Department of Energy’s Low-Income Weatherization Assistance Program when spending LIHEAP funds on weatherization activities, provided the grantee administers both programs.” Therefore, WVDO works with DHHR to construct the LIHEAP agreement to provide more flexibility within the program and the ability to address issues that may not be able to be addressed with DOE funding due to certain restrictions.

Currently, the most notable exceptions of LIHEAP funding are the three (3) Supplemental Components: Electrical Upgrade, Weatherization Related Home Repair, and the Energy Crisis Intervention Program (ECIP) which historically have been approved measures of the Grant Agreement WVDO has with DHHR. DHHR has also approved additional funds for Health and Safety measures through LIHEAP funding. The WVDO monitors subrecipient Health and Safety spending monthly to keep the WV WAP Network from spending excessive funding on Health and Safety related issues.

The WV WAP is again seeking additional LIHEAP funding through DHHR for weatherization services. The WV WAP is proposing that these funds not include all DOE rules and regulations in order to address client issues that are outside the scope of DOE funds. This includes additional Home Repair flexibility in attempts to reduce the deferral rate of the WV WAP by being able to address larger scale repair issues of dwellings to make them eligible to receive weatherization services. Working with DHHR, the WVDO will continue to be diligent to include proper standards for these funds to ensure appropriate quality for measure installation.

### **Utility Programs**

Through participation of rate-case energy advocacy intervention activity at the Public Service Commission of West Virginia, the WVCAP worked and advocated for utility-weatherization leveraging partnership initiatives administered by WVDO. These have been continuing partnerships that have not required additional rate case intervention. The current partnerships are as follows:

**Dominion Hope Gas:** The Dominion Hope Targeted Gas Energy Efficiency Program (TGEEP) is also managed in conjunction with the WAP. The intent of the program is to improve the overall efficiency and safety of the heating system by repair or replacement, thereby reducing the energy consumption of the customers served. Currently no other measures are approved as part of the program. The program typically receives \$100,000 per year from the utility company.

**AEP dba Appalachian Power Company and Wheeling Power Company (APCO):** The APCO low income weatherization program is a comprehensive utility funded residential energy efficiency program that encompasses all the major areas of the DOE WAP (insulation, air sealing, HVAC, baseload reduction, and limited health and safety measures). The program typically provides approximately \$500,000 per year, but the program will most likely receive a significant increase for calendar year 2018 with an allocation just under \$900,000. This program, as well as the other non-WAP energy efficiency programs Appalachian Power Co. operates in WV, is evaluated yearly by a third-party contracted by the utility company.

**FirstEnergy Corporation dba Mon Power Company and Potomac Edison Company:** As of February 25, 2011, Allegheny Energy and its subsidiaries, merged and became part of the FirstEnergy family of companies headquartered in Akron, Ohio. In West Virginia, FirstEnergy will continue to utilize Potomac Edison Company for the service area in the eastern panhandle, and

the Mon Power Company in the north-central service area of the state. The former Allegheny Power programs are now FirstEnergy programs.

- **FirstEnergy EEP:** First Energy Electric Efficiency Partnership: The FirstEnergy Electric Efficiency Partnership is a very basic utility program that was started over 10 years ago in WV. The program focuses on measures that will impact the consumption of electricity in the homes of WAP clients that are electric customers of First Energy Corporation in West Virginia. The program reimburses for costs of electric heating systems up to \$500, 50% of costs of electric water heaters, 50% of air sealing and insulation costs, and 100% of cost of various baseload measures. Typically, this partnership receives \$100,000 per year.
- **TrAILCo EEP+:** The Trans-Allegheny Interstate Line Company (TrAILCo) Electric Efficiency Partnership provide funds to the two West Virginia WAP Community Action Agency (CAA) subrecipients serving FirstEnergy customers in the six-county area through which the TrAILCo corridor passes. The program operates to supplement the DOE WAP funds to provide customers a more comprehensive and aggressive focus on baseload energy usage and energy efficiency measures than is defined and permitted by the DOE WAP. The TrAILCo program further invests in long range lowering of utility costs by allowing the installation of Energy Star appliances such as washing machines, air conditioners, water heaters and other appliances that have the potential to reduce energy costs for the household. The program also allows the replacement of high cost, low-efficiency heating systems with high-efficiency systems including Energy Star heat pumps. The TrAILCo program also allows for the installation of standard weatherization measures to better serve a greater number of clients more effectively and efficiently and stretch the federal weatherization dollars further. This program's original budget was \$500,000 per year for 5 years, split between the two CAAs. The program is no longer receiving funds from FirstEnergy, but is still in operation due to carry-over funds from previous years.
- **LICUAP:** FirstEnergy Corporation has also developed and approved a Low-Income Check-Up Audit Program (LICUAP) allowing the WAP subrecipients to perform "walk-thru" audits for low-income customers and address some basic baseload needs, as a complement to the WAP (CFLs, power strips, LED nightlight, showerhead/faucet aerator, pipe wrap, furnace whistle, refrigerators, freezers, window air conditioners) in addition to energy education. This program was implemented in May 2012 and continues today. This program differs from the others as the funds are not administered by WVDO; it is a contract between the utility company, its contracted entities, and the CAAs. WVDO plays a supporting and technical assistance role in the partnership. The first five years of the program had a budget of almost \$2,758,919. The approval for future years is pending but is anticipated to be similar or increased. This program is also evaluated by a third-party contractor of the utility company.

#### **IV.5 Policy Advisory Council:**

The Policy Advisory Council (PAC) historically meets at least once a year with periodic updates sent to members if major changes occur. A PAC meeting is scheduled during the WV WAP State

Plan process to solicit input from the PAC Committee on the development of the program for PY 2018 – 2019.

Policy Advisory Council Members:

<b>NAME</b>	<b>ORGANIZATION</b>	<b>CONTACT INFORMATION</b>	<b>REPRESENTING</b>
Steve Gilman	PRIDE Community Services Inc.	<a href="mailto:steve.gilman@loganpride.com">steve.gilman@loganpride.com</a>	WV WAP Network
Ann McDaniel	WV Statewide Independent Living Council	<a href="mailto:ann.meadows@wvsilc.org">ann.meadows@wvsilc.org</a>	Disabled West Virginians
Gaylene Miller	Senior State Director, AARP	<a href="mailto:gmliller@aarp.org">gmliller@aarp.org</a>	Elderly
Mary Chipps	Executive Director, WV Community Action Partnership	<a href="mailto:mchipps@suddenlinkmail.com">mchipps@suddenlinkmail.com</a>	Community Action Agencies
Jacqueline Roberts	Public Service Commission; Consumer Advocate Division	<a href="mailto:jroberts@cad.state.wv.us">jroberts@cad.state.wv.us</a>	Consumers in West Virginia
Tammy Stafford	EE & Consumer Programs Manager, Appalachian Power	<a href="mailto:tcstafford@aep.com">tcstafford@aep.com</a>	Utility Sector

The WVDO was able to fill the Utility Sector vacancy in PY 2017 – 2018. The WV WAP PAC has excellent representation in areas relevant to eligible applicants, energy efficiency/leveraging activities, and subgrantee execution of weatherization services. WVDO and the PAC are always open and considering if the addition of further representatives would be beneficial to the PAC.

The PAC works to advise state weatherization staff on issues, challenges, and future direction of the program. The council is composed of members of associations and organizations serving the citizens of West Virginia. PAC members, by their leadership roles in the larger community, bring added value from an outside perspective to the program. The committee can also be an advocate for the general public about the Weatherization Assistance Program, low-income energy needs, and energy efficiency. The PAC will advise WV WAP staff on policy based on their knowledge, perspective, and sensitivity to their particular constituency.

During the PAC meeting on March 15, 2018, members had a chance to provide input for the PY 2018 – 2019 State Plan as well as discuss challenges of the upcoming year. The Agenda, Sign-In Sheet, and Meeting Notes are submitted as an attachment to this plan.

#### **IV.6 State Plan Hearings:**

An announcement of the Public Hearing was posted for three (3) consecutive days, at least ten (10) days prior to the Public Hearing in eight (8) major newspapers throughout the state. The

Public Hearing was announced April 5, 2018, and WVDO held the Public Hearing on April 23, 2018. The following newspapers advertised the hearing:

- Bluefield Daily Telegraph
- Charleston Newspapers
- Dominion Post (Morgantown)
- The Herald Dispatch (Huntington)
- Parkersburg News and Sentinel
- Register-Herald (Beckley)
- The Journal (Martinsburg)
- Wheeling Newspaper, Inc.

The “Public Hearing Notice” that appeared in the newspapers is included as an attachment. WVDO also attached evidence that each newspaper published the announcement as back-up documentation.

A court reporter was retained to provide a transcript of the Public Hearing and WVDO will provide the written transcript upon receipt.

#### **IV.7 Miscellaneous:**

##### **“Recipient Business Officer”**

*Name:* Russell Tarry – Deputy Director, Community Advancement and Development

*Email:* [Russell.W.Tarry@wv.gov](mailto:Russell.W.Tarry@wv.gov)

*Phone:* 304 – 558 – 2234 ext. 52061

##### **“Recipient Principal Investigator”**

*Name:* Mark Adams – Weatherization Manger

*Email:* [Mark.A.Adams@wv.gov](mailto:Mark.A.Adams@wv.gov)

*Phone:* 304 – 558 – 2234 ext. 52007



# **West Virginia Weatherization Assistance Program**

**State of West Virginia  
Development Office**

## **PART III - BUDGET PY 2018 - 2019**



**BUDGET INFORMATION - Non-Construction Programs**

1. Program/Project Identification No. EE0007958		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address West Virginia Development Office 1900 Kanawha Blvd., East Charleston, WV 253050000		4. Program/Project Start Date 07/01/2017	5. Completion Date 06/30/2018

**SECTION A - BUDGET SUMMARY**

Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. PY2018-19 DOE Annual Grant	81.042	\$ 0.00		\$ 2,977,505.00		\$ 2,977,505.00
2.						
3.						
4.						
5. TOTAL		\$ 0.00	\$ 0.00	\$ 2,977,505.00	\$ 0.00	\$ 2,977,505.00

**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) GRANTEE ADMINISTR ATION	(2) SUBGRANTE E ADMINISTR	(3) GRANTEE T&TA	(4) PROGRAM OPERATION S	
a. Personnel	\$ 70,491.00	\$ 0.00	\$ 100,382.00	\$ 0.00	\$ 171,873.00
b. Fringe Benefits	\$ 30,262.00	\$ 0.00	\$ 38,086.00	\$ 0.00	\$ 68,748.00
c. Travel	\$ 8,966.00	\$ 0.00	\$ 16,185.00	\$ 0.00	\$ 25,151.00
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
e. Supplies	\$ 2,700.00	\$ 0.00	\$ 2,562.00	\$ 0.00	\$ 5,262.00
f. Contract	\$ 0.00	\$ 164,919.00	\$ 150,865.00	\$ 1,942,523.00	\$ 2,623,872.00
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other Direct Costs	\$ 20,413.00	\$ 0.00	\$ 62,186.00	\$ 0.00	\$ 82,599.00
i. Total Direct Charges	\$ 132,832.00	\$ 164,919.00	\$ 370,266.00	\$ 1,942,523.00	\$ 2,977,505.00
j. Indirect Costs	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
k. Totals	\$ 132,832.00	\$ 164,919.00	\$ 370,266.00	\$ 1,942,523.00	\$ 2,977,505.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00



**BUDGET INFORMATION - Non-Construction Programs**

1. Program/Project Identification No. EE0007958		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address West Virginia Development Office 1900 Kanawha Blvd., East Charleston, WV 253050000		4. Program/Project Start Date 07/01/2017	5. Completion Date 06/30/2018

SECTION A - BUDGET SUMMARY						
Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						
2.						
3.						
4.						
5. TOTAL		\$ 0.00	\$ 0.00	\$ 2,977,505.00	\$ 0.00	\$ 2,977,505.00

SECTION B - BUDGET CATEGORIES					
6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) HEALTH AND SAFETY	(2) LIABILITY INSURANCE	(3) FINANCIAL AUDITS	(4) LEVERAGIN G	
a. Personnel	\$ 0.00	\$ 0.00	\$ 0.00	\$ 1,000.00	\$ 171,873.00
b. Fringe Benefits	\$ 0.00	\$ 0.00	\$ 0.00	\$ 400.00	\$ 68,748.00
c. Travel	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 25,151.00
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
e. Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 5,262.00
f. Contract	\$ 291,376.00	\$ 49,459.00	\$ 24,730.00	\$ 0.00	\$ 2,623,872.00
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other Direct Costs	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 82,599.00
i. Total Direct Charges	\$ 291,376.00	\$ 49,459.00	\$ 24,730.00	\$ 1,400.00	\$ 2,977,505.00
j. Indirect Costs	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
k. Totals	\$ 291,376.00	\$ 49,459.00	\$ 24,730.00	\$ 1,400.00	\$ 2,977,505.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00



# U.S. DEPARTMENT OF ENERGY



## BUDGET JUSTIFICATION FOR FORMULA GRANTS

Applicant: West Virginia Development Office  
Award number: EE0007958

Budget period: 07/01/2017 - 06/30/2018

1. **PERSONNEL** - Prime Applicant only (all other participant costs are listed in 6 below and form SF-242A, Section B. Line 6.f. Contracts and Sub-Grants).

