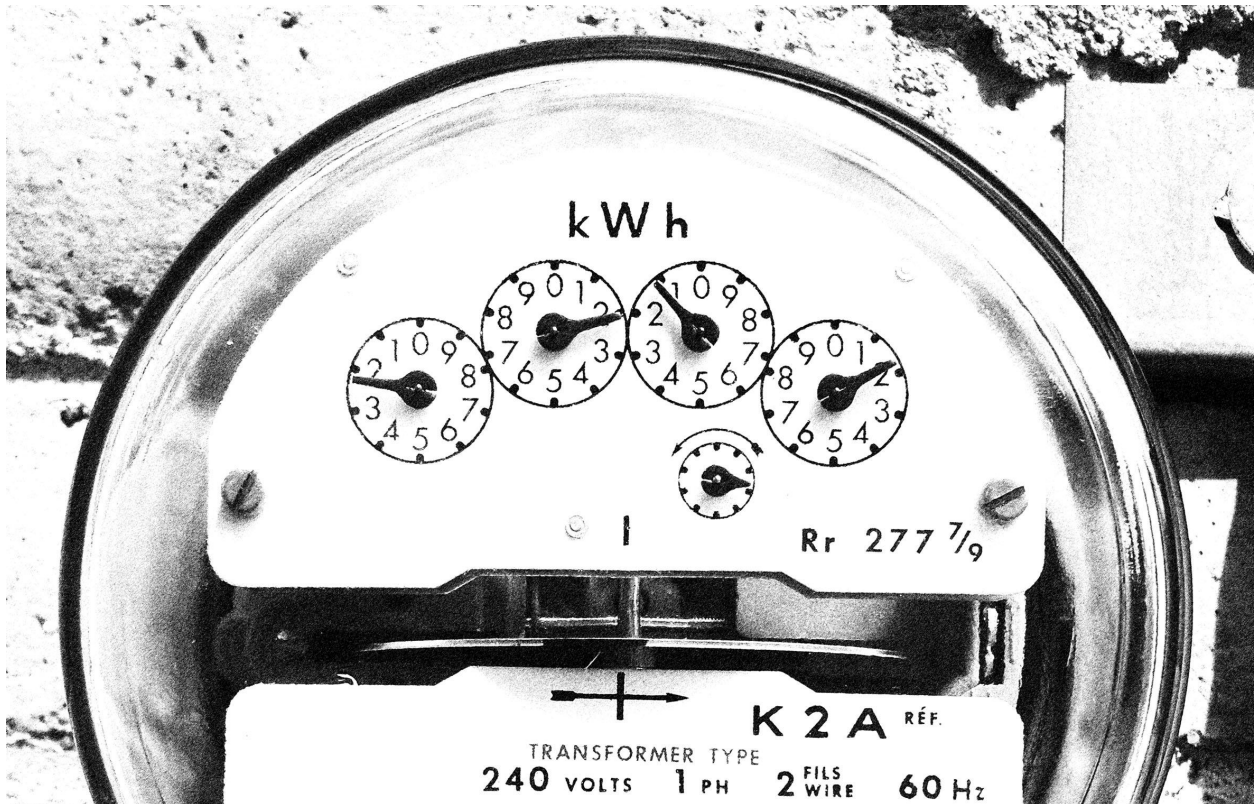


# ENERGY EFFICIENCY PROGRAM OPERATIONS MANUAL

v.2.2024



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**Maryland Department of Housing and Community Development**  
**Housing & Building Energy Programs**  
7800 Harkins Road  
Lanham, MD 20706



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## SECTION A - INTRODUCTION

### 1. DEFINITION OF TERMS

In order to clarify the policies and procedures contained in the POM, it is understood that the following definitions apply throughout:

Glossary	
<b>Agency</b>	The company (SWC) or the organization (LWA) of a Network Partner as a whole.
<b>At-Risk Occupant</b>	A person with a medical condition documented by a physician that requires air conditioning.
<b>BPI</b>	The Building Performance Institute provides certification for home energy professionals and is referenced as the auditing standard required in the weatherization program.
<b>Building Envelope</b>	The area of the building that encloses the conditioned space ( including any conditioned basements). The exterior walls to the ceiling under the attic and the floors above the unconditioned basement areas are considered part of the building envelope. The floor of a unit built on stilts or is above an unconditioned crawl space is considered a part of the building envelope. The roof of a building that has no ceilings (or that is part of the ceiling) is considered part of the building envelope.
<b>Child</b>	A person under 18 years of age.
<b>Code of Federal Regulations (CFR)</b>	The Code of Federal Regulations (CFR) is the codification of the general and permanent rules published in the Federal Register by the departments and agencies of the Federal Government produced by the Office of the Federal Register (OFR) and the Government Publishing Office. 10 CFR Part 440 and 2 CFR Part 200 provide the framework for the DOE Weatherization Assistance Program.

<b>Continuous Ventilation</b>	Sometimes referred to as general, central, or whole-house ventilation. Should be quiet, low volume, and simple to operate.
<b>DHCD Field Guide</b>	The DHCD Field Guide is used as the standard for the installation of weatherization measures for DHCD energy efficiency programs.
<b>Disabled/Handicapped</b>	Any individual who is [1] handicapped as defined in Section 7 (6) of the Rehabilitation Act of 1973; [2] under a disability as defined in Section 1614 (a) (3) (A) or 223 (d) (i) of the Social Security Act or in Section 102 (7) of the Developmental Disabilities Services and Facilities Construction Act; or [3] who is receiving benefits under Chapter 11 or 15 of Title 38, U.S.C.
<b>Deferral</b>	Weatherization to a home may be deferred if the property has health and safety issues or require other repairs that prevent weatherization from occurring. If not further specified, a deferral equates to a Tier 1 job in the EmPOWER program. In some cases (as specifically defined) a DOE deferral may equate to an EmPOWER denial.
<b>DOE</b>	The U.S. Department of Energy (“DOE”) provides funding to states, U.S. overseas territories, and Indian tribal governments, which manage the day-to-day details of the program. These governments, in turn, fund a network of local community action agencies, nonprofit organizations, and local governments that provide these weatherization services in every state, the District of Columbia, U.S. territories, and among Native American tribes.
<b>Dwelling Unit</b>	A house, including a stationary mobile home, an apartment, a group of rooms, or a single room occupied as separate living quarters.
<b>ECM</b>	An Energy Conservation Measure (“ECM”) is a procedure including materials and installation, which is considered for its anticipated energy savings. An ECM often includes installation of ancillary items but does not include Incidental Repair Measures (IRM).
<b>Elderly Person</b>	A person who is sixty (60) years of age or older.
<b>EmPOWER</b>	Energy efficiency programs that are funded and regulated through the EmPOWER Maryland Act. In context of this document the term refers to the Low-Income Energy Efficiency Program (LIEEP) portion of the EmPOWER programs.
<b>Family Unit</b>	All persons living together in a dwelling unit.
<b>Funding Period</b>	The time period in which the weatherization funds are available for use by the LWA or SWC. No funds can be expended before the start date of the performance period and may not be expended after the close of the period.
<b>Funding Source</b>	The source of weatherization and/or energy efficiency funds used to reimburse the LWA or SWC for costs associated with providing services to eligible clients.
<b>Hancock Software</b>	DHCD currently uses the Hancock Energy Software system as the program management software for its energy efficiency programs. Hancock is the central software program used by DHCD and all network partners to track job progress and consolidate information such as dwelling units, priority service delivery, work orders, inspection status, required forms, and invoicing.



<b>HBEP</b>	DHCD’s Housing and Building Energy Programs unit, also referred to as DHCD’s energy or weatherization programs unit.
<b>HEAT</b>	Hancock Energy Audit Tool.
<b>HEP Certifications</b>	Home Energy Professional (HEP) certifications are nationally recognized professional certifications for weatherization and home performance that have been adopted as requirements by the U.S. Department of Energy (DOE) Developed in coordination with the National Renewable Energy Laboratory (NREL), and administered by the Building Performance Institute, Inc. (BPI), these certifications seek to ensure a standardized approach to quality in the field.
<b>Incidental Repair Measures (IRM)</b>	Incidental Repair Measures (IRM) include materials and installation which are performed because they are necessary for the preservation and effectiveness of one or more energy savings measures. Such repairs include, but are not limited to drainage (gutters, downspouts, extensions, flashing, sump pumps, etc.), electrical, and providing protective materials, such as paint, used to seal materials installed.
<b>Intake</b>	The application processes necessary to enable certification of an application.
<b>Lead</b>	A “lead” is a potential client referred to the network partners by DHCD.
<b>Leverage Activity</b>	Blending two or more compatible funding sources to maximize the weatherization services.
<b>LIHEAP</b>	Low-income Home Energy Assistance Program (LIHEAP) funds also known in Maryland as Maryland Energy Assistance Program (MEAP) are federal funds provided to DHCD through the Maryland Department of Human Resources Office of Home Energy Programs (OHEP) for furnace repair or replacement.
<b>Local Weatherization Agency (LWA)</b>	Also referred to as the "sub-grantee", “network partner” and "local service provider", the LWA is the nonprofit organization, community action agency or local government selected to administer the DOE WAP and is responsible for providing direct weatherization services.
<b>MEAP-C</b>	MEAP Crisis work, including the repair and replacement of non-functioning heating, cooling, and water heater systems.
<b>MEAP-Wx</b>	Weatherization work funded by MEAP
<b>Network Partner</b>	An LWA or SWC under contract with DHCD to perform weatherization services.
<b>OHEP Certification</b>	A final determination concerning program income eligibility of an applicant by the Maryland Department of Human Services (DHS), Office of Home Energy Programs (OHEP), resulting in the applicant’s receipt or denial of energy assistance benefits.
<b>PAC</b>	As required by federal regulations for the DOE WAP, a Policy Advisory Council (PAC) assists in the development and implementation of the WAP and advises HBEP on a broad range of issues

	relating to WAP.
<b>Priority List / PL</b>	Set of prescriptive energy measures that must be considered in order of the prescribed listing.
<b>QA Inspector</b>	DHCD Quality Assurance Inspectors assess quality of work order measures and compliance; appropriate and allowable materials; appropriateness and accuracy of energy audits (no missed opportunities); comprehensive final inspections; safe work practices, such as lead safe weatherization protocols; and other factors relevant to on-site work.
<b>QC Inspector</b>	The Quality Control Inspector is a BPI certified professional responsible for ensuring and certifying to DHCD that all work on the measures list for a dwelling unit is done correctly and completely in accordance with program requirements.
<b>Re-certification</b>	Re-certification must occur when an application is more than twelve (12) months old and the LWA or SWC have not "begun work" (starts with energy audit) on the dwelling unit. A second confirmation of the information must be performed. Re-certified applications are again eligible for inspection and receipt of weatherization.
<b>Re-weatherization</b>	A unit receives additional weatherization services after it was previously weatherized. Each funding source has a "lock-out" period for re-weatherization that are described in the sections below.
<b>Re-Work</b>	The LWA or SWC returns to a completed unit to perform additional work or make corrections in response to a QA or QC findings. Processing through Hancock is required.
<b>RGGI/SEIF</b>	Regional Greenhouse Gas Initiative (RGGI) funds also known in Maryland as Strategic Energy Investment Fund (SEIF) funds , are non-federal resources that are used for weatherization assistance, furnace repair and replacement, and resolution of health and safety items incidental to the provision of weatherization with DOE funded units.
<b>Separate Living Quarters</b>	Living quarters in which the occupants do not live and eat with any other persons in the building and have either direct access from the outside of the building or through a common hall or complete kitchen facilities for the exclusive use of the occupants. The occupants may be a single-family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements.
<b>Single-Family Dwelling Unit</b>	A structure containing no more than one dwelling unit.
<b>SIR</b>	Savings-to-Investment Ratio: The ratio of life-cycle savings to life-cycle costs adjusted for inflation, energy-cost escalation, and the time value of money. This number is the measure used for cost effectiveness.
<b>SWC</b>	Statewide Weatherization Contractors ("SWC") perform weatherization work for the Department under contract with the Department. SWCs are ineligible to receive DOE WAP funds.