Positions to be supported under the proposed award and brief description of the duties of professionals:

Position	Description of Duties of Professionals
WVDO Accountant II	Payment and tracking of agency funding request and other bills
WVDO Accounting Tech	Support for accounting staff
WVDO Administrative Secretary	General secretarial duties for agency/management
WVDO Accounting Auditor IV	Oversee fiscal operations at WVDO
Deputy Director	Assist with direction and management of the Development Office
Program Specialist/Field Monitor	Monitoring and T&TA
Program Specialist/Field Monitor	Monitoring and T&TA
Program Specialist/Field Monitor	Monitoring and T&TA
Weatherization Manager	Administer, manage, and coordinate WV Weatherization Assistance Program
Weatherization Assistant Administrator	Assist in management and administration of WAP, includes some monitoring
Weatherization Training Specialist	Manage/oversee training and technical assistance activities
Fiscal Monitor	Perform fiscal monitorings
Monitoring Coordinator/Compliance	Oversee all monitoring activities - Ensure compliance with Federal and State Regulations
WVDO Accountant II	Payment and tracking of agency funding request and other bills
Sustainability Manager	Oversees duties of Sustainability Division staff.
Deputy Director	Manages utility partnerships

Direct Personnel Compensation:

Position	Salary/Rate	Time	Direct Pay
WVDO Accountant II	\$42,672.00	20.0002 % FT	\$8,534.49
WVDO Accounting Tech	\$36,492.00	15.0022 % FT	\$5,474.60
WVDO Administrative Secretary	\$33,444.00	10.0003 % FT	\$3,344.50
WVDO Accounting Auditor IV	\$56,664.00	15.0008 % FT	\$8,500.05
Deputy Director	\$61,482.00	2.0001 % FT	\$1,229.70
Program Specialist/Field Monitor	\$42,160.00	50.0002 % FT	\$21,080.08
Program Specialist/Field Monitor	\$35,006.00	50.0002 % FT	\$17,503.07
Program Specialist/Field Monitor	\$53,016.00	50.0001 % FT	\$26,508.05
Weatherization Manager	\$54,160.00	50.0001 % FT	\$27,080.05
Weatherization Assistant Administrator	\$47,796.00	40.0002 % FT	\$19,118.50
Weatherization Training Specialist	\$49,812.00	25.0002 % FT	\$12,453.10
Fiscal Monitor	\$47,796.00	10.0002 % FT	\$4,779.70
Monitoring Coordinator/Compliance	\$51,660.00	10.0002 % FT	\$5,166.10
WVDO Accountant II	\$34,160.00	10.0002 % FT	\$3,416.07
Sustainability Manager	\$66,848.00	10.0001 % FT	\$6,684.87
Deputy Director	\$61,482.00	1.6266 % FT	\$1,000.07
		Direct Pay Total	\$171,873.00

**2. FRINGE BENEFITS**

- a. Are the fringe cost rates approved by a Federal Agency? If so, identify the agency and date of latest rate agreement or audit below, and attach a copy of the rate agreement to the application.

- b. If a. above does not apply, please use this box (or an attachment) to further explain how your total fringe benefits costs were calculated. Your calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total). If there is an established computation methodology approved for state-wide use, please provide a copy. Also, please fill out the table below with the Fringe Benefits Calculations.

The basis for computation of rates for fringe benefits of State employees includes federal and state regulations, personnel policies, and past experience. Fringe benefits to be paid from this grant include:

Social Security match - FICA @ 7.65% of the gross salary as per federal regulation

Workers compensation - calculated at .64% of gross salary

Unemployment compensation - calculated at 1.21% of gross salary

Health insurance - depends on salary, type of coverage (single or family), optional life, and choice of plan, as per personnel policies and state options - calculated at 16% of gross salary

State Retirement fund - calculated at 14.5% of gross salary

We are using 40% for budgeting purposes in this grant year, based on average fringe benefit costs from the previous grant year.

**Fringe Benefits Calculations**

<b>Position</b>	<b>Direct Pay</b>	<b>Rate</b>	<b>Benefits</b>
WVDO Accountant II	\$8,534.49	39.9992 %	\$3,413.73
WVDO Accounting Tech	\$5,474.60	39.9987 %	\$2,189.77
WVDO Administrative Secretary	\$3,344.50	39.9979 %	\$1,337.73
WVDO Accounting Auditor IV	\$8,500.05	39.9991 %	\$3,399.94
Deputy Director	\$1,229.70	39.9941 %	\$491.81
Program Specialist/Field Monitor	\$21,080.08	39.9996 %	\$8,431.95
Program Specialist/Field Monitor	\$17,503.07	39.9996 %	\$7,001.16
Program Specialist/Field Monitor	\$26,508.05	39.9997 %	\$10,603.14
Weatherization Manager	\$27,080.05	39.9997 %	\$10,831.94
Weatherization Assistant Administrator	\$19,118.50	39.9996 %	\$7,647.32
Weatherization Training Specialist	\$12,453.10	39.9994 %	\$4,981.17
Fiscal Monitor	\$4,779.70	39.9984 %	\$1,911.80
Monitoring Coordinator/Compliance	\$5,166.10	39.9985 %	\$2,066.36
WVDO Accountant II	\$3,416.07	39.9979 %	\$1,366.36
Sustainability Manager	\$6,684.87	39.9989 %	\$2,673.87
Deputy Director	\$1,000.07	39.9926 %	\$399.95
Fringe Benefits Total			\$68,748.00

**3. TRAVEL**

- a. Please provide the purpose of travel, such as professional conference(s), DOE sponsored meeting(s), project management meeting, etc. If there is any foreign travel, please identify.

<b>Purpose of Trip</b>	<b>Number of Trips</b>	<b>Cost Per Trip</b>	<b>Total</b>
Return Field Monitoring Trips for Follow Up compliance Total Cost: \$3,100 DOE Cost 50% = \$1,550 (All TTA)	10	\$155.00	\$1,550.00
WVDO staff travel for Field/Technical Meetings/Roundtables \$2,400 x 50% (DOE cost) = \$1,200 (All TTA)	4	\$300.00	\$1,200.00
WAP Programmatic Monitoring Total Cost: \$13,892 DOE 50% = \$6,946 Admin: \$5,086 TTA: \$1,860	10	\$694.60	\$6,946.00

WAP Field Monitoring Total Cost: \$13,050 (\$450 per trip) DOE cost 50% = \$6,525 (\$225 per trip)	29	\$225.00	\$6,525.00
Fall & Mid-Winter NASCSP Conference Total Cost: \$12,000 DOE Total Cost: \$6,000 (Admin: \$2,400 TTA: \$3,600)	6	\$1,000.00	\$6,000.00
WAP Fiscal Monitoring Total Cost: \$2,460 All Admin DOE cost 50% = \$1,230	12	\$102.50	\$1,230.00
WVDO staff travel for Training for Certifications \$2,400 x 50% (DOE cost) = \$1,200 All TTA	4	\$300.00	\$1,200.00
WVDO staff travel for WV WAP Programmatic/Administrative Meeting \$1,000 x 50% (DOE cost) = \$500 (Admin: \$250 TTA: \$250)	2	\$250.00	\$500.00
		Travel Total	\$25,151.00

- b. Please provide the basis for estimating the costs, such as past trips, current quotations, Federal Travel Regulations, etc. All listed travel must be necessary for the performance of the award objectives.

Most travel estimates are based on State Travel Policy (per West Virginia Code §12-3-11 effective 7/1/2015 <http://www.state.wv.us/admin/purchase/travel/policy.html>) and past trips of a similar nature.

**4. EQUIPMENT** - Equipment is generally defined as an item with an acquisition cost greater than \$5,000 and a useful life expectancy of more than one year.

- a. List all proposed equipment below and briefly justify its need as it applies to the objectives of the award.

Equipment	Unit Cost	Number	Total Cost	Justification of Need
-----------	-----------	--------	------------	-----------------------

- b. Please provide a basis of cost such as vendor quotes, catalog prices, prior invoices, etc. and justify need. If the Equipment is being proposed as Cost Share and was previously acquired, please provide the source and value of its contribution to the project and logical support for the estimated value shown. If it is new equipment which will retain a useful life upon completion of the project, provide logical support for the estimated value shown. Also, please indicate whether the Equipment is being used for other projects or is 100% dedicated to the DOE project.

**5. SUPPLIES** - Supplies are generally defined as an item with an acquisition cost of \$5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance.

- a. List all proposed supplies below, the estimated cost, and briefly justify the need for the supplies as they apply to the objectives of the award. Note that all direct costs, including Supply items, may not be duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

General Category	Cost	Justification of Need
Computer Purchase/Upgrade	\$1,362.00	Total Cost: \$2,724 (50% DOE) TTA funds
Computer Purchase Admin	\$1,500.00	Total cost \$3,000 (DOE 50%)
General Office Supplies, DOE Share	\$2,400.00	Office supplies for daily use in operating program-paper, ink, pens, clips, binders, tape, etc. Total 12 month cost: \$4,800.00 (DOE 50%) Admin: \$1,200.00 TTA: \$1,200.36
Materials and Supplies Total	\$5,262.00	

- b. Please provide a basis of cost for each item listed above and justify need. Examples include vendor quotes, prior purchases of similar or like items, published price list, etc.

Costs are based on previous year's costs.

**6. CONTRACTS AND SUBGRANTS** - Provide the following information for New proposed subrecipients and subcontractors. For ongoing subcontractors and subrecipients, this information does not have to be restated here, if it is provided elsewhere in the application; under Name of Proposed Sub, indicate purpose of work and where additional information can be found (i.e. weatherization subgrants, Annual File section IV.1).



Name of Proposed Sub	Total Cost	Basis of Cost*
Training Centers/Trainers Costs for Subrecipients - All TBD	\$126,865.00	All costs are estimates - All trainings will go through bidding process Total DOE cost: \$126,865. Additional cost picked up with other funding sources DOE Costs - ALL TTA: HVAC: \$8,290 BPI QCI: \$16,700 BPI EA: \$28,452 OSHA: \$3,293 New Hire/Basic WX: \$225 WV State Electrical licenses: \$2,367 ASHRAE: \$25,900 Lead Safe: \$750 CAZ: \$2,160 Infrared Camera: \$16,000 HEP Crew Leader: \$5,250 CEUs (HEP, Healthy Homes): \$17,478
DBA FACS Pro	\$24,000.00	WAP database management system Total WAP cost: \$56,000 DOE upgrade cost: \$4,000 TTA DOE System Maintenance Fee: \$20,000 TTA
WV WAP Subgrantees	\$2,473,007.00	To provide funds to twelve (12) Community Action Agencies to operate Weatherization Assistance Programs throughout fifty-five (55) counties in West Virginia.
Contracts and Subgrants Total	\$2,623,872.00	

\*For example, Competitive, Historical, Quote, Catalog

**7. OTHER DIRECT COSTS** - Other direct costs are direct cost items required for the project which do not fit clearly into other categories. These direct costs may not be duplicative of costs included in the indirect pool that is the basis of the indirect rate applied for this project. Examples are: conference fees, subscription costs, printing costs, etc.

a. Please provide a General Description, Cost and Justification of Need.