<b>SWS</b>	Standard Work Specifications (SWS) define the minimum requirements to ensure that the work performed during energy upgrades in single-family, and manufactured homes is effective, durable, and safe.
<b>T&amp;TA</b>	Training and Technical Assistance is provided to support program operations such as analysis, measurement and documentation of program performance, skill development, and local monitoring, to improve program effectiveness.
<b>Title XVI</b>	To be used interchangeably with those income groups known as SSI (Supplemental Security Income).
<b>WAP Certification</b>	A final determination concerning the application for program eligibility based on income and ownership.
<a href="http://waptac.org">waptac.org</a>	The Weatherization Assistance Program Technical Assistance Center website is an invaluable repository of information related to the DOE WAP program and weatherization practices.
<b>WPN</b>	DOE WAP Grant Guidance documents are issued by DOE as Weatherization Program Notices (WPN).
<b>WX</b>	Acronym for Weatherization

## 2. HOUSING AND BUILDING ENERGY PROGRAMS

Weatherization has evolved considerably since its inception in the late 1970’s. Today’s weatherization comprises a comprehensive series of energy efficiency measures based on a sophisticated analysis of the individual home. This analysis uses a whole-house approach, modeling the entire existing conditions of a structure and the proposed improvements in great detail to maximize energy and dollar savings. Because of this rigorous approach and the building science that supports the improvements, limited-income weatherization programs have become leaders in advancing residential building science and in helping to create a profitable new industry that provides home energy efficiency services to the wider public, regardless of income.

The Maryland Department of Housing and Community Development’s (DHCD) weatherization and energy efficiency programs are administered by DHCD’s Housing and Building Energy Programs (HBEP) unit. These programs assist eligible limited-income households with the installation of energy conservation measures in their homes. Energy efficiency projects are intended to reduce both the consumption of energy and maintenance cost for these homes while improving health and safety for the occupants. DHCD’s Housing and Building Energy Programs (HBEP) staff provides the management, technical assistance and administrative support for its weatherization programs

In 2023, the new law called the “Energy Performance Targets and Low-Income Housing” legislation set statewide limited-income household electric savings goals to be met by DHCD. Those goals are to reduce

limited-income electric retail sales by 0.53% in 2024, 0.72% in 2025, and 1% in 2026. DHCD is responsible for accounting for all statewide work that is performed towards these goals, and to provide any services necessary to meet the goals.

## **2.1. GRANT BASED ENERGY PROGRAMS**

DHCD administers limited-income weatherization programs statewide, utilizing a number of funding sources that include the U.S. Department of Energy's Weatherization Assistance Program (DOE WAP), the EmPOWER Limited-income Energy Efficiency Program (LIEEP), and the Low-income Home Energy Assistance Program (LIHEAP, known in Maryland as the Maryland Energy Assistance Program "MEAP"). These funds are disbursed as contracts and grants to participating network partners to install energy efficiency and health and safety measures at no cost to limited-income homeowners.

Specific funding source guidelines are included in this POM for reference and marked in program specific colors as described in sections 2.1.1 through 2.1.4. When there is a conflict between funding source specific guidelines and DHCD Energy Efficiency Programs policies, the policies stated for each funding source prevail.

### **2.1.1. DEPARTMENT OF ENERGY WEATHERIZATION ASSISTANCE PROGRAM**

The Department of Energy's Weatherization Assistance Program (DOE WAP) reduces energy costs for low-income families by increasing the energy efficiency of their homes, while ensuring their health and safety. Funds are used to improve the energy performance of dwellings of families in need using the most advanced technologies and testing protocols available in the housing industry. The U.S. Department of Energy provides funding to states, U.S. overseas territories, and Indian tribal governments. These governments, in turn, fund a network of local community action agencies, nonprofit organizations, and local governments that provide these weatherization services in every state, the District of Columbia, U.S. territories, and among Native American tribes.

In Maryland, the Governor designates a Department within the State government to serve as the administering agency for DOE's WAP. Maryland's Department of Housing and Community Development (DHCD), has administered the DOE WAP program in the state since 1987. DHCD administers the program through a network of highly skilled subgrantees that provide program services in each of the state's 23 counties and Baltimore City. Subgrantees provide energy-efficiency services through their own trained crews and/or by subcontracting work to local contractors. Program services are available to both homeowners and renters, with priority given to the particularly vulnerable such as the elderly, families with children, persons with disabilities, high residential energy users, and households with high energy burden.

The WAP State Plan is developed annually by HBEP staff as part of the State's application for federal WAP funds. The State Plan is used as an overall guide for program operation and outlines the State's objective

for the expenditure of funds received from DOE. It identifies the local subgrantees contracted to carry out the State's WAP activities, projects the allocation to be awarded to each local subgrantee, and lists the number of units expected to be weatherized during the annual budget period.

Every fiscal year, before the State Plan is submitted to DOE for approval, it is reviewed by the Policy Advisory Council (PAC), and a public hearing is held to obtain comments. The hearing provides an opportunity for subgrantees, local leaders, WAP beneficiaries, and other interested persons to comment on program operations, community needs, and subgrantee performance. Subgrantees are encouraged to publicize the hearing to WAP participants. The final State Plan is submitted to DOE for approval after consideration for comments received. The approved State Plan becomes part of the Weatherization Assistance Grant Agreement for the Local Weatherization Agencies.

On November 15, 2021, the President signed into law the Infrastructure Investment and Jobs Act (Public Law 117-58), also referred to as the Bipartisan Infrastructure Law (BIL).

While the BIL did not significantly alter the statute governing the WAP, some key impacts and federal requirements are *BIL Flow-down requirements – General information* on Davis Bacon, Buy American, National Environmental Policy Act (NEPA), Historic Preservation, Monitoring Activities, Workforce Development, Equity and Justice40 and Fuel Switching, including electrification.

In addition to BIL requirements, DOE is applying several Administration priorities to the expenditure of these funds, including focusing funding on workforce development and diversity, inclusion and equity on delivering funds and the benefits of funding across communities in the United States.

WAP BIL funding must be tracked, monitored and reported on separately from WAP annual appropriations funding and BIL funding is for long-term use "available until expended."

Policies and requirements pertaining to the **DOE WAP** and DOE BIL programs are marked in dark blue in this POM, requirements pertaining only to the **DOE BIL** are marked in light blue.

### **2.1.2. EMPOWER MARYLAND LIMITED INCOME ENERGY EFFICIENCY PROGRAMS**

In 2008, the Maryland General Assembly passed the EmPOWER Maryland Energy Efficiency Act, creating new opportunities for energy efficiency activities in Maryland. The initial legislation set a target reduction of 15 percent in per capita electricity consumption and demand by 2015 from a 2007 baseline. The legislation also provided for a surcharge to be assessed to ratepayers of the five participating electric utility companies in order to support programs designed to help meet the aggressive energy savings goal.

The EmPOWER programs are overseen by the Maryland Public Service Commission (PSC), which regulates gas and electric utility companies, and for-profit water and sewage companies in Maryland. The EmPOWER Maryland Energy Efficiency Act required the Baltimore Gas and Electric Company (BGE); Potomac Edison Company (PE); Potomac Electric Power Company (Pepco); Delmarva Power & Light Company (Delmarva); and Southern Maryland Electric Cooperative (SMECO) to submit for review to the

PSC three-year plans detailing the provision of energy efficiency activities to all client classes, including limited-income households. Five separate limited-income EmPOWER program components began operating under individual utility administration in 2009.

In April 2012, DHCD began administering the EmPOWER Limited-income Energy Efficiency Programs statewide. These weatherization type services help eligible low-to-moderate income households by installing energy conservation materials in their homes at no additional charge. Electrically heated or cooled clients of BGE, PE, Pepco, Delmarva and SMECO with qualifying incomes are eligible to participate in the program. Qualifying households become eligible for installation of energy-saving measures following a comprehensive home energy audit performed by an energy auditor who is a certified building science professional.

EmPOWER activities operate on a three-year cycle and require DHCD to submit a three-year program plan before each new cycle. The EmPOWER program plan defines the program and outlines methods, delivery and services with a goal of saving kWh for limited-income electric clients. HBEP staff issue grant agreements to Local Weatherization Agencies (LWA) and contracts to State Weatherization Contractors (SWC) participating in the program.

In February 2019, the Department entered into an agreement with Washington Gas Light Company (“WGL”) to implement a limited income energy efficiency program on behalf of WGL, substantially similar to the limited income program DHCD implements on behalf of BGE, Delmarva, PE, Pepco, and Smeco, pursuant to Order of the Public Service Commission 88514. Through this program, DHCD, will provide comprehensive weatherization, energy conservation, and helpful energy-savings measures to WGL’s limited income customers. Implementation strategy and customer eligibility will generally follow DHCD policies associated with the electric funds, unless otherwise noted.

Policies and requirements pertaining only to the **EmPOWER Whole Home Efficiency** program are marked in dark green in this POM, requirements for the **EmPOWER Base Efficiency** program are marked in light green.

### **2.1.3. MARYLAND ENERGY ASSISTANCE PROGRAM**

The Maryland Energy Assistance Program (“MEAP”) provides heating system repair and replacement for applicants with non-functioning heating systems. The Maryland DHCD’s Housing and Building Energy Programs administers the MEAP utilizing federal LIHEAP funding through an MOU with the Maryland Department of Human Services. Crisis cases have to be resolved on an expedited timeline as defined in project guidance.

DHCD receives funds dedicated to heating and cooling crisis work (MEAP-C) and may receive weatherization funds for weatherization activities (MEAP-Wx), upon DHS’s discretion.

From November 1 (October 1 in Garrett County) - March 31 (“no heat season”) MEAP-C funding is prioritized to resolve “Crisis - No Heat” situations.

From April 1 - September 30 MEAP-C funding is prioritized for the repair / replacement of non-functioning water heaters.

From June 1 – September 30 MEAP-C funding is prioritized for the repair/replacement of non-functioning or inefficient cooling equipment.

Policies and requirements for the MEAP-Wx funds generally follow DOE requirements, unless otherwise marked in light orange in this POM. Policies and requirements for MEAP-C work are marked in dark orange.

## **2.2. STATE ADMINISTRATION**

DHCD's Housing and Building Energy Programs (HBEP) provides the funding, management, technical assistance and administrative support for its single-family and multifamily weatherization and energy efficiency programs. All current guidelines for the various single-family weatherization programs administered through DHCD (i.e. funding restrictions, income level, assistance per dwelling unit, etc.) are incorporated in this manual.

### **2.2.1. SUBGRANT AGREEMENTS AND CONTRACTS**

DHCD utilizes a network of local non-profit Local Weatherization Agencies (LWA) and for-profit State Weatherization Contractors (SWC) to perform program related services for eligible recipients. A Grant Agreement is executed with an LWA whereas a contract is executed with an SWC. These documents define the relationship and expectations between the Department and the LWA or SWC and convey the program requirements including any incorporated governing technical guides, funding sources, funding amounts, reporting requirements, and performance periods.

#### **2.2.1.1. DEBARMENT AND TERMINATION**

Suspension or debarment of Network Partners from all programs of the Department will follow the procedure outlined in the Code of Maryland Regulations (COMAR) 05.01.05.01, et seq.

To the extent that any such suspension or debarment results in the termination of an Agreement, the procedures for notice and opportunity to be heard, as outlined in COMAR 05.01.05.01 et seq., will govern.

Termination as used in this section, does not include contract non-renewal. DHCD has no obligation to renew a Network Partners agreement that has expired. A decision by DHCD not to renew an agreement with an existing Network Partner may be made when funding is not available or not sufficient to provide a Network Partner with funding or when DHCD determines that it would be in the best interest of the State not to renew the agreement. The notification process described above only applies to contract termination and does not apply to contract non-renewal.

## 2.2.2. PROGRAM OPERATIONS MANUAL

The Weatherization Program Operations Manual (POM) is intended for use by HBEP and all Network Partners. This Manual is HBEP’s resource to consolidate all policies germane to the operation of its single-family weatherization programs into a single document. The remaining sections of this manual describe the many requirements each service provider must adhere to when performing services for DHCD’s energy efficiency programs.

It is the responsibility of SWC and LWA staff to be familiar with the full contents of this manual and perform program services accordingly. Network Partners are responsible to ensure subcontractors have the most recent copy and are familiar with the contents.

### 2.2.2.1. DIRECTIVES AND WPNs

Directives and WPNs make “Emergent Policy Changes” to the POM. Directives and WPNs are effective as of the date on the corresponding Policy Memo and Notice, unless another date is specified within the Policy Memo/Notice. Revisions will be applied to the POM and an updated version of the POM will be distributed to the network partners and made available online when major changes occur.

### 2.2.2.2. PROGRAM GUIDELINES

Projects shall be completed in accordance with Program Guidelines for the appropriate housing type (single-family, manufactured, and multi-family). Program Guidelines collectively include the federal and state regulations, State Plan, MD SWS aligned Field Guide, contract/grant agreement, Directives/Program Notices, the Weatherization Programs Operations Manual, and the Technical Policies and Procedures Manual. As federal, State, PSC or other regulatory requirements necessitate, DHCD will update the Program Guidelines via use of Directives and DOE WAP Weatherization Program Notices (WPNs) and memos as needed. DHCD will complete a comprehensive review and/or update of the POM, the Field Guide, Programmatic and Technical Monitoring Tools, and the Technical Policies and Procedures Manual annually. Senior Program staff reviews and authorizes policy changes. Network Partners and stakeholders can provide comments. Once the POM, Field Guide, and the Technical Policies and Procedures Manual are authorized by Senior Program staff, the updated documents will be distributed to Network Partners. A signed acknowledgement or email confirmation of receipt is required.

Regulation and Policy define allowable program work. The Standard Work Specifications (SWS) describe acceptable outcomes for weatherization or home performance upgrades - effective, durable, and safe improvements for each housing type. Additionally, see [section 8.3.2.8](#) for code compliance.

DOE

Work performed under the above-mentioned documents is governed by:

- Federal regulations, 10 CFR Part 440 and 2 CFR Part 200



- Grant Agreement and federal Terms and Conditions

The annual *Maryland State Plan* Application - identifies how the State will administer the program in accordance with federal regulations. This includes “Technical Guides and Materials”.

All measures and incidental repairs performed must meet the *MD SWS aligned Field Guide*. The Field Guide will be updated and reviewed by DOE for approval every 5 years.

In all cases, Program Guidelines should complement each other, not conflict. If conflict in Program Guidance is identified it should be brought to the Program Manager’s attention immediately.

#### EmP

Work performed under the above-mentioned documents is ultimately governed by the agency’s agreement with DHCD and the general requirements defined in the RFP or RFA. Where conflict may occur, the following hierarchy applies:

1. Contract or Grant Agreement
2. RFP or RFA requirements
3. Network Partner’s proposal
4. Technical Policy and Procedures Guide
5. SWS aligned Field Guide
6. POM

### 2.2.3. PROGRAM MANAGEMENT SOFTWARE

The Hancock Energy Software (HES), a web-based program management system, is used to manage the weatherization programs. Network Partners can access the system via a high-speed internet connection. Network Partners are required to enter data into HES, from initial client application and intake through to the energy audit and work order, and ending with invoicing of completed jobs.

DHCD monitors the information entered to make budget and lead allocation assessments, and complete monthly reports. It is imperative that Network Partners keep the system updated at each step of a project. Any activity performed for a client or job must be documented in Hancock within one week of the activity occurring. Projects not entered accurately and timely as they move from one stage to another in real time, are at risk of losing funding when DHCD reviews production and budget projections.

The Hancock user manual is included in the appendix of the Program Operations Manual. Training on the Hancock system is offered by DHCD at request, and there is phone, email (support@hancocksoftware.com), and chat support during office hours.

#### **2.2.3.1. HANCOCK USER ACCOUNT REQUESTS**

Each network partner employee that performs work in DHCD’s single family grant programs is required to have a Hancock user account. To request a user account, fill the employee's information in this [User Account Request Form](#) and upload [necessary certification documentation](#). DHCD will validate the certification requirements and provide a Hancock account for the new user within 2 business days of receiving all required documentation. Be sure to have the employee's contact information and required certifications on hand before filling out this form. For audit and inspection staff, the BPI number must be provided and added to Hancock.

Staff who also perform work as a subcontractor for other agencies require a separate Hancock account for each agency.

#### **2.2.4. NETWORK PARTNERS ROLES AND RESPONSIBILITIES**

Network Partners perform program services directly to the program recipients. They are the first point of contact for limited income households, who are the primary beneficiaries of weatherization assistance. They are also the contact for multi-family building owners. Network Partners perform most of the functions that are necessary to meet program goals and follow program procedures to ensure compliance with all program requirements.

Network Partners are responsible for ensuring that weatherization funds are only expended on approved program activities to eligible households, to achieve energy efficiency and technical performance goals of the program, and for educating program participants, and their building owners. Together with HBEP and other program partners, Network Partners foster the technical advancement of the program and provide the public “face” of weatherization. Network Partners are also responsible for cooperating with HBEP with providing information to DOE, PSC, to other State agencies such as the Department of Human Services, and to the public.

Network Partners are responsible for meeting all of the terms and conditions of this manual and other binding documentation. Any Network Partner with questions on any provision in this manual is encouraged to contact HBEP program managers. It is the responsibility of all Network Partners to read and understand this manual and to provide training for internal staff to know and understand its contents.

### **2.3. LOCAL WEATHERIZATION AGENCIES**

10 CFR Part 440 requires that the DOE program services are delivered by a Community Action Agency (“CAA”) or other public or private non-profit entity. An entity that receives WAP grant funds from DHCD to manage a weatherization project is considered a WAP subgrantee, also known as a Local

Weatherization Agency (“LWA”).

An LWA may provide services either statewide or regionally for various programs and funding including the DOE WAP, EmPOWER, and other opportunities as they become available.

The CAA or other public or nonprofit entity is selected through the Request for Application (RFA) process considering: (1) the subgrantees experience and performance in weatherization or housing renovation activities; (2) experience in assisting limited-income persons in the area to be served; and (3) the capacity to undertake a timely and effective weatherization program. Prior to an award, the entity is affirmed by public comments received during a public hearing.

In selecting a subgrantee, CFR 440.15 requires preference to be given to any CAA or other public or nonprofit entity which has, or is currently administering, an effective program. Program effectiveness is evaluated with consideration for a number of factors including but not limited to: (1) the extent to which the past or current program achieved or is achieving weatherization goals in a timely fashion; (2) quality of work; (3) the number, qualifications, and experience of the staff members of the subgrantee; and (4) the ability of the subgrantee to secure volunteers, training participants, public service employment workers, and other federal or state training programs.

Local Weatherization Agencies operating in-house crews to perform weatherization activities must hold and maintain any required licenses issued through the Maryland Home Improvement Commission.

#### **DOE Required Subgrantee Documentation**

The following documentation must be submitted to DHCD by each subgrantee and must be appropriately updated annually:

All Subgrantees:

- Subgrantee Articles of Incorporation, including amendments to date;
- Subgrantee’s current corporate by-laws;
- List of the current members and officers of the board of directors
- List of individuals authorized to sign contracts and amendments on behalf of the subgrantee
- Applicable Indirect Cost Rate approval documentation
- Evidence of required insurance
- A current organizational chart showing management hierarchy and division of responsibilities.
- Most recently executed contracts and date/time stamped documentation of contractor verified SAMs status.
- Written Policies and Procedures Manual (specifically on the following):
  - Personnel policies or Employee Handbook
  - Financial policies and procedures
  - Procurement policies and procedures

- Most recent Single Audit (if applicable)

Additional document for units of local government:

- A letter, on appropriate letterhead and signed by the chief elected official, stating that the organization is a division, office, department, etc. of a unit of local government.

EmP

A subgrantee cannot perform work as both an LWA and an SWC for the same program.

## 2.4. STATE WEATHERIZATION CONTRACTORS

State Weatherization Contractors (SWC) are eligible to receive EmPOWER and other funds, and can perform services for DOE WAP as a subcontractor to LWAs. As a for-profit entity, SWCs are not eligible to receive DOE funds directly.

SWCs are selected through a Request For Proposal (RFP) through the State of Maryland procurement process based on experience, capacity, capability, and pricing and provide weatherization services to eligible clients statewide.

## 2.5. SUBCONTRACTORS AND MINORITY BUSINESS ENTERPRISE (MBE) GOALS

LWAs and SWCs may subcontract some of the services required for performing work as defined in their agreements and allowed throughout this POM. The Network Partner is responsible to train their subcontractors and oversee their work to ensure compliance with program policies. Changes in program policy must be relayed to the relevant subcontractors.

DOE

Subgrantees must take all necessary affirmative action steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Affirmative steps must include:

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;

4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women’s business enterprises;
5. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
6. Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs 1-5 of this section.

See [this section](#) for comprehensive guidance on procuring subcontractors.

**EmP**

SWCs are required to adhere to certain MBE subcontractor goals as identified in the RFP applicable to the performance period and are required to submit monthly payment reports to DHCD Office of Fair Practices. Liquidated damages may apply in the event the contractor fails to comply with the requirements of the program.

For details on the process, see MBE Attachment D-1A MBE Utilization and Fair Solicitation Affidavit & MBE Participation Schedule – Instructions.

**MEAP**

MBE subcontractor goals may apply based on requirements in the RFP or RFA.

### 3. NETWORK PARTNER ADMINISTRATIVE MANAGEMENT

#### 3.1. BUDGET MANAGEMENT AND PRODUCTION

The HBEP single family programs use Hancock for budget management. After contract / grant agreements are in place, budgets will be awarded through allocations in Hancock by funding source.

Each funding source contains individual budget categories. These budget categories allow DHCD to track spending and assist in fulfilling reporting requirements.

Network Partners are required to monitor their expenditures and production throughout each budget period and make adjustments necessary to complete their production goal and fully expend their budget period allocation. Partners should assess their expenditures and production each month. This assessment should review expenditures and production to date, as well as any anticipated expenditures and production through the end of the budget period.

If the total projected expenditures or production for the budget period has changed significantly from the last approved budget for that budget period, or if the projected expenditures within budget

categories vary significantly from the last approved budget for that budget period, HBEP program staff should be consulted to determine whether a budget amendment is necessary. DHCD has the ability to increase or decrease a Network Partner's allocation at its discretion. If an allocation adjustment is required, the Network Partner will be notified in writing for each occurrence.

It is the responsibility of the Network Partner to analyze their budget and manage production and expenditures accordingly.

Program managers connect with network partners at least quarterly to assess the budget status.

### **Client Status Report in Hancock**

The client status/Pipeline Report is designed to provide DHCD a status update of all jobs listed in Hancock. This report is used to help HBEP staff determine budget allocation and lead distribution. The network partners can use it as a tool for managing their budget balances. It is the responsibility of the network partner to ensure the status of each job is properly reflected in Hancock. Spreadsheets and written updates will not be accepted. Please follow the below process to verify every job being serviced is accurately reported in Hancock:

- Main Hancock Menu; expand Job Menu and select Client Status Report
  - Select the funding source
  - Leave the county blank, unless county specific job status is required
  - The target date will default to the current date, this can be changed if needed
- Hit search
  - Click on the blue numbers to see the specific client detail for each status. This detail will assist in determining if a job has the proper status
- Bottom left of the screen select pipeline report
  - The popup window details the current status of budgets, budget balances, and amount of jobs in the production pipeline.