General Description	Cost	Justification of Need
Subrecipient Round Table/Meetings	\$9,000.00	Total WAP expenses \$28,000; DOE cost 32%
T&TA Support for Sub-grantee Travel for Trainings & Certifications	\$27,431.00	Sub-grantee Travel Costs Only Total WAP Cost: \$47,232 DOE: \$27,431 (58%) TOTAL WAP Cost: BPI QCI: \$6,975 (DOE 50%: \$3,487) BPI EA: \$14,725 (DOE 50%: \$7,362) ASHRAE: \$12,400 (DOE 50%: \$6,200) EPA 608: \$4,185 (DOE 50%: \$2,093) Lead Safe Training & Healthy Homes CEUs: \$1,318 (DOE 50%: \$659) CAZ: \$4,220 (DOE 100%) OSHA: \$1,085 (DOE 100%) BPI Crew Leader: \$2,325 (DOE 100%)
Vehicle Fuel	\$3,600.00	WX Cost: \$7,200 DOE 50%: \$3,600 All TTA
Postage	\$100.00	Total WX cost: \$200 DOE 50%: \$100 All Admin
Field Equipment Maintenance and Repair	\$500.00	Total WX cost: \$1,000 DOE 50%: \$500 All TTA
Computer Networking	\$13,682.00	Computer Networking cost, IT costs, Website costs Costs based on actual expenses Total WX cost: \$27,364 Doe 50%: \$13,682 Admin: \$7,996 TTA: \$5,686
Miscellaneous Costs	\$450.00	Miscellaneous items such as bottled water for office water coolers, cell phone/tablet accessories, etc. Total: \$900 DOE: \$450 Admin: \$200 TTA: \$250
NASCSP Yearly Membership Fees	\$2,632.00	Association Dues Total Cost: \$2,632 DOE Cost: \$2,632 All Admin
Advertising and Transcript for Public Hearing	\$1,900.00	Total cost: \$1,900 All Admin
Telecommunications	\$6,250.00	Desk phones, cell phones, and conference calls WX share: \$12,500 DOE 50% = \$6,250 Admin: \$2,350 TTA: \$3,900
Vehicle Maintenance/Repairs	\$4,000.00	WX share: \$8,000 DOE 50%: \$4,000 All TTA
Commerce Marketing Fees	\$330.00	Total cost: \$660 DOE 50% All Admin
WVDO Insurance	\$5,185.00	WX Share = \$10,370 DOE 50% = \$5,185 Admin: \$2,305 TTA: \$2,880

Associations and Professional Memberships	\$562.00	Total cost \$1,125 DOE 50% = \$562 All TTA Total WAP Cost: \$1,125 HVAC Contractor License: \$300 HVAC Electrical License: \$150 Single Family Electrical: \$150 EPA Section 608: \$525
Office Space	\$6,977.00	WX: \$6,977 (WVDO main office, Parkersburg office, Princeton office) DOE cost \$13,954 x 50% = \$6,977 Admin: \$2,600 TTA: \$4,377
Other Direct Costs Total	\$82,599.00	

- b. Please provide a basis of cost for each item listed above. Examples include vendor quotes, prior purchases of similar or like items, published price list, etc.

Rental and dues costs are based on agreements. Other costs are estimates based on prior similar expenditures or recent estimates

All costs included in Other Direct Costs are properly segregated from indirect costs to ensure there are not duplicate charges.

All costs proposed are only being used in support of the WAP program.

#### 8. INDIRECT COSTS

- a. Are the indirect cost rates approved by a Federal agency? If so, identify the agency and date of latest rate agreement or audit and provide a copy of the rate agreement.
- b. If the above does not apply, indicate the basis for computation of rates, including the types of benefits to be provided, the rate(s) used, and the cost base for each rate. You may provide the information below or provide the calculations separately.

The name and phone number of the individual responsible for negotiating the State's indirect cost rates.

Name:

Phone Number:

**WEST VIRGINIA**  
**WEATHERIZATION ASSISTANCE PROGRAM**

**2018 – 2019 STATE PLAN**

**ATTACHMENTS**

**WEATHERIZATION ASSISTANCE PROGRAM  
SUBGRANTEE INFORMATION**

Expiration Date: 02/29/2020

State: WV Grant Number: EE0007958 Program Year: 2018

Name:	<b>CHANGE, Incorporated</b>	Contact:	David Ruhl, Weatherization Coordinator
		DUNS:	131200057
Address:	3136 West Street Weirton, WV 26062-4637	Phone:	(304) 797-7733
		Fax:	(304) 797-7740
		Email:	davidruhl@changeinc.org
Counties served:	BROOKE County OHIO County HANCOCK County MARSHALL County	Tentative allocation:	\$ 144,821.00
		Planned units:	23
		Type of organization:	Local agency
		Source of labor:	Agency and Contractors
		Congressional districts served:	CD WV-01
Name:	<b>Coalfield CAP</b>	Contact:	Jason Johnson, Weatherization Coordinator
		DUNS:	003845596
Address:	P.O. Box 1406 Williamson, WV 25661-3215	Phone:	(304) 235-1701
		Fax:	(304) 235-1706
		Email:	jjohnson@coalfieldcap.org
Counties served:	MINGO County KANAWHA County CLAY County BOONE County	Tentative allocation:	\$ 287,901.00
		Planned units:	46
		Type of organization:	Local agency
		Source of labor:	Agency
		Congressional districts served:	CD WV-03 WV-02
Name:	<b>Community Action of South Eastern West Virginia</b>	Contact:	Kimberly Bourne, Weatherization Coordinator
		DUNS:	627389364
Address:	355 Bluefield Avenue Bluefield, WV 24701-3044	Phone:	(304) 324-0450
		Fax:	(304) 372-8822
		Email:	kbourne@casewv.org
Counties served:	RALEIGH County MERCER County SUMMERS County MONROE County	Tentative allocation:	\$ 240,050.00
		Planned units:	38
		Type of organization:	Local agency
		Source of labor:	Agency and Contractors
		Congressional districts served:	CD WV-03
Name:	<b>Community Resources, Incorporated</b>	Contact:	Vicki Randolph, Weatherization Director
		DUNS:	784204240
Address:	1037 Market Street Parkersburg, WV 26101-0000	Phone:	(304) 485-9238
		Fax:	(304) 485-5526
		Email:	vrandolph@cricap.org

DOE F 540.5

U.S. Department of Energy

OMB Control No: 1910-5127

(08/05)

**WEATHERIZATION ASSISTANCE PROGRAM  
SUBGRANTEE INFORMATION**

Expiration Date: 02/29/2020

State: WV Grant Number: EE0007958 Program Year: 2018

Counties served:	CALHOUN County RITCHIE County WOOD County WIRT County WETZEL County GILMER County PLEASANTS County JACKSON County TYLER County DODDRIDGE County ROANE County	Tentative allocation: \$ 305,992.00 Planned units: 49 Type of organization: Local agency	Congressional districts served:	CD WV-01 WV-02
Source of labor: Agency				

Name:	Council of the Southern Mountains		Contact:	Curtis Lindsey, Weatherization Coordinator	
			DUNS:	084598598	
Address:	148 McDowell Street Welch, WV 24801-0000		Phone:	(304) 436-6800	
			Fax:	(304) 436-6803	
			Email:	clindsey@citlink.net	
Counties served:	MCDOWELL County	Tentative allocation:	\$ 56,975.00	Congressional districts served:	CD
		Planned units:	9		WV-03
		Type of organization:	Local agency		
		Source of labor:	Agency and Contractors		

Name:	Eastern West Virginia Community Action Agency		Contact:	Joe Adkins, Weatherization Coordinator	
			DUNS:	804530087	
Address:	228 Clay Street Moorefield, WV 26836		Phone:	(304) 538-7711	
			Fax:	(304) 538-7478	
			Email:	jdadkins@ewvcaa.org	
Counties served:	GRANT County	Tentative allocation:	\$ 253,856.00	Congressional	CD
	MINERAL County	Planned units:	40	districts served:	WV-01
	BERKELEY County	Type of organization:	Local agency		WV-02
	PENDLETON County				
	MORGAN County				
	HAMPSHIRE County				
	JEFFERSON County				
	HARDY County				
		Source of labor:	Agency and Contractors		

Name:	<b>Mountain CAP of West Virginia, Incorporated</b>	Contact:	Lance Cragle, Weatherization Coordinator
		DUNS:	014529630
Address:	26 North Kanawha Street Buckhannon, WV 26201-2714	Phone:	(304) 472-1500
		Fax:	(304) 472-9064
		Email:	lcragle@mountaincap.com



**WEATHERIZATION ASSISTANCE PROGRAM  
SUBGRANTEE INFORMATION**

Expiration Date: 02/29/2020

State: WV Grant Number: EE0007958 Program Year: 2018

Counties served:	LEWIS County WEBSTER County BRAXTON County UPSHUR County	Tentative allocation: \$ 122,919.00 Planned units: 19 Type of organization: Local agency Source of labor: Agency	Congressional districts served:	CD WV-02 WV-03
Name:	<b>MountainHeart Community Services</b>	Contact: Gerald Brown, Weatherization Coordinator DUNS: 155399363 Address: P.O. Box 1509 Oceana, WV 24870-1519 Phone: (304) 682-8271 Fax: (304) 682-8274 Email: gbrown@mountainheartwv.org		
Counties served:	WYOMING County FAYETTE County	Tentative allocation: \$ 111,016.00 Planned units: 17 Type of organization: Local agency Source of labor: Agency	Congressional districts served:	CD WV-03
Name:	<b>Nicholas Community Action Partnership</b>	Contact: Cindy Foster, Weatherization Coordinator DUNS: 169582368 Address: 1205 Broad Street Summersville, WV 26651-1205 Phone: (304) 872-1162 Fax: (304) 872-5796 Email: cfoster@ncapwv.org		
Counties served:	NICHOLAS County	Tentative allocation: \$ 48,166.00 Planned units: 7 Type of organization: Local agency Source of labor: Agency and Contractors	Congressional districts served:	CD WV-03
Name:	<b>North Central West Virginia Community Action Assoc., Inc.</b>	Contact: Brian Hollen, Weatherization Coordinator DUNS: 108900317 Address: 1304 Goose Run Road Fairmont, WV 26554-1345 Phone: (304) 457-3420 Fax: (304) 457-1367 Email: bhollen@ncwvcaa.org		
Counties served:	PRESTON County HARRISON County TAYLOR County MARION County POCAHONTAS County MONONGALIA County TUCKER County GREENBRIER County BARBOUR County RANDOLPH County	Tentative allocation: \$ 523,107.00 Planned units: 87 Type of organization: Non-profit organization Source of labor: Agency	Congressional districts served:	CD WV-01 WV-03 WV-02

**WEATHERIZATION ASSISTANCE PROGRAM  
SUBGRANTEE INFORMATION**

Expiration Date: 02/29/2020

State: WV Grant Number: EE0007958 Program Year: 2018

Name:	<b>PRIDE Community Services</b>	Contact:	Steve Gilman, Weatherization Coordinator
		DUNS:	085529840
Address:	PO Box 1346 Logan, WV 25601-0000	Phone:	(304) 752-6868
		Fax:	(304) 752-1047
		Email:	steve.gilman@loganpride.com
Counties served:	LOGAN County	Tentative allocation:	\$ 63,879.00
		Planned units:	10
		Type of organization:	Local agency
		Source of labor:	Agency
		Congressional districts served:	CD WV-03
Name:	<b>Southwestern Community Action Council</b>	Contact:	Connie Sherrill-Drake, Weatherization Coordinator
		DUNS:	063472088
Address:	540 Fifth Avenue Huntington, WV 25701-1908	Phone:	(304) 525-5151
		Fax:	(304) 525-5162
		Email:	connie.sherrill-drake@scacwv.org
Counties served:	MASON County LINCOLN County WAYNE County CABELL County PUTNAM County	Tentative allocation:	\$ 314,325.00
		Planned units:	50
		Type of organization:	Local agency
		Source of labor:	Agency and Contractors
		Congressional districts served:	CD WV-03 WV-02

## **WV WAP HEALTH AND SAFETY PLAN**

### **1.0 – GENERAL INFORMATION**

The primary goal for the WV WAP is to implement cost-effective weatherization procedures to conserve energy and to assess and correct related health and safety hazards for the well-being of clients, their dwellings, and weatherization personnel.

With more advanced diagnostics and installation techniques utilized in the WV WAP, it is increasingly necessary to take steps to ensure that program measures do not cause or exacerbate health and safety problems for workers or clients.

Each home weatherized must be individually assessed to determine the existence of potential hazards to weatherization personnel or clients. When conditions within the home are such that the health and safety of the client, crew, or subcontractor will be jeopardized prior to providing assistance, weatherization must not proceed until such problems are remedied. In some cases, mitigation of problems may be beyond the scope of the Weatherization program. In these instances, the client must be notified in writing and referred to alternative resources for resolution of the problem.

In those instances where the existing conditions are perceived to pose a threat to the client, crew or contractor's health and safety, the WV WAP allows for deferral of weatherization work until the identified condition is made acceptable. The WV WAP Deferral Policy is described in *Section V.1.2 Approach to Determining Building Eligibility*.

### **2.0 – BUDGETING**

The WV WAP will budget Health and Safety in a separate category and thereby exclude such costs from the average unit cost calculations. This separate category will also allow these costs to be isolated from energy efficiency costs in program evaluation.

### **3.0 – HEALTH AND SAFETY EXPENDITURE LIMITS**

For the 2018 – 2019 Program Year, the West Virginia WAP would request to utilize up to **15 percent (15%)** of our 2018 – 2019 Program Operation funds for Health and Safety Expenditures. WV WAP uses its data management system to implement a limit on Health and Safety costs charged to DOE on a per job basis. Any Health and Safety costs over 15 percent (15%) will be charged to Low-Income Home Energy Assistance Program (LIHEAP) funding, as approved from the West Virginia Department of Health and Human Resources (DHHR), the LIHEAP Grantee.

Health and Safety costs are recorded in the data management system and tracked separately at the subrecipient level for accounting purposes, as well as in the Weatherization Assistant auditing software and reported as a separate line item on the WV WAP “Monthly Progress Report.” A list of materials that are allowable charges to Health and Safety has been developed

and distributed. (See *WV WAP Materials Chart Attachment*). Subrecipients cannot add additional materials to this list. In this way, WVDO can monitor the Health and Safety costs on each job. The Health and Safety costs reported on the WV WAP “Monthly Progress Report” are reviewed monthly and WVDO works with the subrecipients to bring them into or remain in compliance. WVDO also tracks the Health and Safety costs in the statistical analysis tool and other various spreadsheets as discussed in *Section V.6 Weatherization Analysis of Effectiveness*.

WVDO has worked with the utility companies and scopes of work have been adjusted so that the WV WAP can use certain utility funding to cover particular Health and Safety costs (specified in the Scopes of Work/Program Designs of the utility program), to lessen the burden on the DOE funds. At this time, not all utility partnerships allow for Health and Safety costs in their programs, but WVDO will continue to pursue this option in the future.

#### **4.0 – INCIDENTAL REPAIR MEASURES**

Incidental Repairs means those repairs necessary for the effective performance or preservation of weatherization materials. Such repairs include, but are not limited to, minor roof repair, framing or repairing windows and doors which could not otherwise be caulked or weather-stripped, and providing protective materials, such as paint, used to seal materials installed under this program. Incidental repairs must be justified in the client file with an explanation for their need and relationship to a specific energy conservation measure (ECM) and included in the Savings-to-Investment Ratio (SIR) of the group of ECMs. The WV WAP has developed a spreadsheet identifying allowable measures to be installed under Health and Safety and allowable measures to be installed as incidental repairs. (See *WV WAP Materials Chart Attachment*)

#### **5.0 – DEFERRAL/REFERRAL POLICY**

The WV WAP developed and implemented a WV WAP *Deferral Policy* on August 21, 2012, to assist in the decision to defer weatherization assistance on an eligible dwelling in attempt to standardize the procedure throughout West Virginia. As per the policy, a deferral does not mean that weatherization assistance will never be available, but that work must be postponed until the problems at the home can be resolved. Subrecipient crews and contractors are expected to pursue all reasonable options on behalf of the client, within program guidelines. After an on-site visit has been conducted, if conditions warrant and the subrecipient determines that the home meets one (1) or more of the following deferral conditions, a letter must be sent to the client outlining the conditions present at the dwelling and the justification for deferral. The reason for deferral must be selected and documented in the database management system and the database management system automatically generates the deferral letter with the proper justification to be submitted to the client.

Possible deferral conditions include but may not be limited to the following:

- a. Structurally unsound dwelling that is not suitable and adaptable to weatherization services, and the WAP does not have the resources to do necessary repairs;

- b. Electrical or plumbing hazards that cannot be resolved prior to or as part of weatherization services;
- c. The presence of raw sewage around or in any part of the dwelling;
- d. The presence of a dead animal, or animal feces, in an area where program staff must install weatherization measures;
- e. Excessive debris and clutter around the dwelling that limits access to the dwelling;
- f. Pets unchained or running loose that would be distracting or unsafe to program staff;
- g. The client is uncooperative, abusive, or threatening to the crew, or there is an apparent threat of violence or abuse to any program worker, or any household member, during the weatherization process;
- h. The presence or use of any controlled substance in the dwelling during the weatherization process;
- i. Environmental hazards, such as serious moisture problem, known excessive radon, friable asbestos, excessive lead paint, or other environmental hazards that cannot be resolved prior to or as part of the weatherization services;
- j. Evidence of substantial infestation of rodents, insects, bats, or other harmful/objectionable animals that are difficult to control;
- k. Major remodeling is in progress, limiting the proper installation of weatherization measures;
- l. Substantial standing water in or around the crawl space or basement area limiting the proper completion of weatherization measures;
- m. Dwelling resident has a medical condition that prohibits the installation of insulation and/or other weatherization measures;
- n. No cost-effective or appropriate health and safety measures can be done to the house resulting in minimal energy savings;
- o. Customer in arrears with utility vendor, gas service has been shut off, or electric service has been shut off;
- p. Client refusal of primary energy conservation measure ( $SIR \geq 2$ );
- q. Client refusal of health and safety measure(s) necessary for client safety;
- r. Income verification needed;
- s. Updated utility information needed; and
- t. Other conditions not listed above that prohibit complete weatherization.

There are several steps detailed in the WV WAP *Deferral Policy* outlining the subrecipient and/or client's responsibilities after the aforementioned deferral letter is generated in order to possibly complete weatherization for a client that was originally deferred. These steps involve allowing the client to correct the identified issues or barriers to weatherization and providing the subrecipient with documentation that issues have been addressed. There is also a procedure in place in the event that issues are not addressed or no response is received from the client. Once reasons for deferral are resolved, the application is re-activated within the data management system. Depending on the timing of the correction of deferral issues, eligibility criteria including income verification and prioritization status may need refreshed.

The WV WAP Deferral Policy outlines the timing parameters in more detail. All applicable steps must be followed and all required documentation retained.

## **6.0 – HAZARD IDENTIFICATION AND NOTIFICATION FORM(S)**

WVDO is developing this form to be presented to DOE at the final submission of the PY 2018 State Plan.

## **7.0 – HEALTH AND SAFETY CATEGORIES**

WVDO is updating Health and Safety Categories to present to DOE at the final submission of the PY 2018 State Plan.

### **7.1 – AIR CONDITIONING AND HEATING SYSTEMS**

**Air Conditioning** - Research indicates that of all people who die of heat stroke, about 80 percent (80%) are age 50 or older. Deaths attributed to lung disease, diabetes and hypertension increase more than 50 percent (50%) during heat waves. Heat stroke occurs 12 to 13 times more frequently in people age 65 and older than in younger persons. It is also an accepted medical fact that infants and children up to 4 years of age are very sensitive to the effects of high temperatures and rely on others to regulate their environment.

Considering preventable deaths may illuminate the need for allowing air conditioning measures. While there are no statistics devoted specifically to that category in West Virginia, the next two (2) paragraphs are devoted to understanding the health risks in our state that relate to the statements above.

According to the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics, in 2015 there were 1,628 deaths in West Virginia due to Chronic Lower Respiratory Disease. 1,079 West Virginians died from stroke, and 784 people in West Virginia died from diabetes. The CDC reports that in 2014, 12.0 percent (12.0%) of adult West Virginians were diagnosed with non-pregnancy related diabetes.

While hypertension is the most prevalent cause of stroke and kidney failure, hypertension must be recognized as part of a bigger disease conglomerate almost always accompanied by obesity, diabetes, kidney disease or many other co-existing problems involving lifestyle and/or genetics. The West Virginia Department of Health & Human Resources Division of Health Promotion and Chronic Disease 2013 report shows over 40 percent (40%) of West Virginia adults have been told by a health care professional that they have hypertension which

was ranked second highest nationally at that time. The same report goes on to state that more than 40 percent (40%) who had their cholesterol checked were told they had high cholesterol. This is of 78.7% that had the cholesterol checked in the past five years (50.76%), which puts them at greater risk for developing heart disease and stroke.

Air conditioning is the number one (1) protective factor against heat-related illness and death effecting people with health issues such as those stated above. **Therefore, air conditioning system replacement, repair or installation is allowed to be categorized as Health and Safety in homes with occupants under 4 years old, over 65 years old and/or where there are “at-risk” occupants.** Air conditioning system replacement, repair or installation must be attempted through cost justification as an ECM first before using Health and Safety funding. Where this measure can be justified by the approved NEAT/MHEA audit, replacement, repair or installation is not to be included in Health and Safety. New replacement units must be ENERGY STAR rated and have an efficiency rating of at least:

- Central AC or Heat Pump Cooling Efficiency = 13 SEER
- Heat Pump Heating Efficiency = 7.7 HSPF
- Window and wall mount air conditioners = 10 EER

**Heating Systems** - Heating system repair, replacement, or installation is allowed of red-tagged, inoperable, or nonexistent heating systems where climate conditions warrant. Repair and replacement of inoperable or unsafe combustion appliances is allowed, including the installation of direct vent-sealed combustion appliances. Direct vent-sealed combustion appliances may be installed to resolve Combustion Appliance Zone (CAZ) problems. Repair and cleaning must be considered before replacement. Correction of venting is allowed when testing indicates a problem.

## **7.2 - ASBESTOS – ALL**

### **7.2A – ASBESTOS - IN SIDING, WALLS, CEILINGS, ETC.**

Removal of siding is allowed when performing energy conservation measures. All precautions must be taken to not damage siding. Asbestos siding should never be cut or drilled. It is recommended where possible to insulate through home interior. The client will be informed that suspected asbestos siding is present and what precautions will be taken.

### **7.2B – ASBESTOS - IN VERMICULITE**

When vermiculite insulation is found in an attic, unless testing proves otherwise, take precautionary measures as if the vermiculite contains asbestos. Encapsulation by an appropriately trained asbestos control professional is

allowed. Removal is not permitted. Blower door testing should be done with pressurization rather than depressurization.

Assess whether vermiculite is present. Asbestos Hazard Emergency Response Act of 1986 (AHERA) certified prescriptive sampling is allowed by a certified tester.

Clients should be instructed not to disturb suspected asbestos containing material.

#### **7.2c – ASBESTOS - ON PIPES, FURNACES, OTHER SMALL COVERED SURFACES**

Subrecipients will assume asbestos is present in covering materials.

Encapsulation is allowed by an AHERA asbestos control professional and should be conducted prior to blower door testing. Removal may be allowed by an AHERA asbestos control professional on a case-by-case basis. AHERA testing is allowed by a certified tester. Clients should be instructed not to disturb suspected asbestos containing material.

### **7.5 – BIOLOGICALS AND UNSANITARY CONDITIONS**

The detection and remediation of mold, odors, viruses, bacteria, unsanitary conditions, and rotting wood is often beyond the scope of the Weatherization Assistance Program and may be a reason for deferral. Since workers often encounter these conditions, they try to remedy the situation if possible and take precaution to not exacerbate any potential problem. Factors such as cleaning agents, paints and turpentine, gasoline, sewage, animal waste, and excessive dust can sometimes be addressed to allow weatherization work to occur. Auditors will inform the client of observed conditions.

### **7.6 – BUILDING STRUCTURE AND ROOFING**

WV WAP crews often encounter homes in poor structural condition. In some cases, WAP services must be deferred until the dwelling is made safe and able to weatherize. When possible, subrecipients can coordinate their efforts with other programs to enable and enhance services. Homes with conditions that require more than incidental repair should be deferred unless repairs can be made with non-DOE funds.

The auditor will perform a visual inspection to ensure that access to areas necessary for weatherization are safe for entry and performance of assessment, work, and inspection. The client will be notified of structurally compromised areas.

### **7.7 – CODE COMPLIANCE**

The correction of pre-existing code compliance issues is not an allowable cost other than where weatherization measures are being conducted.



As per DOE WPN 11-06:

“Correction of pre-existing code compliance issues is not an allowable cost other than where weatherization measures are being conducted. State and local (or jurisdiction having authority) codes must be followed while installing weatherization measures. Condemned properties and properties where “red tagged” Health and Safety conditions exist that cannot be corrected under this guidance should be deferred.” Testing required: “Visual inspection. Local code enforcement inspections”, the subrecipient personnel should also “Inform client of observed code compliance issues” according to the guidance.