#### **DOE**

### **Bank Account Requirements**

#### Insured bank accounts

Insured accounts are required to maintain advances of federal funds. WAP funds must be deposited in either a financial institution insured by the Federal Deposit Insurance Fund Corporation or a credit union insured by the National Credit Union Share Insurance Fund.

#### Interest-Bearing Accounts

Interest-bearing accounts are required to maintain advances of federal funds. It is a requirement to remit interest in excess of \$500 per year to DHCD on a quarterly basis.

### **Coordination with Other Programs**

DHCD recommends that where WAP will be leveraged with other development subsidies to preserve and enhance affordable housing, subgrantees should engage the housing provider as early as possible.

Coordination will be necessary to integrate WAP work into the larger project, and energy audits can be a useful tool to help define priorities in the overall scope of work. Both parties should be familiar with the goals and restrictions of all of the financing sources and should discuss in advance how the subgrantee's work will be coordinated within the project schedule.

DHCD is committed to an open and flexible approach to work strategically with WAP subgrantees and local partners to maximize resources, save energy, and preserve affordability.

Although coordination is strongly encouraged, subgrantees are reminded that there are core program principles that must be maintained as follows:

- Assisted households must be eligible under WAP rules; all WAP policy must be followed.
- There must be an approved DOE energy audit with an evaluation of energy-related health and safety (H&S) conditions, analyzing existing building conditions and building energy use. There must also be a written scope of work that documents the work that will be funded by WAP and the work that will be funded by other sources.
- Material and installation standards must meet DOE WAP requirements.

### **Program Income**

Program Income is gross income earned by the recipient that is directly generated by a supported activity or earned as a result of WAP activities. Program Income includes income from fees for services performed, the use or rental of real personal property acquired under the federally-funded project, the sale of commodities or items fabricated under an award, license fees and royalties on patents and copyrights, and from payments of principal and interest on loans made with WAP funds. Interest earned on advances of DOE funds is not Program Income. Program Income does include rebates, credits, discounts, etc., or interest earned on any of them.

Program Income funds include funds received from rental of WAP tools and equipment for fee-for-service activities. Before Program Income funds can be expended, a Program Income budget should be submitted to the Program Manager for approval. The plan must be prepared at the beginning of the annual budget period and may be modified during the budget period.

- Program Income funds must be accounted for separately and expended before any other program funds are spent.

- Up to 10% of the Program Income funds may be used for T&TA.
- A minimum of 80% of the funds received must be used for labor, materials and program support, in compliance with DOE regulations.
- All Program Income received during a given budget period must be identified in the Unaudited Financial Statements.
- Subgrantees must report on the receipt and expenditure of Program Income on a quarterly basis during the desk review process.
- Program Income received within an annual budget period must be spent before any other funds are requested from DHCD.
- DOE will maintain a reversionary right to all tools and equipment purchased with Program Income.

Interest income earned on Program Income funds may be retained by the subgrantee, and shall be used at the discretion of the subgrantee's board to further the corporate purposes of the subgrantee organization.

### **Fee-for-Service Activities**

DHCD encourages subgrantees to seek out other resources to address the energy and affordable housing needs of low-income households in their community. WAP subgrantees may sometimes engage in activities that provide service to low-income and other households across the State under contract to utilities or other public agencies. These activities must be performed on a fee-for-service basis by the subgrantee where:

1. services are provided to households that are not eligible for WAP (e.g., do not meet WAP income eligibility limits).
2. services are not coordinated services provided in conjunction with WAP for an eligible household.

Subgrantees who engage in fee-for-service activities are reminded that their primary responsibility in accordance with the terms and conditions of their contract with DHCD is the implementation and operation of the WAP. WAP subgrantees are required to provide the highest quality service to assisted households, while meeting all federal and state requirements and providing work of the highest quality.

The following minimum requirements must be met by WAP subgrantees engaging in fee-for-service where WAP-funded staff, materials or other resources are shared in order to continue to receive WAP funding from DHCD:

1. Subgrantees must notify DHCD, in writing, of any fee-for-service activity prior to commencement of that activity.



2. Subgrantees must enter into written agreements for any fee-for-service activities and provide the DHCD Program Manager with a copy of that written agreement.
3. Subgrantees must establish a separate and distinct operation to perform fee-for-service work, and must establish and maintain separate accounting records for this work. All fee-for-service activities must be supported by books and records separate and distinct from those required for the WAP. DHCD staff must be provided with access to these books and records upon request.
4. Subgrantees must notify the DHCD Program Manager, in writing, of any fee-for-service activity where federally-funded tools, equipment, facilities, or shared staff are planned to be used to complete fee-for-service activities.
5. Subgrantees operating fee-for-service activities that utilize tools and equipment purchased with federal WAP funds must pay rental fees to the WAP in accordance with prevailing rates established by private tool and equipment rental firms in the surrounding area. These rental fees are considered Program Income.
6. Subgrantees operating fee-for-service activities out of facilities paid for with federal WAP funds must ensure that the WAP is reimbursed for the use of those facilities.
7. The use of vehicles purchased with WAP funds may be allowed; if vehicles purchased with WAP funds are used in a fee-for service operation, the WAP account must be reimbursed for use of the vehicle at the State of Maryland mileage rate.
8. Rental of WAP tools and equipment is only permitted if a price list for a standard list of “tool kits” that are needed for the tasks that the WAP tools and equipment are used for has been established. This price list must be used by the subgrantee as the basis for the cost for the specified tasks and the rental cost for the WAP tools and equipment.

Subgrantees must reimburse the WAP program on a monthly or quarterly basis, in consultation with DHCD Program Manager, using information collected regarding the fair market value for use of tools and equipment during the period.

Subgrantees must comply with all federal and state labor regulations (including prevailing wage requirements, when applicable) regarding the employment and relevant of staff in activities outside the normal scope of their employment and relevant overtime compensation. It is not sufficient to claim that staff is performing fee-for-service activities on nights and weekends. These activities must be documented by payroll records that show that staff are working on these activities at times other than those covered by the WAP contract. In cases where fee-for-service activities are performed by staff funded by the WAP during times budgeted in the WAP contract, the program budget must be adjusted accordingly.

Subgrantees engaged in fee-for-service activities may not advance WAP funds to pay for staff salaries, materials, subcontracts, or any other expenses incurred as a result of fee-for-service

activities. Subgrantees may not pay for these activities through the WAP in the first instance. This would constitute a loan of public funds to a private enterprise which would be providing it with an unfair advantage over potential competitors. Subgrantees must fully fund these types of activities with non-program funds.

Subgrantees must be familiar with the provisions under the DOE Financial Assistance Rule [2 CFR Part 200.313 (c) (3)], which regulates the use of equipment acquired with grant funds. Specifically, it states that “the non-Federal entity must not use equipment acquired with the federal award to provide service for a fee that is less than private companies charge for equivalent services unless specifically authorized by Federal statute for as long as the Federal government retains interest in the equipment.”

Funds received as a result of fee-for-service activity are considered agency income, not Program Income; therefore, the use of these funds is unrestricted from the perspective of the WAP. However, subgrantees should be careful to make sure that the receipt of these additional funds does not legally affect their not-for-profit status, which would affect their subgrantee status.

Subgrantees should also involve their accountant and counsel in setting up fee-for-service components to make sure that all financial and legal matters are established and maintained as separate and distinct “arm’s-length” entities from the federally-funded WAP.

Subgrantees that are using tools and equipment purchased with WAP funds as part of a fee-for-service activity are encouraged to use earned agency income to purchase the necessary tools and equipment for this activity. It is expected that subgrantee fee-for-service components will be limited to three years. In any case, where a subgrantee proposes to continue to rent these tools and equipment from the WAP beyond three years from the date when the fee for service component first originated, approval must again be obtained by the DHCD Program Manager.

### **Conflict of Interest**

Each subgrantee must maintain written standards of conduct governing the performance of its employees engaged in the award and administration of contracts (2 CFR 200.112). No subgrantee employee, officer, or agent shall participate in the selection, award, or administration of a contract supported by federal funds if a real or apparent conflict of interest would be involved.

Such a conflict would arise when the employee, officer, or agent, any member of his/her immediate family, his/her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in the firm selected for an award. The officers, employees, and agents of the subgrantee shall neither solicit nor accept gratuities, favors, or anything of monetary value from subcontractors or parties to

sub-agreements (e.g., agreements governing procurement of materials).

The standards of conduct shall provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the subgrantee.

Subgrantee staff that act in a decision-making capacity with respect to WAP funds or are in a position to influence a decision (such as staff that determines the work scope on an assisted building) may not directly benefit from the investment of WAP funds. WAP funds may not be invested in buildings owned by officers, employees, or agents of the subgrantee, including investment in rental property owned by officers, employees, or agents.

Waivers will be granted on a case by case basis and assistance may only be provided for residential units when:

- The subgrantee received written prior approval from the DHCD Program Manager.
- all other program rules and guidance are adhered to.
- subgrantee employees are not provided with greater opportunity to learn about the program or apply for assistance than other members of the community.

Subgrantee staff acting either as individuals or on behalf of an outside contracting firm may not solicit or provide contractor services to low-income households who have received or been deemed eligible for WAP services. Low-income households seeking work from private contractors should be advised to consult with other sources. Also, subgrantee staff that offers other energy or building repair services for a fee to the general public may not also perform these same services for the subgrantee.

Any subgrantee staff member who originally establishes a relationship with the household as a representative of the WAP must not transition that relationship to one where they subsequently become a private contractor for the household. Subgrantee staff engaged in private contractor work are also prohibited from using subgrantee tools, vehicles, and equipment to perform this work, and must have their own privately-owned tools, vehicles, and any other equipment when doing any contractor work not otherwise prohibited.

Subgrantees set up to perform services through a fee-for-service arrangement are not prohibited from providing such services as long as the subgrantee, and not an employee acting as an independent contractor, is paid for the service in accordance with all appropriate requirements related to this type of arrangement.

The following examples illustrate conflicts of interest that must be avoided by subgrantees:

#### Example A

The auditor from Subgrantee A goes to the home of an applicant to perform an inspection before the WAP work is begun. While explaining to the applicant what the WAP will provide, the auditor indicates that new prime windows will not be included in the scope of work, in response to questions by the applicant. The auditor remarks that he could install new

windows, but the cost would have to be paid by the applicant.

The applicant states they would be willing to pay for new windows. The auditor responds that he could do this work for the applicant. The applicant agrees, and the auditor returns at a later date and completes this installation as a private contractor.

This is clearly a conflict of interest on the part of the auditor. While the subgrantee's code of conduct may not prohibit the auditor from engaging in any related outside business, under no circumstances should the auditor engage in or solicit business from an assisted household. When a subgrantee operates a fee-for-service component to their program in accordance with the guidance provided elsewhere in this manual, they may install windows through a separate agreement, following prior approval by DHCD, but subgrantee staff operating their own business may not contract separately with an applicant.

#### Example B

An ad is placed which advertises contractor services. The person providing these services is the director of the local WAP subgrantee and performs other contracting services on a part-time basis. The ad does not mention the local WAP program.

A homeowner seeing the ad is interested in having their roof replaced and calls the contractor. A price is agreed, and while replacing the roof the contractor mentions that he is also the director of the local WAP.

The homeowner has never heard of the program but applies and is deemed eligible and is placed on the waiting list. Now that this homeowner has become a WAP applicant, the WAP director can no longer engage in any private contractor work for the homeowner.