## **7.8 – COMBUSTION GASES**

Proper venting to the outside for combustion appliances, including gas dryers is required. Correction of venting is allowed when testing indicates a problem.

Subrecipients will be required to conduct combustion safety testing when combustion appliances are present. The subrecipient must also upload pre and post draft/combustion tapes to the client file in DBA FACS Pro.

Subrecipients will conduct inspection and testing of Combustion Appliance Zones (CAZ) and confirm adequate clearances and test naturally drafting appliances for draft and spillage under worst case conditions before and after air tightening and inspect gas cooking appliances for safe operability.

Subrecipients will provide the client with combustion Safety and Hazards information, including the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit the production of Carbon Monoxide (CO).

- **Appliances and Water Heaters** - Poorly functioning water heaters that may pose a health concern may be replaced on a case-by-case basis. Installation of one (1) water heater per dwelling is allowed. Repair, replacement and installation of moisture control appliances, such as dehumidifiers, condensate pumps and sump pumps are allowable on a case-by-case basis. Documentation must be maintained to justify replacement of water heaters and moisture control appliances. Replacement and installation of other appliances for health and safety reasons is not allowed. Repair and cleaning for other appliances is allowed.

## **7.9 – ELECTRICAL**

**Electrical - Other than Knob-and Tube Wiring** - Minor electrical repairs are allowed where health and safety of the occupant is at risk. Upgrades and repairs are allowed when necessary to perform specific weatherization measures.

Auditors will perform a visual inspection. Voltage drop and voltage detection testing are allowed.

**Electrical – Knob-and Tube Wiring** - Minor upgrades and repairs necessary for weatherization measures and where the health or safety of the occupant is at risk are allowed.

Where live knob-and-tube wiring exists, the following conditions must be met in order to install attic insulation:

- Wiring insulation must be intact and complete with no exposed areas and connections.
- S-type fuses that match the size of the wiring must be installed if they do not already exist. Any modification of the electrical panel must have prior written permission from the client. The subrecipient may wish to contract with a licensed electrician where questionable safety conditions exist.
- When installing cellulose or fiberglass, there must be a minimum of 1" clearance from the wiring. Precaution must be taken to prevent the possible drifting of the product, which could result in contact with the wiring.

The presence of knob-and-tube wiring, overloaded circuits, live bare wires, asbestos siding, or untreatable moisture in the wall cavities will be allowable reasons for not insulating exterior walls. If the problems can be corrected within reasonable means, the walls may be insulated.

#### **7.10 – FORMALDEHYDE, VOLATILE ORGANIC COMPOUNDS (VOCs), FLAMMABLE LIQUIDS, AND OTHER AIR POLLUTANTS**

Crew awareness of potential problems with formaldehyde and volatile organic compounds is important when addressing air sealing. Crews are instructed to remove any VOCs when possible and to give client education regarding the potential dangers. If removal cannot be performed or is not allowed by the client, the unit must be deferred.

#### **7.11 – FUEL LEAKS**

*IN DEVELOPMENT STAGE*

#### **7.12 – GAS OVENS / STOVETOPS / RANGES**

*IN DEVELOPMENT STAGE*

#### **7.13 – HAZARDOUS MATERIALS DISPOSAL**

**[LEAD, REFRIGERANT, ASBESTOS, MERCURY (INCLUDING CFLs/FLUORESCENTS), ETC.]**

***IN DEVELOPMENT STAGE***

**7.14 – INJURY PREVENTION OF OCCUPANTS AND WEATHERIZATION WORKERS**

Minor repairs may be done when weatherizing a home in order to prevent injury to weatherization workers and to occupants. These repairs may only be done to the extent of ensuring safety.

**7.15 – LEAD BASED PAINT**

Subrecipients or contractors will follow EPA's Lead; Renovation, Repair and Painting Program (RRP) which includes becoming a certified lead renovation firm. In addition to RRP, weatherization requires all weatherization crews working in pre-1978 housing to be trained in Lead Safe Weatherization (LSW). Deferral is required when the extent and condition of lead-based paint in the house would potentially create further Health and Safety hazards.

Testing is allowed. Job site setup and cleaning verification is required by a Certified Renovator.

Each subrecipient or contractor must give notification to the occupants of homes to be weatherized regarding the potential hazards of lead paint and lead paint dust if the home was built prior to 1978. The EPA's publication "Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools" must be given to an adult occupant of the affected home prior to beginning weatherization. For occupied homes, the weatherization staff, crew, or contractor must have an adult tenant or homeowner sign an acknowledgement after receiving the pamphlet. As an alternative to delivery in person, the subrecipient or contractor may mail the lead hazard information pamphlet to the owner and/or tenant. The pamphlet must be mailed at least seven (7) days before renovation. Mailing must be documented by a certificate of mailing from the post office.

WVDO developed and implemented a *Lead Safe Work Policy* on July 27, 2012, including standardized forms and processes to supplement information available from DOE and the EPA (This policy was amended August 16, 2013). The policy provides additional information and guidance on LSW, proper practices, and documentation requirements.

LSW includes weatherization worker protection, general LSW practice standards, and lead dust containment standards.

1. Level 1 Containment.

- a. Level 1 containment is required in pre-1978 homes when less than 6'2" of interior painted surface per room or 20'2" of exterior painted surface will be disturbed.
  - b. Level 1 containment consists of methods that prevent dust generation and contains all debris generated during the work process. The containment establishes the work area which must be kept secure.
  - c. Measures that may fall within this guideline include:
    - i. Installing or replacing a thermostat
    - ii. Drilling and patching test holes
    - iii. Replacing HEPA filters and cleaning HEPA vacuums
    - iv. Changing furnace filter(s)
    - v. Removing caulk or window putty (interior)
    - vi. Removing caulk or window putty (exterior)
    - vii. Removing weather-stripping
2. Level 2 Containment.
- a. Level 2 containment is required when weatherization activities will disturb more than 6'2" of interior surface per room or 20'2" of exterior surfaces in homes built prior to 1978. Level 2 containment consists of methods that define a work area that will not allow any dust or debris from the work area to spread. Level 2 containment requires the covering of all horizontal surfaces, constructing barrier walls, sealing doorways, covering HVAC registers with approved materials, and closing windows to prevent the spread of dust and debris.
  - b. Measures requiring Level 2 containment may include:
    - i. Drilling holes in interior walls
    - ii. Drilling holes in exterior walls, removing painted siding
    - iii. Cutting attic access into ceiling or knee walls
    - iv. Plane a door in place
    - v. Replacing door jambs and thresholds
    - vi. Replacing windows or doors
    - vii. Furnace replacements
  - c. Additionally, Level 2 containment must ALWAYS be used where any of the following is conducted (even if the activities will disturb less than the hazard levels within the Level 1 category):
    - i. Window replacement
    - ii. Demolition of painted surface areas
    - iii. Using any of the following: Open-flame burning or torching; machines to remove paint through high-speed operation without

HEPA exhaust control; or operating a heat gun at temperatures at or above 1,100 degrees Fahrenheit.

**Note:** The use of a drill, reciprocating saw, or other power tool is considered a “machine” for removing paint. Examples include: Cutting a hatch inside the dwelling or interior drilling of holes for the installation of insulation require Level 2 containment.

3. There must be adequate documentation in the client file to demonstrate that LSW measures were performed when necessary. Documentation should include photos of the site and containment set up, as well as a listing of materials used and measures taken. Quality Control Inspector must also certify that LSW procedures were used and properly implemented.
4. WV WAP will adhere to EPA lead safe rules as written in the *Lead; Renovation, Repair, and Painting Program Final Rule* (LRRPP Final Rule), as directed by DOE.
5. Weatherization of HUD program housing stock, including HUD Section 8, is infrequent in West Virginia. These units will only be weatherized if the owner provides a “Certificate of Lead-Based Paint Compliance” (copy must be in client file) that documents abatement or control of any lead paint hazard has been addressed and will agree that the local subrecipient will not be liable for any lead hazards, provided the safe work practices generally outlined above are employed.
6. In cases where the subrecipient cannot safely weatherize a home due to lead paint hazards, the subrecipient may defer the work. Such deferral will be considered by WVDO on a case-by-case basis. Subrecipients may not weatherize dwellings where there are cases of documented or suspected lead poisoning. Additionally, subrecipients will not weatherize homes where there is an extraordinary lead paint hazard with no means to abate the hazard, including insufficient funds or insufficient training to properly address the hazard.

#### **7.16 – MOLD AND MOISTURE**

The Weatherization Assistance Program is not a mold remediation program. The use of DOE funds for the removal of mold and other related biological substances is not an allowable weatherization expense. Mold testing is not an allowable cost. If necessary, Weatherization Assistance Program services may need to be deferred until the existing mold problem can be corrected or referred to another program for funding of remedial action.

All homes will be inspected for previous and existing moisture problems using the WV WAP “Mold and Moisture Assessment Findings Form” to document existing mold and moisture related problems in homes.

Moisture, mold, and mildew can seriously affect the health and safety of the client and crew. Steps must be taken to alleviate moisture problems. The WV WAP will ensure that regular weatherization work is performed in a manner that does not contribute to the increase of any mold problems, and when the work is performed properly, can alleviate many mold conditions.

- **Drainage** - Auditors will conduct a visual inspection. Major drainage issues are beyond the scope of the Weatherization Assistance Program. Homes with conditions that may create a serious health concern that require more than simple repair should be deferred.

#### **7.17 – PESTS**

- Pest removal is cause for deferral unless other funds are available, or the cost is considered when running NEAT or MHEA. Screening of windows and points of access is allowed to prevent pest intrusion.
- Auditors will assess the presence and degree of infestation and risk to workers.
- Auditors will inform clients of the observed condition and associated risks.

#### **7.18 – RADON**

- Provide the client with EPA’s consumer guide to radon.
- Whenever conditions permit, exposed dirt must be covered with a vapor permeable ground cover.
- In dwellings where radon may be present, precautions should be taken to reduce the likeliness of making radon concentrations higher.
- Radon testing is an allowable DOE expense in locations with high radon potential.
- Radon abatement is not an allowable activity with DOE funds; major radon problems are deferred and referred to the appropriate local environmental agency.

#### **7.19 – SAFETY DEVICES: SMOKE AND CARBON MONOXIDE ALARMS, FIRE EXTINGUISHERS**

If smoke alarms are inoperable or non-existent, at least one (1) alarm must be installed in each weatherized dwelling on each floor. Follow the manufacturer’s recommendations for locating and installing the alarm(s). If existing hard-wired smoke alarms are inoperable or broken, they must be replaced with comparable units. Replacement of operative smoke alarms is not an allowable expense. Typically, alarms are installed where the clients spend the most time, such as near bedrooms.

An approved CO alarm will be installed in all homes where functional CO detector/warning equipment does not already exist. CO detectors will comply with UL 2075. Single-station CO alarms will comply with UL 2034 and will be installed in accordance with local code and the manufacturer's installation instructions. If an entire multi-family building is to receive weatherization services, a CO alarm should be installed in each unit of the complex.

Providing fire extinguishers is allowable only when solid fuel is present. Subrecipient will provide the client with verbal and written information on use of smoke/CO detectors and fire extinguishers where allowed.

#### **7.20 – OCCUPANT HEALTH AND SAFETY CONCERNS AND CONDITIONS**

WV WAP subrecipients are required to take all reasonable precautions against performing work on dwellings that will subject clients to health and safety risks. Before beginning work on the dwelling, the subrecipient must take into consideration the health concerns of each occupant, the condition of the dwelling, and the possible effect of work to be performed on any particular health or medical condition of the occupants. When a person's health is fragile and/or the work activities would constitute a health or safety hazard, the occupants at risk will be required to leave the home during these work activities.

When a person's health may be at risk and/or the work activities could constitute a health or safety hazard, the occupant at risk will be required to take appropriate action as previously identified, based on severity of risk. Temporary relocation of at-risk occupants may be allowed on a case by case basis. Failure or the inability to take appropriate actions must result in deferral.