The initial agreement to install the roof might violate the subgrantee's code of conduct; therefore, the WAP director should first determine that outside employment is in fact permitted by the subgrantee. When the homeowner becomes a WAP applicant, a clear conflict of interest exists. The homeowner must be referred to other contractors for any work that is outside the WAP scope of work.

#### Example C

An employee of the subgrantee also has an automotive service and repair business that she operates after regular business hours. This subgrantee employee cannot bid on or perform automotive repair work or provide other services or products to the subgrantee.

#### Example D

The subgrantee weatherization coordinator tells some subgrantee staff that additional funding will soon become available and that an outreach event will be conducted by the subgrantee the following week. He tells them that if they get on the list now, they will have a better chance of getting assistance than if they wait until the outreach event.

This is a conflict of interest because subgrantee staff who received advance notice of the

outreach event would receive assistance sooner than other eligible households in the community. The subgrantee should not accept applications from employees that are aware of the outreach event until after the event is held and must notify DHCD immediately if this principle is violated.

### 3.1.1. PROJECT DOCUMENTATION

The Network Partner must implement and maintain record-keeping procedures that reflect effective and efficient program management and document all activities relating to the delivery of weatherization services to eligible households. The Network Partner is also required to generate accurate reports regarding each weatherization project and the status of the program.

The Network Partner must develop and maintain an organized and usable filing system containing the information necessary to prepare all required reports. It is the responsibility of the Network Partner to ensure that all weatherization files are complete, accurate and accessible for review by DHCD and federal staff (if DOE WAP funds have been provided).

#### DOE Required File Documentation

The following documents must be maintained in each client file by all subgrantees in an organized manner so that they are readily accessible for review by DHCD staff. Documents can be in electronic and/or paper format.

1. OHEP/Weatherization Application
2. Proof of Ownership
3. Copy of Notice of Eligibility (LWA generated lead)
4. Historic Preservation Response Letter (if applicable)

Additional documentation must be uploaded in Hancock per the documentation requirements listed in the [invoicing section](#).

Records related to the use of DOE WAP funds must be maintained and reasonably accessible for a minimum of 3 years following the close of the associated federal grant.

EmP EmPOWER does not require paper files. All files can be kept electronically and must be uploaded in Hancock per the documentation requirements listed in the [invoicing section](#).

MEAP MEAP does not require paper files. All files can be kept electronically and must be uploaded in Hancock per the documentation requirements listed in the [invoicing section](#).



### 3.1.2. REGULATIONS DOCUMENTATION

DHCD’s weatherization programs, including DOE WAP and EmPOWER, are governed by program regulations that define permitted activities. It is important that these regulations are maintained and accessible for easy reference in the network partner’s filing system. Network Partners may keep regulations in electronic format.

The file should contain at least the following for applicable awards:

- Program Operations Manual (only the most recent version of the POM shall be referenced)
- SWS-aligned Maryland Field Guide
- Technical Policy and Procedures manual (most recent version)

<b>DOE</b>	Additional documents required to be on file: <ul style="list-style-type: none"><li>● DOE WAP State Plan</li><li>● Department of Energy Federal Regulations (10 CFR 440, 2 CFR 200, OMB circulars) and amendments</li><li>● Directive or guidance documents relating to DHCD’s weatherization programs</li><li>● Annual Monitoring Reports (Programmatic, Financial and Technical)</li></ul>
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## SECTION B - ENERGY EFFICIENCY PROJECT GUIDANCE

### 4. OUTREACH

#### 4.1. NETWORK PARTNER OUTREACH

DHCD's Network Partners are expected to actively promote the programs they implement for the Department to all potential clients they interact with during any of their operations. This effort should not be limited to the energy efficiency programs the network partner performs on behalf of the Department, but may also include non-energy related non-profit programs or outside energy programs.

It is essential that network partners provide outreach so that all eligible households in their service area, including those with concentrations of minority groups or others that are not likely to apply without targeted outreach, are aware of the program. This may include outreach to neighborhoods or areas other than the one in which the network partner is located.

**DOE** Network Partners have an obligation to make sure that all eligible households in their service area have access to program services and to affirmatively market the program to those least likely to apply. Subgrantees should ensure that WAP information is readily available at all local human services and governmental agencies serving low-income persons and that staff of those agencies are familiar with WAP.

Network Partners need to have an adequate number of applicants available in order to provide WAP services to the number of dwelling units projected for any given year. In areas of the state where subgrantees have a difficult time obtaining enough applicants to fulfill their commitment to DHCD, outreach for applicants will play an essential role.

Outreach efforts must be made to provide information regarding the nature and existence of the program, eligibility requirements, the application process, and accessing the program. Outreach efforts should be aimed at other public and private organizations providing similar services as well as directly to the public through various types of public service announcements.

Network Partners must have written protocols in their operations manuals describing their outreach efforts and applicant selection process that address the demographics of their service area with specific reference to how they identify and serve owners and renters and other populations with special needs.

DHCD will provide additional leads to supplement the stream of applicants. It is the LWA's responsibility to notify DHCD when additional leads are needed.

Network Partners should not limit their waiting lists for assistance based on anticipated funding availability.

**EmP**

Network Partners are expected to perform additional outreach activities beyond their regular business operations to generate client leads to supplement the stream of leads supplied by DHCD to meet RFP responses and program production goals. Such activities may include mailers, email campaigns, networking with building owners and building owner associations, community events, etc. Network partners may perform such activities at their own discretion and timing depending on their own need for leads as long as the DHCD supplied client leads remain the priority for service. Please see [this section](#) for the appropriate use of marketing materials.

**MEAP**

Network Partners may refer potentially eligible clients to [DHCD's intake team](#).

#### 4.1.1. TARGET POPULATION

**DOE**

##### **Priorities for Assistance**

Subgrantees must have a written policy in their operations manual outlining how they prioritize and select households and buildings to be weatherized.

Subgrantees are required to provide weatherization services to clients based on the priorities defined in the DOE regulations, 10 CFR 440.3, to ensure that the most vulnerable households are serviced first.

It is the subgrantee's responsibility to administer weatherization services based on the priorities; however to assist with this requirement, DHCD has implemented the Client Priority Score, an automated algorithm provided by the Hancock Software. The Client Priority Score will assign points to each client based on data inputs and then determine the order in which services should be delivered to each household. Once the score is determined, each household will receive a "WAP Rank". Clients will be automatically filtered and listed in Hancock by the highest to lowest WAP Rank.

The priority score is defined below. In cases where all priorities are equal, time on the waiting



list shall be used as the final deciding factor:

1. Priority for Elderly: Four (4) priority points are given to each elderly person residing in the household. Elderly is defined as age 60 or older.
2. Priority for Children: Four (4) priority points are given to each child under 5 residing in the household.
3. Priority for Persons with Disabilities: One (1) priority point is given to each person with disabilities residing in the household.
4. High Residential Energy Users: One (1) priority point is given to high residential energy users.
5. Priority for Households with a High Energy Cost Burden: Up to four (4) priority points can be given to households with a high energy cost burden. The high energy burden calculation percentage is defined as the total annual household energy cost divided by the total annual household income across all fuel sources.
  - Group 1 - 0-10% - One (1) priority point
  - Group 2 - 11-15% - Two (2) priority points
  - Group 3 - 16-20% - Three (3) priority points
  - Group 4 - 21%+ and clients with no income - Four (4) priority points

Additionally, at-risk clients with valid medical documentation will receive the highest priority after meeting 1 of the 5 priorities listed above. Subgrantees may also schedule work with reduced regard to priorities where projects are able to coordinate work with other funding sources.

All subgrantees must maintain a waiting list of applicants that have contacted the agency to apply for assistance. It is a best practice to utilize a pre-application to screen applicants for eligibility. It is not acceptable to only maintain a waiting list of applicants that have completed the eligibility process and are ready to proceed to audit.

**EmP**

Contractors are expected to service clients on a first come first serve basis as client leads are assigned and cooperative. Non-responsive clients may lose their spot in line.

**MEAP  
-C**

Network Partners are expected to service waitlisted clients in order of assignment and approval by DHCD. The client tag in each client file indicates the order of assignment.

DHCD will prioritize and assign "crisis" clients based on the following priorities:

1. Homeowners with elderly and/or disabled individuals, or with a documented critical medical need
2. Homeowners with children under 5 years old

3. Homeowners with high energy use, as defined by monthly electric use exceeding 1,500 KWh or monthly gas use exceeding 150 therms.
4. Other homeowners
5. Renters

When there are no waitlist clients to be served, Network Partners shall service clients in order of identification as being MEAP-C eligible, while prioritizing the current crisis season and the priority list stated above.

MEAP  
-Wx

Network Partners are expected to service clients on a first come first serve basis as client leads are cooperative. Non-responsive clients may lose their spot in line.

## 4.2. USE OF OUTREACH MATERIALS

DHCD provides program materials that are approved for use in the network partner’s outreach efforts and can be requested from DHCD via [this form](#). Such materials may include fact sheets, brochures, postcards, door hangers, and other items. DHCD also provides templates of client facing letters and notifications as included in the appendix of this POM.

Network partners may create additional client facing outreach materials as needed, but must present them to DHCD for approval before use. The network partner’s publications and advertisements must include statements and/or information that DHCD is the funding agency.

DOE

Subgrantees must perform outreach activities and are strongly encouraged to generate their own outreach materials. When promoting the WAP, subgrantee publications and advertisements must include statements and/or information that DHCD is the funding agency. DOE has Spanish-language outreach materials available, and in some areas LWAs may need to make arrangements to conduct applicant services in languages other than English or Spanish. LWAs may order reasonable amounts of such materials for their outreach efforts.

EmP

Materials created for the purpose of marketing must include language that the service is provided using EmPOWER Maryland funds. The EmPOWER logo must be included as well as the message “Energy-saving Solutions brought to you by EmPOWER Maryland.”

## 5. CLIENT INTAKE

## 5.1. CLIENT APPLICATION PROCESS

DHCD has partnered with the Maryland Department of Human Services (DHS), Office of Home Energy Programs (OHEP) which administers the Low-Income Home Energy Assistance Program (LIHEAP). Through this partnership, DHCD has access to the DHS OHEP database to download the list of households on a monthly basis that have been certified as income eligible for energy assistance services. Once the list is retrieved, DHCD designates the eligible applicants by territory and assigns cases to Network Partners as described in [this section](#). An executed copy of the certified eligible application of each client is maintained at DHS and is accessible by DHCD.

In addition, DHCD and LWAs process direct applications in house. SWCs shall not process income-based applications. If a client provides a completed application to a SWC, the SWC must submit the application to [dhcd.energyintake@maryland.gov](mailto:dhcd.energyintake@maryland.gov) for approval.

**DOE** Any eligible applicants that are assigned to LWAs by DHCD are provided only to supplement the subgrantee's responsibility to effectively conduct outreach and client intake to solicit applications from eligible households of potential weatherization projects.

For direct applications, a Weatherization Application must be maintained in the client file for each household that applied for WAP assistance. Applications should be noted as eligible or ineligible, and there must be an application for every unit in each assisted building, except for certain federally assisted projects that are deemed categorically eligible following the procedures outlined in DOE WPN 22-5 and also described section 5.2.1.

Additionally, some households are deemed categorically eligible if they:

- contain a member who has received cash assistance payments under Title IV or XVI of the Social Security Act or applicable State or local law at any time during the 12-month period preceding the determination of eligibility for weatherization assistance.
- reside in buildings that have received assistance from certain HUD programs pursuant to DOE WPN 22-5.
- reside in any other building that claims categorical eligibility by participation in another assistance program that has eligibility requirements that are as restrictive as those of the WAP. Documentation from the administrator of the other program establishing participation must be provided.