##### **Procedure for Identifying Occupant Health Concerns**

- When a person's health may be at risk and/or the work activities could constitute a Health and Safety hazard, the occupant at risk will be required to take appropriate action based on the severity of the risk.
- The at-risk occupant should reveal they have known or suspected health concerns during the initial application for weatherization services.
- The at-risk occupant should be provided with known risks of the weatherization process.
- Subrecipient contact information should be provided to the occupant so that the occupant can easily provide information about health issues or concerns.
- Failure or the inability to take appropriate actions must result in deferral of the weatherization work.

**Documentation for identifying occupant health concerns will include:**

- Client's name and address;
- Dates of the audit/assessment and when the client was informed of a potential; health and safety issue;
- Clear description of the problem;
- Statement indicating if, or when weatherization could continue; and
- Client(s) signature(s) indicating that they understand and have been informed of their rights and options.

#### **7.21 – VENTILATION AND INDOOR AIR QUALITY**

A complete review of the current version of ASHRAE minimum ventilation standards was completed including effective methods for full compliance to ASHRAE 62.2-2016. Training will occur throughout the Program Year.

Weatherization trained personnel will calculate the ventilation requirements for each home utilizing the current ASHRAE spreadsheet or Residential Energy Dynamics (RED) online tool to ensure adequate indoor air quality. Continuous and/or intermittent ventilation fans will be installed based upon spreadsheet calculations. The ASHRAE 62.2-2016 standard was released in 2016 and implemented by the WV WAP for Program Year 2017 – 2018. WVDO weatherization specialist field/technical monitors will monitor to this standard for PY 2017 – 2018.

For homes that require added ventilation, subrecipients must implement a ventilation strategy that meets the requirements of the current ASHRAE standards. Subrecipients are required to evaluate any pre-existing mold and moisture conditions, potential spot ventilation needs and pre and post fan flow rates. If whole-house ventilation requirements are **less than or equal to 15 CFM**, then additional ventilation is not required. If the Energy Auditor's pre-site evaluation determines that due to existing conditions the threshold ventilation is warranted, it will be allowed.

If the whole-house minimum ventilation requirement is **greater than 15 CFM**, a system supplying the design ventilation airflow must be installed. The subrecipient Quality Control Inspector will verify that fan flow rates have been met based on design requirements.

Implementing ASHRAE 62.2 will not be required where acceptable indoor air quality already exists. Existing ventilation systems will not be updated if found to be adequate and in good operating condition.

Subrecipients will provide clients with information on function, use, and maintenance of ventilation systems and components. Subrecipients will provide a disclaimer that current ASHRAE 62.2 does not account for high polluting sources or guarantee indoor air quality.



### **7.22 – WINDOW AND DOOR REPLACEMENT, WINDOW GUARDS**

Replacement, repair or installation of windows or doors is not an allowable Health and Safety cost but may be allowed as an efficiency measure if justified by the NEAT or MHEA audit. If window and door replacement, repair or installation is limited in scope such as less than three (3) windows and only one (1) door. The measures may be included as infiltration reduction (NEAT) and general air sealing (MEHA) as long as the SIR is greater than one (1) for the measure.

### **7.23 – WORKER SAFETY (OSHA, ETC.)**

Weatherization personnel must follow applicable OSHA standards and Safety Data Sheets (SDS) and take precautions to ensure the health and safety of themselves and other personnel. SDS must be posted wherever workers may be exposed to hazardous materials.

Subrecipients must perform assessments to determine if crews are practicing and utilizing safe work practices and that all workers receive training specific to hazards that the worker can reasonably expect to encounter on a particular job site.

- Subrecipients are also required to have bi-monthly safety meetings.
- All auditors, crews, and contractors must use and understand the importance of Personal Protection Equipment (PPE).
- OSHA 10 training for all current weatherization personnel. OSHA 30 for all crew leaders is not required but considered a best practice.
- Confined spaces – such as crawl spaces and attics – are not designed for continuous occupancy and are difficult to exit in the event of an emergency. People working in confined spaces face life-threatening hazards including toxic substances, electrocutions, explosions, and asphyxiation. See 29 CFR 1926, Subpart AA from OSHA for details in addressing confined spaces. The subrecipient is required to have a written plan in place regarding confined spaces which is available upon request.

### **7.24 – <ADD IN TOPIC>**

#### **REMEDIATION PROTOCOLS**

##### ***IN DEVELOPMENT STAGE***

#### **TESTING PROTOCOLS**

##### ***IN DEVELOPMENT STAGE***

#### **CLIENT EDUCATION**

As mentioned in *Section V.8.4 Training and Technical Assistance Approach and Activities*, Energy Education is one of the most important weatherization processes to ensure the maximum effectiveness of the weatherization measures and each subrecipient has at least one (1) certified Energy Educator. The Energy Education process, educational materials used, and forms utilized (described in *Section V.8.4*) will encompass all weatherization measures installed,

including any Health and Safety related information or issues identified/ corrected, or those that could be encountered if the integrity of measures is altered, measures are removed, made not to function or damaged, or proper maintenance is not performed as instructed. WVDO has added an additional client file document requirement that has a client sign-off that includes (but is not limited to) whether client education took place and all education/maintenance information necessary was communicated. This form supplements current client education documents which also includes client and subrecipient sign-offs.

#### **TRAINING**

**THIS IS COVERED UNDER SECTION V.8.4 TRAINING AND TECHNICAL ASSISTANCE APPROACH AND ACTIVITIES IN THE MASTER FILE SECTION.**

## **PY 2018 – 2019 WV WEATHERIZATION ASSISTANCE PROGRAM**

### **State Plan**

**PUBLIC HEARING NOTICE:** Availability of a federal grant plan for public review for the proposed use and distribution of funds. The purpose is to receive comment on the proposed use of funds for 2018. The grant reviewed will be the Department of Energy (US DOE) Weatherization Assistance Program. A public hearing will be held on Thursday, April 23, 2018, at 10:00 AM, at 1900 Kanawha Blvd., East, Capitol Complex, Building 3, Conference Room 8C. All written comments must be received before 5:00 PM, on April 23, 2018. Copies of the plan are available April 5, 2018, by accessing the following website: [www.wvcad.org/sustainability/weatherization-assistance-program](http://www.wvcad.org/sustainability/weatherization-assistance-program) or by writing: WV Development Office, 1900 Kanawha Blvd., East, Capitol Complex, Building 3, Suite 700, Charleston, WV, 25305. Limited copies will be available at the hearing. The public comment period will begin on April 5, 2018, and conclude on April 23, 2018. Anyone may submit written comments regarding the proposed use of these funds to Weatherization Manager, WVDO, 1900 Kanawha Blvd., East, Capitol Complex, Building 3, Suite 700, Charleston, WV 25305.

**West Virginia**  
**Weatherization Assistance Program**

**Policy Advisory Council Meeting**

March 15, 2018

WV Development Office

Charleston, WV

**AGENDA**

- Updates for the Policy Advisory Council:
  - DOE Monitoring of WV WAP – November 2017
  - Weatherization Tract @ WVCAP Conference – April
- Updates – Department of Energy
  - Resignation of David Rinebolt – Weatherization Assistant Program Manager
  - Release of WPN 18-1 Weatherization Grant Guidelines
  - WPN 18-2, Program Year 2017 Grantee Allocations
  - New Health & Safety Template
- WV Weatherization Assistance Program Improvements
  - New Staff – Field/Technical Specialist
  - Update - WAP Standard Work Specifications (SWS)
- Supplemental Funding
  - Low Income Home Energy Assistance Program (LIHEAP) – WVDHHR
- Items to be addressed/considered – 2018 - 2019
  - Possible reassignment of one county
- Challenges for 2018 - 2019:
  - Subrecipient Input per DOE WAP Memorandum 025
  - Deferral rate
  - Training and Technical Assistance
- PY 2017- 2018 WV WAP DOE State Plan
  - Master File
  - Annual File

REC'D APR 27 2017



**The Culture Center**  
1900 Kanawha Blvd., E.  
Charleston, WV 25305-0300

**Randall Reid-Smith, Commissioner**

Phone 304.558.0220 • [www.wvculture.org](http://www.wvculture.org)  
Fax 304.558.2779 • TDD 304.558.3562  
EEO/AA Employer

April 25, 2017

Mr. Mark A. Adams  
Weatherization Manager  
West Virginia Office of Economic Opportunity  
Capitol Complex, Building 6, Room 553  
1900 Kanawha Boulevard East  
Charleston, West Virginia 25305-0311

RE: 2017 State Agreement Between WVODO and WVSHPO  
FR# 17-490-Multi-1

Dear Mr. Adams:

We have reviewed the above mentioned project to determine its effects to cultural resources. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to submitted information, the West Virginia Office of Economic Opportunity wishes to renew the State Agreement between our agencies early. WVEO wishes to move the date covered under the agreement from November 30, 2017 forward to April 1, 2017 and each April thereafter. This will coordinate the date with the other WVODO planning and reporting procedures. We are agreeable to the date change.

We have signed the letter and are returning the original copy for your files. We will retain a copy, Exemptions Attachment, Certificates of completion for the ACHP course in 106, and the US Department of Energy Weatherization Program Notice 10-08 for our records.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Ernest Blevins, Structural Historian, at (304) 558-0240.

Sincerely,

A handwritten signature in blue ink that reads "Susan M. Pierce".

Susan M. Pierce  
Deputy State Historic Preservation Officer

SMP/EEB



## WEST VIRGINIA DEVELOPMENT OFFICE

1900 Kanawha Boulevard East • Charleston, WV 25305-0311  
(304) 558-2234 • (800) 982-3386 • WVDO.org

April 1, 2017

Susan M. Pierce  
Deputy State Historic Preservation Officer  
West Virginia Division of Culture and History  
1900 Kanawha Boulevard East  
Charleston, WV 25305

Dear Ms. Pierce,

In preparation for the 2017 State Plan, I would like to request an early renewal of the Agreement between the WV Development Office (WVDO) and the WV State Historic Preservation Office (WVSHPO). The State Plan is the official application to the U.S. Department of Energy (DOE) for the Weatherization Assistance for Low-Income Persons Grant. The current Agreement expires November 30, 2017. An early renewal (if approved) would negate the need to apply for renewal after the grant start date of July 1, 2017. The current Agreement is for a period of three (3) years, and I would like to request the new Agreement run three (3) years, April 1, 2017, to March 31, 2020.

WVDO is the administering agency of DOE funds for the Weatherization Assistance Program (WAP) in the State of West Virginia. This correspondence is to ensure compliance with the National Historic Preservation Act (NHPA or "the Act"), 54 U.S.C. 300101 et seq., as it relates to DOE WAP Grantees, specifically in the State of West Virginia. It is our opinion that our program will result in numerous projects that do not have the potential to impact historic resources. We request your concurrence with this determination and have attached to this letter a list of the undertakings that we would request to be exempt from Section 106 review by your office. In anticipation of your agreement with these findings, we have taken the liberty to outline what our organization believes to be the roles and responsibilities of the State Historic Preservation Office and the Office of Economic Opportunity.

Specific roles and responsibilities of both parties are as follows:

1. WVDO shall be responsible for conducting Section 106 reviews in a timely manner, preparing documentation, and maintaining records on undertakings. Undertakings that involve properties greater than forty-five (45) years old and are not listed on Appendix A (attached) shall be submitted to the WVSHPO for review.
  - 1.a. In addition to the WV Weatherization Assistance Program Historic Preservation Review Sheet already submitted, WVDO will complete the WVSHPO Historic Property Inventory Form (HPI) to include setting and building descriptions and additional building history the owner may provide. Both will be submitted to WVSHPO.



2. WVDO shall ensure that the provisions of this Agreement apply to its subrecipients.
3. WVDO shall not submit to the WVSHPO undertakings outlined on the attached list as they do not have the potential to cause effects on historic properties even when historic properties may be present.
4. As allowed under Section 106 of the NHPA, the WVSHPO shall provide comments to WVDO within thirty (30) days for reviews. In the event that the WVSHPO fails to comment within the thirty (30) day period, WVDO can assume the WVSHPO has concurred, and proceed.
5. WVDO will advise subrecipients of the provisions in Section 110 (k) of the Act and will advise the subrecipients that Section 106 reviews may be compromised when project undertakings are initiated prematurely.
6. Both parties shall make every effort to expedite Section 106 reviews for a period of less than the 30-day review when consistent with the terms of the DOE grant agreements. WVDO has identified two (2) qualified staff members to review these projects. These qualified persons have attended training regarding the National Register of Historic Places and will be applying the criteria of the National Register. Their certificates are attached. When an emergency, as defined by WVDO, has the potential to impact a building 45 years or older and necessitates a quicker review by the WVSHPO, the WVSHPO will make every reasonable effort to expedite the review. As defined by the WVDO, emergencies exist where there is a need to eliminate an imminent threat to health and safety of residents. It is WVOEO's responsibility to communicate to the WVSHPO the need for an expedited review.
  - a. WVDO shall forward documentation to the WVSHPO for review immediately upon notification that an emergency exists. Documentation should include a) nature of the emergency; b) the address of the historic property involved; c) photographs showing the current condition of the building; and d) the time frame allowed by local or county officials to respond to, or correct, the emergency situation.
  - b. If an emergency undertaking will result in an adverse effect to a historic resource, the WVDO will work with the WVSHPO to avoid, minimize or mitigate the adverse effect.
7. WVDO shall maintain a list of undertakings and shall make documentation available to the public per Department of Energy Weatherization Program Notice 10-08 guidelines. At the end of each reporting year a list of exempted projects will be forwarded to the WVSHPO.
  - a. Public Information to include: City/town, county, date of construction (if not known ca. with an approximate date will be used), if the property is NR listed in a district or individually, and a brief work summary.