In accordance with DOE guidelines, Maryland may use the LIHEAP limit of 60% of State Median Income (SMI) but not lower than 200% of Federal Poverty Level (FPL). DHCD has adopted these guidelines. The most current income limits are updated annually and can be found on [DHCD's WAP website](#).

Subgrantees must complete the following actions when conducting outreach/intake procedures:

- Conduct outreach to solicit applications from eligible households;
- Households apply, and if demand exceeds available funds, are placed on a waiting list;
- As assistance becomes available, review application and determine whether additional information is needed;
- Verify income and document eligibility;
- Certify eligibility by signing the application;
- Notify clients of eligibility status.

**EmP**

Applicants for the EmPOWER program must provide a copy of their utility bill or other documentation to demonstrate that they are residential clients of an EmPOWER participating utility. Applicants who do not apply through OHEP, must also provide a signed utility release form.

Households with an income up to 250% of FPL / 80% AMI are income-eligible. The current income limits are listed on [DHCD's EmPOWER website](#).

In addition, participants of certain other programs are deemed categorically eligible for the EmPOWER programs and do not require further income verification. However, they must still provide basic information and proof of categorical eligibility to DHCD. Refer to section 5.2.1 for more details on categorical eligibility.

**MEAP  
-C**

Households with an income up to 200% of FPL are income-eligible. The current income limits are listed on [DHCD's MEAP website](#).

Households with 1 or more SSI recipients are categorically eligible.

All applicants must be approved by DHCD. LWAs are able to certify household eligibility, but must get approval from DHCD before committing funding to a project.

The household must have a non-functioning or inefficient heating system, cooling system, or water heating system.

**If an LWA or SWC is referring a MEAP client to DHCD follow the below procedure**  
*For a client who is currently income-certified:*

MEAP -Wx	<ul style="list-style-type: none"> <li>Use the <a href="#">Critical Service Referral Form</a> to have clients added to the MEAP list.</li> </ul> <p><i>For a client who is not currently income-certified:</i></p> <ul style="list-style-type: none"> <li>Send them an Energy Programs application or forward them to the DHCD call center (the 1-855-583-8976) which will send them an application.</li> </ul>
	Households with an income up to 200% of FPL are income-eligible. The current income limits are listed on <a href="#">DHCD's MEAP website</a> .

### Re-Certification

All certified applications expire twelve months from the date of certification and must be recertified before starting weatherization service activities, if such activities were not started prior to the expiration date. Re-certification is not necessary if the project has progressed at least past the audit prior to the expiration date and the work is completed within the timeframe the respective program allows. The age of the application is determined by the original certification date as noted in Hancock.

The [Documentation of Income procedures](#) of the manual should be followed as well as the [Certification Procedures](#). However, for households whose total income is Social Security or Supplemental Security Income, S.S.I. , the Recertification of SSI form may be used.

#### 5.1.1. CLIENT INTAKE BY OFFICE OF HOME ENERGY PROGRAMS

The Office of Home Energy Programs (“OHEP”) receives, evaluates and certifies applications for energy assistance. Income up to 175% of the federal poverty line (“FPL”) is eligible for assistance and automatically qualifies for DHCD’s income-based programs. An applicant can select that they wish to be referred to DHCD to participate in energy efficiency programs. DHCD also receives any applications with incomes between 175% and 250% of FPL, which are considered “OHEP leads” for the appropriate DHCD programs.

OHEP leads are deemed income eligible by OHEP and require no further income verification. DHCD screens these leads for previous weatherization, meeting specific program income guidelines, and re-weatherization eligibility before they are [distributed](#) to Network Partners. DHCD sends eligibility letters to each screened client. These letters include the name of and contact information for the assigned Network Partner and the Energy Assessment Agreement form.

OHEP Application Information	
Website	<a href="http://dhr.maryland.gov/office-of-home-energy-programs/">http://dhr.maryland.gov/office-of-home-energy-programs/</a>
Link to Apply	<a href="http://dhr.maryland.gov/office-of-home-energy-programs/">http://dhr.maryland.gov/office-of-home-energy-programs/</a>

	<a href="#">gy-programs/how-do-you-apply/</a>
Phone Number	1-800-332-6347

### 5.1.2. CLIENT INTAKE BY DHCD

DHCD processes applications from applicants who do not wish to sign up for any OHEP programs, and handles cases that require assignment to specific Network Partners, such as re-certifications or leads generated by SWCs.

The intake and income verification procedures comply with the current *Poverty Income Guidelines and Definition of Income* program notice to ensure that clients are income certified at or below 200% FPL for DOE and MEAP, and 250% FPL for EmPOWER. DHCD screens these leads for previous weatherization and re-weatherization eligibility before they are [distributed](#) to Network Partners. DHCD sends eligibility letters to each screened client. These letters include the name and contact information for the assigned Network Partner and the Energy Assessment Agreement form.

DHCD Application Information	
Website	<a href="http://dhcd.maryland.gov/Residents/Pages/lieep/default.aspx">http://dhcd.maryland.gov/Residents/Pages/lieep/default.aspx</a>
Link to Apply	<a href="http://dhcd.maryland.gov/Residents/Pages/lieep/EmPOWER-PreApp.aspx">http://dhcd.maryland.gov/Residents/Pages/lieep/EmPOWER-PreApp.aspx</a>
Phone Number	1-855-583-8976

### 5.1.3. CLIENT INTAKE BY LWA

LWAs are required to provide intake services to participants in their area provided those participants are not already enrolled or are enrolling in OHEP energy assistance programs. LWAs must qualify each client in accordance with DOE Program Guidelines. LWAs must maintain records for each client served which may be inspected by DHCD and DOE at any time. Where the LWA shares an inter-office agency with an OHEP office, LWAs are not permitted to receive direct referrals from that office, unless given express approval from DHCD. All OHEP referrals are maintained and distributed centrally from DHCD.

Upon completion of the application and a review of the required documentation, the LWA makes an initial determination of eligibility or verifies if referral has been made through OHEP.

Individuals seeking weatherization assistance may make an application either in person or by proxy to their Local Weatherization Agency. The agency providing intake services must ensure that all information is complete. Upon DHCD approval and verification that the applicant is not already on the OHEP list, client information is then entered into the Hancock system and assigned a job number.

An electronic client file is generated in Hancock and can be used for all required file documentation with the exception of income eligibility documents.

**DOE**

**Services to Agency Employees and Board Members**

Subgrantees should be aware that service to employees and relatives of employees may appear as a conflict of interest. As such, subgrantees must obtain prior approval from DHCD's Program Manager.

Subgrantees must have a written policy in their operations manuals outlining how they prioritize and select agency employees, relatives of agency employees, and income-eligible board members for service. Senior agency staff may not receive WAP assistance. Board members may not apply for assistance while they are serving on the board, but may receive assistance if they applied before becoming a board member.

At a minimum, the following policy and procedures must be followed when providing weatherization services to employees, relatives of employees, or board members. Failure to adhere to the following policy and procedures may result in a partial or total disallowance of all costs associated with the work conducted:

- A completed, signed, and dated application must be on file documenting the income eligibility of the applicant and the unit to be weatherized.
- Prior approval documentation. Written approval by the DHCD Program Manager must be on file. This approval must be obtained after the applicant is approved by the agency and before the audit is done.
- The applicant must be placed on the subgrantee's waiting list (after DHCD approval is given) and not be moved ahead of other applicants because of any special considerations other than those available to any other applicants in similar circumstances.
- The weatherization work scope must be prepared based on the DOE-approved energy audit.
- The investment in the building to be weatherized must conform to the energy audit conducted and the subsequent work scope that was determined.
- The weatherization work performed, including any repairs and H/S work, must be consistent with the approved energy audit and work scope, in accordance with all DHCD standards.

MEAP  
-C

LWAs are permitted to perform intake and certify clients, however all clients that are to receive MEAP-C funds, must be submitted to DHCD using the [Critical Service Referral Form](#) .

#### 5.1.4. CLIENT INTAKE BY SWC

SWC's are not eligible to handle or verify clients' income information. Any income-based applications must be forwarded to DHCD or an LWA for processing.

EmP

SWCs are only eligible to verify categorical eligibility for EmPOWER based on the criteria established in section 5.2.1.

## 5.2. ELIGIBILITY DETERMINATION

Eligibility for both the applicant and the applicant's dwelling unit (building) must be determined before program funds can be expended in any project. The eligibility guidelines under this section apply to all projects and are verified at multiple steps including at the time of application, lead management, and energy audit based on the information available. Network Partners are required to inform DHCD if they notice any indication that the client is not eligible.

DOE

### Notice of Eligibility

Applicants must receive written notification, on subgrantee official letterhead, of their eligibility status within thirty days of completed application submission to the WAP subgrantee. A copy of the applicant's Notice of Eligibility must be placed in the subgrantee's files. In multi-family buildings where a notification is posted, one copy should be in the building file.

### Notice of Ineligibility

Applicants must receive written notification, on subgrantee official letterhead, of their eligibility status within thirty days of completed application submission to the WAP subgrantee. A Notice of Ineligibility must include the reason(s) for denial of WAP services. A copy of the applicant's Notice of Ineligibility must be placed in the subgrantee's files. In multi-family buildings where a notification is posted, one copy should be in the building file.

### Appeals of Ineligibility



The appeals process for ineligibility determination is as follows:

1. Applicant will notify the subgrantee, in writing, of intent and reason for appeal.
2. Subgrantee will submit the applicant's file and appeal letter to the DHCD Program Manager.
3. The DHCD Program Manager will review the file and notify the applicant and subgrantee in writing of the eligibility determination decision.

MEAP  
-C

#### Eligibility Determination

- Must be income qualified
- Must have an existing Non-Functioning Heating System (No Heat), Hot Water Heater, or Cooling System.

Households including a senior, young child, or person with a disability or documented medical condition are prioritized for service, but any household can apply.

### 5.2.1. CATEGORICAL INCOME ELIGIBILITY

Applicants can forego income verification for certain energy programs in certain cases, if they are deemed categorically eligible through participation in another income-based program.

A list of current categorically eligible resources/programs can be found on the websites for each energy program:

- [EmPOWER](#)
- [MEAP](#)
- [DOE](#)

Network Partners may use categorical eligibility in place of income verification whenever possible, but should weigh the easier application against potential downsides, such as categorical eligibility not being consistent between different energy programs. When transferring jobs to a more restrictive program, the client may still need to undergo income verification at a later point.

DOE

DOE has issued [Weatherization Program Notice 22-5](#), expanding client eligibility criteria for the program. Eligibility is determined based on categorical income, which includes individuals enrolled in HUD means-tested programs targeted to 80 percent or below of the area median income (AMI).

Subgrantees may certify that clients have met the income requirements of HUD means-tested

programs through mechanisms including, but not limited to, client documentation, interagency recipient lists, shared system databases, and others. The chosen method of verification must be documented in the client file.

HUD and DOE have published updated lists of eligible and potentially eligible multifamily buildings. A data dictionary is provided to aid in the utilization of these lists.

It's important to note that the certification procedures outlined in this guidance do not pertain to clients who qualify under USDA's income eligibility requirements. However, DOE has furnished an approved USDA list for these clients. All relevant lists can be accessed through the provided DOE link above.

**EmP**

In order to qualify as categorically eligible, clients must present a copy of an official benefit notice from the respective program that is on the issuing organization's letterhead and was issued within 365 days from application to the energy programs. The benefits notice must be uploaded in Hancock's document section, and the appropriate category must be selected in the client application under "Categorical Eligibility."

For applicants qualifying under the geographical categorical eligibility, the Network Partner must use the [MDE EJ Map](#) to verify that the applicant's address falls within one of the areas identified as having a Final EJ Score Percentile at or above 90.

The applicant must fill out and sign the Income Attestation Form.

The signed Income Attestation Form as well as a screenshot showing the customer's address on the EJ map, must be uploaded in the Hancock documents section under "Categorical Eligibility"

## 5.2.2. INCOME

In determining what eligibility level will be used in its programs, DHCD has elected to consider limited-income in relation to family size, in accordance with DOE regulation CFR 440.3. Applicant income eligibility is determined per household and valid for the respective household only. A change of address does not affect the income eligibility, as long as the household composition and income remain the same

at the new address. Federal Poverty Income Guidelines are generally adjusted once a year and the current levels can be found on [DHCD's website](#).

Income certification can be performed by OHEP, DHCD, or LWAs. SWCs are not authorized to certify income eligibility, they must refer applicants to OHEP, DHCD, or an LWA.

The income determination process results in either a certification of income eligibility or denial of assistance. Income eligibility will be based on all gross income received by the household during the 30 days preceding the date of application. Household members who are self-employed must document their income for a twelve-month period preceding the date of application.

Income eligibility is determined based on the income status at the time of the application and is valid for 12 months from the certification date. A change in income during the 12-month period does not change the client's eligibility as determined at the time of application. If an application is deemed ineligible the applicant can re-apply in 30 days if their income changes.

Households that receive Supplemental Security Income or Aid to Families with Dependent Children are automatically income-eligible to receive weatherization services.

#### 5.2.2.1. ALLOWABLE INCOME

Household income is defined as compensation received from one or more of the "allowable" sources (gross amounts, unless otherwise noted) listed below. Disallowed income sources are not taken into account:

Allowable Income	Excluded Income
<ul style="list-style-type: none"> <li>● Money, wages and salaries before any deductions;</li> <li>● Net receipts from non-farm or farm self-employment (receipts from a person's own business or from an owned or rented farm after deductions for business or farm expenses);</li> <li>● Regular payments from social security, railroad retirement, unemployment compensation, strike benefits from union funds, worker's compensation, veteran's payments, training stipends alimony and military family allotments;</li> <li>● Private pensions, government employee pensions (including military retirement pay), and regular insurance or annuity payments;</li> <li>● Dividends and/or interest;</li> <li>● Net Rental income and net royalties;</li> <li>● Periodic receipts from estates or trusts; and</li> <li>● Net gambling and lottery winnings.</li> </ul>	<ul style="list-style-type: none"> <li>● Capital gains,</li> <li>● Any assets drawn down as withdrawals from a bank;</li> <li>● Money received from the sale of a property, house, or car;</li> <li>● One-time payments from a welfare agency to a family or person who is in temporary financial difficulty;</li> <li>● Tax refunds;</li> <li>● Gifts, loans, or lump-sum inheritances;</li> <li>● College Scholarships;</li> <li>● One-time insurance payments, or compensation for injury;</li> <li>● Non-cash benefits, such as the employer-paid or union-paid portion of health insurance;</li> <li>● Employee fringe benefits, food or housing received in lieu of wages;</li> <li>● The value of food and fuel produced and consumed on farms;</li> <li>● The imputed value of rent from owner-occupied non-farm or farm housing;</li> </ul>

	<ul style="list-style-type: none"> <li>● Depreciation for farm or business assets;</li> <li>● Federal non-cash benefit programs such as Medicare, Medicaid, Food Stamps, school lunches, housing assistance;</li> <li>● Combat zone pay to the military;</li> <li>● Child Support Payments;*</li> <li>● Reverse mortgages; and</li> <li>● Payments for care of Foster Children.</li> </ul>
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\*A common income exclusion for DHCD is child support. This income is allowable however under DHS OHEP and can cause an OHEP applicant to be ineligible for energy assistance. Under DHCD’s policy, the OHEP applicant could still qualify for weatherization services. Clients where this income plays a role should apply with DHCD or an LWA directly.

#### 5.2.2.2. INCOME DOCUMENTATION

Acceptable forms of documentation for the 30-day period immediately preceding the application includes the following:

Income Source	Acceptable Documentation
Wages or Salaries	Weekly pay period - four latest pay stubs; Bi-weekly or twice monthly - the two latest pay stubs; Monthly pay period - the latest pay stub; or A signed statement from the employer, on official company letterhead showing the employee's name, the day the income was received, and for what time period, gross pay and net pay.
TANF and General Public Assistance	A grant award letter dated within 30 days of the application or a copy of a recent check if there is no reduction in benefit. A grant award letter dated within 90 days may be accepted if the applicant has a current Medicaid card. A Declaration of Income may also be used, until such time as documentation of income can be produced; Verification of open case number of Master File for Departments of Social Services plus case worker's name and phone number; Medicaid Card (not Medicare) with Declaration of Income Form. Note the expiration date of the Medicaid Card to assure its validity.
Social Security or SSI	Latest award letter or copy of check received within 90 days of application or copy of most recent check; Medicare card (not Medicaid) with Declaration of Income Form; Verification from local SSI Office or online statements; or Current bank statement for direct deposits.
Veteran's Pension,	A signed statement on official paper showing:

Retirement, Worker' Compensation	Name of the person receiving the benefits; Name of the agency providing the benefits; Amount of money provided; How often money is provided; and Duration of benefits. A copy of the latest benefit check for the period covered; Computerized annual benefit card (civil service retirement).
Unemployment Insurance Compensation	A signed Request for Verification of Unemployment Benefits from the local employment office stating the amount of benefits received in the 30 days prior to application date. All benefits received during the 30-day period is to be considered as income; The benefit history record reported by the terminal inquiry system (for Departments of Social Services only);
Self-Employment	Business records for 3 months prior to date of application showing gross income and expenses; or Copy of business and personal tax returns for previous year; or Signed statement by corporation's accountant describing the compensation arrangement between the corporation and the applicant. Income Verification of Self-Employment form; Customers who do not file taxes must provide proof of all income and expenses for the last 30 days AND Income Verification of Self-Employment form.
Rental Income	A copy of the applicant's last Federal Form 1040 and Schedule E (divide rental income by 12); A copy of the current, fully executed lease. A signed statement from the renter, roomer or boarder, showing: To whom the money is paid; Name and address of person giving the money; Amount of money given; How often the money is given.

NOTE: The forms of documentation outlined above are preferred for their clarity and reliability in verifying the period in question, i.e. 30 days preceding application date. It is recognized, however, that in some cases local agencies may find it necessary to seek forms of documentation other than those described. In such cases, the documentation presented must be in writing, dated within 30 days of the application, and record the gross amount of income received by the person named for the period in question. The documentation should be signed by the provider of this information.

**Zero Income Form**

Applicants and/or members of the applicant's household who receive income from Social Security, SSI or public assistance, or who possess a Medicaid Card, may not complete the Zero Income Form. The Zero Income Form is required for zero-income individuals and in cases where information from Social Security or other public assistance agencies has been delayed for more than three weeks.

If the household members do not complete this form in the presence of a DHCD, OHEP, or LWA Intake Officer, the Declaration may be given to the applicant to be completed at home. In cases such as this, the form must be completed, witnessed/notarized, and signed before returning it to the office. If the form is

completed in the office by an Intake Officer it need not be notarized.

### **Roomers and Boarders**

“Separate Living Quarters” means living quarters in which the occupants do not live and eat with any other persons in the structure and which have either (1) direct access from the outside of the building or through a common hall or (2) complete kitchen facilities for the exclusive use of the occupants. The occupants may be a single-family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. An applicant's spouse may not claim other roomer or boarder status. The Roomers or Boarders Separate Living Quarters Form must be completed for each roomer or boarder application.

Rent paid by the roomer/boarder to the host family must be considered in the total household income when processing an application for eligibility. However, the local agency should not count the roomer/boarder as a household member for purposes of application processing.

Residents of group homes and shelter facilities are not eligible to apply on their own behalf. An operator of a documented group home or shelter may apply for weatherization assistance on behalf of residents provided that the individuals or families residing in such group home or shelter meet the eligibility requirements. In such a case, the income of all residents of the group home or shelter must be considered.

### **5.2.3. BUILDING TYPE ELIGIBILITY**

Building eligibility must be determined before any measures are installed. Eligible structures within the State of MD include manufactured homes, single family homes, duplexes, triplexes, apartment buildings, or a single room occupied as separate living quarters (including historic properties), and qualified shelters or other group homes. Prior approval from the DHCD program manager is required for group homes, shelters, apartment buildings, and single room occupancy situations.

Government institutions, halfway houses, nursing homes, recreational vehicles (RVs), boats, cars, trucks, non-stationary campers and trailers, and tents are not eligible dwellings and are not eligible for weatherization services.

#### **DOE**

Properties having only a commercial use are not eligible for weatherization. Commercial use spaces of mixed-use buildings are not eligible for weatherization. However, the owner of the commercial space could have weatherization work performed on the commercial space at the same time as residential weatherization activities provided the owner pays the contractor directly with non-federal funds.

DHCD does not have an approved multi-family energy audit. Projects having buildings

containing in excess of four units per building will be reviewed on a case by case basis and submitted to DHCD and DOE for approval.

**EmP** Refer to multi-unit eligibility for additional information.

### 5.2.4. HOMEOWNERSHIP

Homeowners as well as renters are eligible. Network Partners are responsible for verifying building ownership for all buildings, regardless of whether they are owner-occupied or rental properties. A dwelling unit shall not be audited or weatherized unless the applicant provides evidence that he/she is the owner or has the owner’s consent. In the case of a renter, the owner or his representative must sign a [building owner agreement](#) to the project and provide proof of ownership. Proof of ownership may be verified and provided in Hancock by utilizing any one of the following methods:

	If Applicant is the Homeowner	If Applicant is the Renter
<b>a) Tax Bill</b>	use only if the name and address of the client is the same as the application form.	use only if the name and address of the landlord is the same as the Landlord/Tenant Agreement.
<b>b) Copy of Deed</b>	can be used if the homeowner's name and address match the name and address on the application.	can be used if the name and address match the Landlord/Tenant Agreement.
<b>c) Title Search</b>	A printed copy of the Maryland Real Property data sheet for the property can be accessed by the homeowner, the landlord, or the Network Partner office online at: <a href="http://sdat.resiusa.org/RealProperty/Pages/default.aspx">http://sdat.resiusa.org/RealProperty/Pages/default.aspx</a>	
<b>d) Property Location Plot</b>	use only if the name and address of the client is the same as the application form.	use only if the name and address of the client is the same on the Landlord/Tenant Agreement.
<b>e) Trailer / Mobile Home Title</b>	A title from the Motor Vehicle Administration for the unit can be used as proof of ownership only if that title contains the name of the applicant. If the applicant's name is not on the title, a Bill of Sale can be presented as proof of ownership possessing the applicant's name and the original owner's name, the serial number for the unit, the year the unit was built, and the sale amount. In cases where more than one (1) Bill of Sale has been received, a clear ownership trail to the original owner must be identified. In addition, if a deed lists the property but not the trailer, the copy of the deed in this situation can be used as proof of ownership only if there is name consistency.	

Absentee Landlords - If an agent is acting on behalf of a landlord, the agent is required to present a notarized statement from the original landlord to act on behalf of, or as agent for, the property owner. This also applies to the Tax Bill and/or copy of the deed when an inconsistency in landlord's name and address exists.

Owners of interest in a cooperative corporation (“Co-op”) are treated as building owners, when the dwelling is occupied by the person with rights to perpetual use of the dwelling and dwelling improvements are approved by the cooperative corporation.

In the event of death of the lawful homeowner, the heir can be treated as homeowner after presenting a death certificate of the previous owner, and a will showing that they are the intended heir. The home can not be listed in the SDAT as under Probate. If the transfer of the home is under probate, the probate process must be completed before eligibility can be determined.