- b. WV SHPO information to include: Address, county, date of construction, (if not known ca. with an approximate date will be used), if the property is NR listed in a district or individually, and a brief work summary.
8. WVDO agrees to notify Historic Landmark Commissions when applicable per 36 CFR 800.2(d)(1). Information provided will adhere to DOE WPN 10-8: Weatherization Guidance on Maintaining the Privacy of Recipients of Services. (Attached)

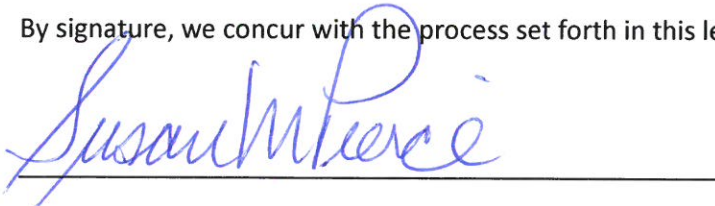
We request that the attached list be exempted from individual review for a period of three (3) years, from April 1, 2017 until March 31, 2020. WVDO and its subrecipients will maintain appropriate documentation of its funded activities should the WVSHPO wish to review the ongoing application of these exemptions. Please provide your comments and concurrence with this proposed list of exemptions.

Respectfully,

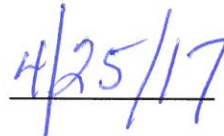


Mark A. Adams  
Weatherization Manager

By signature, we concur with the process set forth in this letter.



Susan M. Pierce, Deputy WVSHPO



Date



## WAP UNDERTAKINGS EXEMPT FROM SECTION 106 REVIEW

All undertakings will be done in accordance with applicable local building codes or the International Building Code, where applicable. In accordance with 36 CFR 800.3(a)(1), the following undertakings have been determined to have no potential to cause effects on historic properties:

### A. Exterior Work

- 1) Air sealing of the building shell, including caulking, weather-stripping, and other air infiltration control measures on windows and doors, and installing thresholds in a manner that does not harm or obscure historic windows or trim;
- 2) Thermal insulation, such as non-toxic fiberglass and foil wrapped, in walls, floors, ceilings, attics, and foundations in a manner that does not harm or damage historic fabric;
- 3) Blown in wall insulation where no holes are drilled through exterior siding, or where holes have no permanent visible alteration to the structure;
- 4) Removable film on windows (if the film is transparent), solar screens, or window louvers, in a manner that does not harm or obscure historic windows or trim;
- 5) Reflective roof coating in a manner that replicates the historic materials and form, or with materials that restore the original feature based on historic evidence, and in a manner that does not alter the roofline, or where not on a primary roof elevation or visible from the public right-of-way; and
- 6) Repair of minor roof and wall leaks prior to insulating attics or walls, provided repairs replicates existing surface composite.

### B. Interior Work

**Special Note:** Undertakings to interior spaces where the work will not be visible from the public right of way; no structural alterations are made; no demolition of walls, ceilings or floors occurs; no drop ceilings are added; or no walls are leveled with furring or moved, should be automatically excluded from **WVSHPO** review. This work includes:

#### ***1. Energy efficiency work within the building shell:***

- a. Thermal insulation in walls, floors, ceilings, attics, crawl spaces, ducts and foundations;
- b. Blown in wall insulation where no decorative plaster is damaged;
- c. Plumbing work, including installation of water heaters;
- d. Electrical work, including improving lamp efficiency;
- e. Sealing air leaks using weather stripping, door sweeps, and caulk and sealing major air leaks associated with bypasses, ducts, air conditioning units, etc.;
- f. Repair or replace water heaters;
- g. Adding adjustable speed drives such as fans on air handling units, cooling tower fans, and pumps;
- h. Install insulation on water heater tanks and water heating pipes;
- j. Install waste heat recovery devices, including desuperheater water heaters, condensing heat exchangers, heat pump and water heating heat recovery systems,

- and other energy recovery equipment;
- k. Repair or replace electric motors and motor controls like variable speed drives; and
- l. Incorporate other lighting technologies such as dimmable ballasts, day lighting controls, and occupant controlled dimming.

***2. Work on heating and cooling systems:***

- a. Clean, tune, repair or replace heating systems, including furnaces, oilers, heat pumps, vented space heaters, and wood stoves. Subrecipient or contractor will use the same foundation pad location as originally used.
- b. Clean, tune repair or replace cooling systems, including central air conditioners, window air conditioners, heat pumps, and evaporative coolers. Subrecipient or contractor will use the same foundation pad location as originally used.
- c. Install insulation on ducts and heating pipes;
- d. Conduct other efficiency improvements on heating and cooling systems, including replacing standing pilot lights with electronic ignition devices and installing vent dampers;
- e. Modify duct and pipe systems so heating and cooling systems operate efficiently and effectively, including adding return ducts, replace diffusers and registers, replace air filters, install thermostatic radiator controls on steam and hot water heating systems; and
- f. Install programmable thermostats, outdoor reset controls, UL listed energy management systems or building automation systems and other HVAC control systems.

***3. Energy efficiency work affecting the electric base load of the property:***

- a. Convert incandescent lighting to fluorescent;
- b. Add reflectors, LED exist signs, efficient HID fixtures, and occupancy (motion) sensors; and
- c. Replace refrigerators and other appliances.

***4. Health and safety measures:***

- a. Installing fire, smoke or carbon dioxide detectors/alarms;
- b. Repair or replace vent systems on fossil-fuel-fired heating systems and water heaters to ensure that combustion gasses draft safely to outside; and
- c. Install mechanical ventilation, in a manner not visible from the public right of way, to ensure adequate indoor air quality if house is air-sealed to building tightness limit.



**Department of Energy**  
Washington, DC 20585

**WEATHERIZATION PROGRAM NOTICE 10-08**  
**ISSUANCE DATE: FEBRUARY 1, 2010**

**SUBJECT:** Weatherization Guidance on Maintaining the Privacy of Recipients of Services

**PURPOSE:** To issue guidance for the Low-Income Weatherization Assistance Program (WAP) on maintaining the privacy of recipients.

**SCOPE:** This guidance is provided to States or other entities named in the Notification of Grant Award as the recipients of financial assistance under the WAP, including the recently added Territories.

**LEGAL AUTHORITY:** Title IV, Energy Conservation and Production Act, as amended, authorizes DOE to administer the WAP. All grant awards made under this Program shall comply with applicable law including the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007, the American Recovery and Reinvestment Act (ARRA) of 2009 and regulations contained in 10 CFR Part 440, 10 CFR Part 600 and other procedures applicable to this regulation as DOE may, from time-to-time, prescribe for the administration of financial assistance.

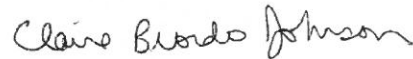
**BACKGROUND:** States receiving funds under WAP have been receiving numerous requests for information regarding the implementation of programs funded through the ARRA. The information requests range from informal inquiries by local elected officials and other community leaders to requests for specific information about recipients from local and regional press outlets. Due, in part, to the increased levels of funding for the WAP - \$5 billion over three years – we anticipate that there will be a number of similar such requests. Therefore, the Department has concluded that it would be prudent to provide guidance for responding to such requests.

**POLICY:** DOE adheres to the transparency requirements placed on these and other government financial assistance programs instituted by the Administration. DOE will work diligently with any state WAP or local service provider to gather the required information and provide it to the requestor. However, the DOE must comply with all requirements on the Government to protect the privacy interests of individuals who participate in these financial assistance programs.

In accordance with 10 CFR 600.153(f), *Retention and access requirements for records*, "Unless required by statute, DOE shall place no restrictions on recipients that limit public access to the records of recipients that are pertinent to an award, *except when DOE can*

*demonstrate that such records shall be kept confidential and would have been exempted from disclosure pursuant to the Freedom of Information Act (5 U.S.C. 552) if the records had belonged to DOE.” (emphasis added)* DOE would be legally required, pursuant to 5 U.S.C. 552(b)(6), of the Freedom of Information Act, to keep confidential any specifically identifying information related to an individual’s eligibility application for WAP, or the individual’s participation in WAP, such as name, address, or income information. Thus, states and local service providers should extend that same protection to their client records for WAP. States may release information about recipients in the aggregate and which does not identify specific individuals. For example, information on the number of recipients in a county, city or a zip code does not compromise the privacy of the recipients.

**CONCLUSION:** Please do not hesitate to contact your Project Officer in the appropriate Project Management Center or Robert Adams at DOE Headquarters if you have questions regarding this issue. As always, thanks for everything you do for the WAP and the citizens you serve. Because of your efforts Weatherization Works!



Claire Broido Johnson  
Acting Program Manager  
Office of Weatherization and Intergovernmental Program  
Energy Efficiency and Renewable Energy



# Advisory Council on Historic

## Preservation

### The Section 106 Essentials

November 5-6, 2015, Washington, DC

*This will verify that*

*Mark A. Adams*

*has successfully completed the course*



---

Reid Nelson  
Director, Office of Federal Agency Programs  
Advisory Council On Historic Preservation

**U.S. DEPARTMENT OF ENERGY  
WEATHERIZATION ASSISTANCE PROGRAM  
QUALITY CONTROL INSPECTION FORM**

**Subrecipient :** \_\_\_\_\_ **Job #:** \_\_\_\_\_

**Inspection Date:** \_\_\_\_\_

**Client Name:** \_\_\_\_\_ ☐ Owner ☐ Renter

**Physical Address:** \_\_\_\_\_ **Zip Code:** \_\_\_\_\_

**Year of Construction:** \_\_\_\_\_ **Pre-1978 Home:** ☐ Yes ☐ No

**Housing Type:**

☐ Site Built ☐ Mobile Home ☐ Mobile Home w/add-on ☐ Multi-family ☐ Double Wide

**Primary Fuel Type:**

☐ Natural Gas ☐ Propane ☐ Electric ☐ Oil ☐ Solid Fuel **Other:** \_\_\_\_\_

**DBA FACS Pro FILE REVIEW** *WV WPN 15-19*

**YES NO N/A**

**Notes:**

- |   |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|
| 1. Eligibility Determination present?                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Input Report   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Energy Audit Recommended Measures Report                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. DBA FacsPro Job Summary                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Total Job Cost:  |                          |                          |                          |
| DOE/DHHR Investment: \$ _____                               |                          |                          |                          |
| Utility Investment: \$ _____ Total Job Investment: \$ _____ |                          |                          |                          |
| 6. Daily Material In/Outs                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Utility Partnership Documentation                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Weatherization Assistant Work Order                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Lead Safe Work Documentation                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Mold/Moisture Form Documentation                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. CO Warning Statement                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Hold Harmless Form Documentation                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. State Historic Preservation Documentation               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Client Education Documentation                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Refrigerator Data / Replacement Justified               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Pre & Post Combustion Safety Tests/Tapes                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Pre & Post Blower Door Results (@CFM 50)                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pre #: _____ Post #: _____ QCI verified#: _____             |                          |                          |                          |
| 18. Customer Satisfaction Form Signed/Dated                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. HVAC Sizing Documentation                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. Solid Fuel Appliance Condition Report                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. WX Tag Documentation                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. Photo Documentation                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. FACS Pro Attachments are complete                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. Insulation Certificate Documentation                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. Other (Describe): _____                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

## ON-SITE WORK ASSESSMENT

	YES	NO	N/A	
<b>HEATING, VENTILATION, AIR CONDITIONING</b>				<b>Comments – HVAC</b>
1. Heating System Replacement <i>WV WAP SWS 5</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Air Conditioning Replacement <i>WV WAP SWS 2.2</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Heating System Tune-Up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Air Conditioning Tune-Up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Distribution System Modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Ducts <i>WV WAP SWS 3.16, 4.16</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Thermostat Anticipator Reading Verified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Filter Installed and one left with client	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Measures(s) were Properly Justified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Ventilation Requirements Verified and Comply with ASHRAE 62.2 2013 <i>WV WAP SWS 6</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. CAZ Testing Verified, Documentation is Complete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Work Meets WV WAP SWS Installation Standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>ATTIC</b> <i>WV WAP SWS 3.10, 2.06, 2.04</i>				<b>Comments – Attic Work</b>
1. Attic Insulation Installed: <i>WV WAP SWS 4</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Coverage R-value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Insulation Certificate Completed & Posted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Heat Source/ Vent Damming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Junction Box Markers Present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Attic Access Insulated and Secured	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Attic Air Sealing was Performed <i>WV WAP SWS 3.10</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Measure(s) were Properly Justified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Work Meets WV WAP SWS Installation Standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>SIDEWALLS &amp; KNEEWALLS</b> <i>WV WAP SWS 2.06, 3.11, 4.11</i>				<b>Comments - Sidewalls</b>
1. Walls Insulated by WAP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Plugs, Patching, & Painting appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Measure(s) were Properly Justified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Work Meets WV WAP SWS Installation Standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>SUBSPACE</b> <i>WV WAP SWS 2.04, 2.05, 3.14, 3.13, 4.13, 4.14</i>				
1. Bandboard Insulation added by WAP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Floor Insulation added by WAP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Basement Wall Insulation added by WAP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Vapor Barrier added; Coverage & Secure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Measure(s) were Properly Justified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Work Meets WV WAP SWS Installation Standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>WINDOWS/DOORS</b> <i>WV WAP SWS 3.12</i>				<b>Comments – Windows/Doors</b>
1. Number of Windows Replaced: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Number of Storm Windows Installed: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Number of Doors Replaced: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Door Weather-stripping/Thresholds/Sweeps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Pre/Post Photo Documentation Completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Measure(s) were Properly Justified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Work Meets WV WAP SWS Installation Standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**OTHER MEASURES** WV WAP SWS 7

	YES	NO	N/A	Comments – Other Measures
1. Water Heater Replacement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Water Heater Treatment (Tank Wrap)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Pipe Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Low Flow Shower heads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Lighting - CFLs Installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Refrigerator Replacement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
a. Metering/Justification/other documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Smoke Detectors WV WAP SWS 2.03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Carbon Monoxide Detector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Other H&S Measures _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Other Energy Related Repairs _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Air Sealing Measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Other (Describe): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Measures were Properly Justified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Work Meets WV WAP SWS Installation Standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Weatherization Assistant 8.9 Audit**

1. All IRMs are justified in the client file with an explanation for their need and relationship to the specific energy conservation measure (ECM) or group of ECMs.

YES ☐ NO ☐ N/A ☐

2. ECMs are all justified with a SIR >1. *Exception: Air Sealing DOE WPN 13-5 Attachment 1*

YES ☐ NO ☐ N/A ☐

3. Ancillary items are charged to the appropriate ECM.

YES ☐ NO ☐ N/A ☐

4. Are materials charged appropriately according to the current WA Materials Chart?

YES ☐ NO ☐ N/A ☐

**Does this unit need additional attention from the Subrecipient?**

☐ Yes

☐ No

(\*Add comments on additional pages if necessary, \*\* A check in the yes box requires completion of the Required Corrective Action(s) Page)

**Notes:**

**REQUIRED CORRECTIVE ACTION(s)**

All corrections must be completed and signed off by the crew leader. When corrections are completed the Quality Control Inspector (QCI) must sign off affirming that required deficiencies were addressed to WV WAP SWS, state policy and all relevant building codes. If job was inspected and all corrections were made on the final day of job, crew leader (CL) and QCI must sign Work Order to verify completion. Final day inspections must reflect corrections cited by QCI. Report must be included in client file.

Last Revised 8/18/2016



CL

QCI

## Corrections

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

**\*\*\*Crew Leader Signature is only required if corrections are made\*\*\***

Crew Leader Name (Print): \_\_\_\_\_

Signature: \_\_\_\_\_ Date:     /     /

QCI Name (Print): \_\_\_\_\_

Signature: \_\_\_\_\_ Date:     /     /

☐ WX tags has been correctly initialed, dated and posted in the correct locations.

☐ I hereby confirm that this job is considered complete, that all measures have been properly justified, all documentation is complete, properly uploaded into the database system and the job can be reported as a completion.

Last Revised 8/18/2016

## DOE, DHHR, Utilities (as applicable)

v.10.2014

<b>Energy Conservation Measure</b>	<b>Direct material for Energy Conservation Measure</b>	<b>Ancillary Items (Cost must be included in SIR for associated individual ECM)</b>	<b>Incidental Repair Measure (IRM) (Cost must be included in SIR for whole unit package of ECM)</b>	<b>Health &amp; Safety Measure (Separate cost justification, not included in SIR)</b>
<b>Heating</b>	heating system clean/tune	black pipe	drywall	barometric damper
	heating system repair	black pipe fittings	lumber	black pipe
	heating system replacement	barometric damper	paneling	black pipe fittings
	heat pump replacement	breaker	plywood	blower motor
		coil cleaner		breaker
		condensate pump		B-vent & Accessories
		cottage stands		coil cleaner
		drywall		condensate pump
		filter grills		contactor
		floor register		electric heat strip
		furnace filter		electrical disconnect
		metal flex tape		fan switch
		mounting brackets		filter grills
		mounting pad		flexible gas line
		oil filter		floor registers
		pvc pipe		fuel filter canister
		sheet metal one sheet or less		furnace filters
		strapping		heat chamber
		thermostat		heat shield
		wire		heat shield insulators
				heat tape (condensate line)
				heating system repair
				heating system replacement
				knob & tube wiring (minor repair)
				louvered door
				limit
				oil filters
				oil nozzles
				pipe insulation (condensate line)
				pvc pipe
				stove pipe & accessories
				thermocouple
				thermostat
				transfer grille
				transformer
				wire
<b>Air Conditioning</b>	cooling system replacement	freon	drywall	a-coil
		furnace filter	lumber	air filters
		line set	plywood	blower motor
		metal duct tape		breaker
		mounting pad		contactors
		sheet metal		diffusers
		straps		electrical disconnect
		thermostat		filter grill
		thermostat wire		freon
		zip ties		heating element
				line set
				thermostat
				thermostat wire

				transformer
				wire

<b>Energy Conservation Measure</b>	<b>Direct material for Energy Conservation Measure</b>	<b>Ancillary Items (Cost must be included in SIR for associated individual ECM)</b>	<b>Incidental Repair Measure (IRM) (Cost must be included in SIR for whole unit package of ECM)</b>	<b>Health &amp; Safety Measure (Separate cost justification, not included in SIR)</b>
<b>Duct Sealing</b>	2-part foam	mesh tape	s-strap	2-part foam
	flex duct	metal duct tape		flex duct
	mastic	silicone caulk		mastic
	sheet metal	zip ties		sheet metal
<b>Duct Insulation</b>	2-part foam	mesh tape		
	flex duct	metal duct tape		
	foil faced duct wrap	staples		
	vinyl duct wrap	vinyl duct tape		
		zip ties		
<b>Attic Insulation</b>	attich hatch (ONLY when insulation is required)	ceiling plugs	attic vents (ONLY when insulation is installed)	minor roof repair of leaking roof that may create moisture/mold issue in attic insulation
	cellulose	dam materials	caulking (MH guttering ONLY when insulation is installed side lift method)	
	fiberglass	drywall (can lights)	flashing	knob & tube wiring (minor repair)
		roof coating	MH guttering (ONLY when insulation is installed side life method)	
		hinges	roll roofing	
		latches	roof coating (ONLY when insulation is required)	
		insulation		
		flashing		
		high-temp silicone sealant		
		insul-shield		
<b>Dense Pack</b>	cellulose	chair railing	primer/sealer	knob & tube wiring
		dry wall compound	roof coating (ONLY when insulation is required)	minor roof repair of leaking roof that may create moisture/mold issue in new wall insulation
		plywood (<1 sheet)		
		sealing high/low openings in balloon framing		
		sheet rock (<1 sheet)		
		wall plugs		
<b>Non-Dense Pack</b>	fiberglass	4" inspection port	flashing	
		wall plugs	MH guttering (ONLY when insulation is installed side life method)	
			primer/sealer	
			roof coating (ONLY when insulation is required)	
<b>Floor Treatment</b>	fiberglass (batt)	adhesive spray	belly repair (when insulation is required)	knob & tube wiring (minor repair)
	fiberglass (blown)	belly repair of insulation access holes (including belly patch, board, tape)	vapor barrier (when floor is insulated)	plumbing leak repair
	rigid foam board		vapor barrier ballast (when floor is insulated)	
	2 part foam	insulation support rods	vapor barrier seam tape (when floor is insulated)	
	dense pack cellulose	netting		
		pipe wrap (only when floor insulated)		

<b>Energy Conservation Measure</b>	<b>Direct material for Energy Conservation Measure</b>	<b>Ancillary Items (Cost must be included in SIR for associated individual ECM)</b>	<b>Incidental Repair Measure (IRM) (Cost must be included in SIR for whole unit package of ECM)</b>	<b>Health &amp; Safety Measure (Separate cost justification, not included in SIR)</b>
<b>Window Replacement</b>	window replacement	caulk	lumber	
		drywall	j channel	
		fasteners	coil stock	
		paneling		
		rope caulk		
		shims		
		trim		
		stops		
<b>Door Replacement</b>	door replacement	caulk	lumber	
		drywall		
		fasteners		
		hinges		
		knobs		
		paneling		
		primer/sealer		
		stops		
<b>General Air Infiltration</b>		trim		
	2 part foam (canister)	caulk	lumber-framing	
	attic hatch	ac cover	door hinges	
	belly repair (when no insulation is required)	drywall	door latches	
	caulk	hinges	lumber-trim	
	chimney draft stopper	insulation	plywood (more than one piece for air sealing)	
	door replacement	latches	primer/sealer	
	door sweeps	locks	sheetrock (more than one piece for air sealing)	
	door weatherstrips	mastic	window stop	
	duct sealing	mesh tape		
	foam (cans)	metal duct tape		
	foam sealant (cans)	rope caulk		
	foam sheets	window stop		
	glass			
	mastic			
	plywood (one piece)			
	sheetrock (one piece)			
	thresholds			
	vent termination cap			
	window replacement			
	window weatherstrips			

<b>Energy Conservation Measure</b>	<b>Direct material for Energy Conservation Measure</b>	<b>Ancillary Items (Cost must be included in SIR for associated individual ECM)</b>	<b>Incidental Repair Measure (IRM) (Cost must be included in SIR for whole unit package of ECM)</b>	<b>Health &amp; Safety Measure (Separate cost justification, not included in SIR)</b>
<b>Energy Improvement</b>	cfl bulb-flood/recessed	water heater straps	light fixture	replace hazardous light fixture or socket
	cfl bulb-specialty	water heater tape	light socket	water heater discharge pipe
	cfl bulb-standard			water leak repair
	cool roof coating			water heater replacement
	door replacement			
	faucet aerator-bathroom			
	faucet aerator-kitchen			
	faucet aerator-other			
	low-flow showerhead			
	low-flow showerhead-handheld			
	refrigerator replacement			
	water distribution pipe insulation-boilers			
	water heater jacket			
	water heater pw (1st 6ft only, h&c at wh)			
	water heater replacement			
	water heater top			
	window replacement			
<b>Other Health &amp; Safety</b>				4 mil plastic (clear)
				6 mil plastic
				blue painters tape
				breakers
				B-vent & accessories
				caz resolution materials
				co detector
				co/smoke detector
				dehumidifier
				dryer vent kit
				duct tape
				electrical panel box
				exhaust vents/fans
				fan controller
				guttering and accessories
				kitchen range hood kit
				make-up air fan
				lead check swabs
				roof coating
				smoke detectors
				sump pump
				tack mats
				vapor barrier
				vapor barrier ballast
				vapor barrier seam tape
				venting
				water heater discharge pipe
				water heater replacement
				wire