<b>MEAP -C</b>	Owner-occupied dwelling units are prioritized. Renters can apply, but they will only be assigned to Network Partners once all Homeowner applicants have been serviced.
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### 5.2.5. OCCUPANCY / VACANCY ELIGIBILITY

A vacant unit may be considered for weatherization services only when the unit will become occupied by an eligible household within 180 days under a federal, state, or local government program that restricts occupancy to households with incomes that qualify for weatherization. The landlord must sign the building owner agreement, and can sign off on any other forms typically required from an occupant.

<b>DOE</b>	Vacant units must not be considered when determining income eligible dwelling units using the 50/66% rule in accordance with 10 CFR 440.22(b)(2). Once income eligible dwelling units are determined, using the 50/66% rule, the whole building (including vacant units) may be considered for weatherization.
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<b>EmP</b>	Vacant units are eligible, if the landlord is the utility account holder and can provide access to utility data of any vacant units.
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<b>MEAP -C</b>	Vacant units are not eligible.
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<b>MEAP -Wx</b>	Vacant units must not be considered when determining income eligible dwelling units using the 50/66% rule. Once income eligible dwelling units are determined, using the 50/66% rule, the whole building (including vacant units) may be considered for weatherization.
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### 5.2.6. RE-WEATHERIZATION ELIGIBILITY

Re-weatherization rules are funding source specific and based on the dwelling. A dwelling cannot receive

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funding from the same funding source for a second time unless the re-weatherization rule allows for it.

**DOE** Subgrantees are required to retain records that allow them to determine which dwellings have been previously weatherized, including the date weatherization activities were completed. Homes previously weatherized with federal funds less than 15 years ago are not eligible for re-weatherization utilizing federal funds. This includes WAP, LIHEAP, HUD, and USDA.

Hancock provides verification of units that have been previously weatherized. All aspects of the completed unit are easily identified by subgrantee, funding source, cost and measures completed. If the unit is in the database, the software will acknowledge a duplicate address and deny further access to proceed without DHCD authorization. If a residence is not in the Hancock database, each agency shall visually identify a previously weatherized unit upon audit. At that point, if previous weatherization work has been completed, the file is denied.

Examples of evidence of previously weatherized homes would include but are not limited to:

- Cellulose in the attic at R30 or better (check the attic access). Look for signed and dated certificate as to who insulated and when (date is required).
- Signs of air sealing in the attic. In most cases, only WAP would have air sealed top plates, etc. Older Wx units may have cellulose and no baffles.
- Hot water tank wraps.
- Air sealing in the rim/band areas. Also, evidence of fiberglass batts in the rim and band areas.

All units that are eligible to be re-weatherized will receive a new energy audit. Units that are re-weatherized will be counted toward the per unit average cost but must be tracked separately from newly weatherized units.

Homes ineligible for weatherization are still eligible to receive assistance and services such as client education to assist with energy management and evaluation of installed weatherization materials.

Homes not eligible for weatherization may become eligible if the home has been damaged from an act of God and/or a federally declared natural disaster that has occurred post weatherization of the home as per DOE WPN 12-7.

**EmP** A dwelling unit that has previously received Whole Home Efficiency or Tier 2 services may be eligible for re-weatherization after one (1) year if the original job was completed in a prior funding cycle. The following are the requirements of re-weatherization of a previously completed unit:

- Re weatherization work scopes must meet the requirements of the current cycle program.
- Previous EmPower funded, installed measures are not permitted for re weatherization

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EmP	A dwelling unit that has previously received Base Efficiency or Tier 1 services is eligible to return for Whole Home Efficiency Services as soon as deferral reasons have been resolved.
MEAP -C	Clients are eligible to participate once per program year per eligible equipment, e.g. receive a heating system in winter, and a water heater in spring.
MEAP -Wx	Homes previously weatherized with federal funds less than 15 years ago are not eligible for re-weatherization utilizing federal funds. This includes WAP, LIHEAP (weatherization use only), HUD, and USDA

Participants can apply for a second weatherization project under a different funding source, as long as one of the funding sources is not federal. When this is the case, DHCD's lead may include an indication that work was previously performed at the home and will make prior work scopes available upon request.

### 5.2.7. OTHER ELIGIBILITY REQUIREMENTS

EmP	<p>The applicant or a member of the applicant's household must have an active residential utility account with one of the participating utilities. In the case of an eligible vacant unit, the property owner or management company must hold the active account at the time of weatherization service delivery.</p> <p>For any lead that was not distributed by DHCD, Network Partners must verify the utility account by requesting a copy of a utility bill, and obtain an energy consent form. It is recommended to also verify utility accounts for any DHCD distributed leads.</p>
MEAP -C	The household must have a non-functioning heating, cooling, or water heating system that is in need of replacement or repair.

### 5.2.8. GROUP HOMES AND SHELTERS

Group homes are eligible for weatherization, however residents of group homes and domiciliary care facilities are not eligible to apply on their own behalf. The operator of the group home is required to gather the resident's information and fill out DHCD's application. Only one joint application is necessary, and the total income of all residents of the facility is considered when evaluating this type of home for

income eligibility.

A group home is treated as a rental property. For the purpose of the Weatherization Programs, the definition of a group home or shelter is as follows:

A shelter is a dwelling unit or units whose principal purpose is to house, on a temporary basis, individuals who may or may not be related to one another and who are **not** living in nursing homes, government-owned, or similar institutional care facilities.

A group home is a dwelling unit in which three or more people, not related by blood or marriage, reside and share eating facilities. In addition, a group home must have a clearly definable identity which distinguishes it from more informal, family-type settings, for example, a residence for disabled individuals.

If a part of a building is being or will be used as a group home or shelter, then only that part of the dwelling housing the group home or shelter residents can be weatherized. If the entire building is used as a group home or shelter and individual units cannot be easily identified, determine the number of units and the allowable budget to be expended on the building in one of the following two ways:

- Each 800 square feet of living space shall be counted as 1 unit (i.e., if there are 4000 square feet in an entire building, the shelter would be considered a 5 unit), OR
- Each level or floor of the building being used as a shelter shall be counted as one (i.e., if there are two floors of living space, the number of units is two).

Other regulations and procedures for Group Homes are:

- The application must include documentation that proves the dwelling unit is a group home or shelter. Documentation may include a notarized letter denoting group home or shelter authorization.
- When taking applications for a group home or shelter, proof of ownership need only be secured for the operator. Evidence of ownership must be maintained in the client file.
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EmP

The utility account for group homes or residential hotels must be a residential account. An electric utility bill (and gas bill, if applicable) must be provided by the individual or host manager. Roomers and boarders may not apply for weatherization assistance separate from the host household unless they live in separate living quarters with separate meters.

If using categorical eligibility, the entire household can be deemed eligible, as long as at least 50% of the residents meet the categorical eligibility criteria.

### 5.2.9. MULTI-UNIT ELIGIBILITY

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Multi-unit affordable housing projects must be comprised of single-family detached homes, duplexes, townhomes, and / or walk-up buildings with 4 or less units to be eligible. Weatherization services are generally required to occur as a whole building system; meaning, the whole building, is to receive weatherization services whether a multi-unit building or single-family home. There are very few cases where it is appropriate for individual units within a multi-unit building to receive services. Such instances must be submitted to DHCD for review.

**DOE** In accordance with 10 CFR 440.22, subgrantees must maintain documentation to show that not less than 66% of the eligible dwelling units in a multi-unit building are occupied units. For two-, three- and four-unit buildings, a minimum of 50% of the units must be documented as occupied. This determination must be completed before the Owner Agreement is executed. If the above conditions are met, the entire building, including common areas, may be weatherized.

**EmP** The dwelling units must be individually metered for the funding utility and each has a unique street address. Common spaces are not eligible for weatherization. Common areas or shared systems disqualify a multi-unit project in this context and should be referred to the DHCD multifamily programs.

The property owner must be willing to fund or seek alternate assistance with funding 15% of HVAC, appliance, and/or other high cost equipment with non-EmPOWER funds when these items are eligible for replacement and cannot be covered by other funding sources. The project may proceed without equipment replacements. However, when weatherization can only proceed with the replacement of HVAC or other equipment or appliances and ancillary funding is not available, the case will be treated as a Base Efficiency project.

Buildings with more than 4 units are eligible to participate, but can only be serviced if they can be modeled through Hancock Energy Software.

**EmP** Base Efficiency is possible for larger buildings, but only if it is a legitimate deferral from Whole Home and cannot be serviced comprehensively through MEEHA. The attempt to use Whole Home Efficiency or MEEHA must be documented.

#### 5.2.9.1. MULTI- UNIT PRE-APPROVAL PROCESS

The pre-approval process follows these steps:

1. Network Partner identifies a potential project that meets the requirements above. DHCD may occasionally identify potential projects and will assign them to a network partner based on jurisdiction and/or lead distribution guidelines.
2. Network Partner submits property information to DHCD via Multi-Unit Intake Template and submit the following documentation for each property lead:
  - a. One (1) permission to enter form signed by the building owner or authorized agent.
3. DHCD assigns an inspector to review the preliminary property information and eligibility.
  - a. If the property is not eligible in its entirety, the Network Partner will notify the property owner or representative via a denial letter and email a copy of it to the DHCD program manager.
4. Network Partner coordinates with DHCD Inspector and Property Management to perform a preliminary site visit. Partner assesses the likelihood of HVAC, appliance, or other equipment replacement, and determines if opportunity for weatherization and other upgrades exist.
5. DHCD reviews the partner's project assessment.
6. Network Partner submits rent roll to [dhcd.lieep@maryland.gov](mailto:dhcd.lieep@maryland.gov) for eligibility verification.
7. The Program Manager gives pre-approval for the project to proceed based on the DHCD Inspector's recommendation.
8. Network Partner presents Building Owner Agreement to Property Management and receives a signed copy. The signed agreement is uploaded into Hancock under WAP Documents - Landlord Consent for Weatherization.

DOE	<p>DHCD will submit multifamily projects for DOE audit approval on a case by case basis. Subgrantees must follow steps 1-5 of the Multi-Unit Pre-Approval Process outlined in <a href="#">this section</a> in addition to submitting the following documentation to the DHCD Program Manager to forward to DOE for review:</p> <ul style="list-style-type: none"><li>● Summary/Description of the project (Multi-unit Pre-approval Template)</li><li>● Results of 2-3 energy audits completed with a DOE-approved MF audit tool</li><li>● Several pictures of the front and back of the project (interior and exterior). As well as interior pictures specific to the improvements proposed.</li><li>● Suggested Scope of Work</li></ul>
BIL	<p>DOE and DHCD approval must be obtained before the Subgrantee can proceed with any work.</p> <p><b>Davis Bacon Act Compliance:</b> Weatherization work on multifamily buildings with no fewer than 5 units will not be serviced with BIL funds. All weatherization work on multifamily buildings with no fewer than 5 units will be completed with regular annual DOE WAP funds.</p>

EmP	<p>If HVAC, appliance, or other major equipment replacement is deemed eligible, the Network Partner will work with the property owner to execute a Memorandum of Agreement as part of</p>
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the Building Owner Agreement to capture a 15% landlord contribution toward the cost of replacing HVAC, appliances, or any other high cost equipment.

After receiving pre-approval, the Network Partner must provide the following documents to dhcd.lieep@maryland.gov:

- Property rent roll and roster. The rent roll and roster must list physical addresses and tenant names.
- Documentation of income restrictions or regulatory agreements or any other documents required for income verification.

DHCD verifies income eligibility and notifies Network Partner when certain units or the entire property is verified as income eligible. This notification establishes a notice to proceed to perform work on the specified units.

#### 5.2.9.2. MULTI-UNIT INCOME VERIFICATION

Income eligibility for multi-unit projects is determined through the individual client application process described in [this section](#) or the program specific processes described below.

If a property contains USDA or LIHTC qualified units, then the following information is to be provided to DHCD:

- Rent roll stating each address, household size, annual income, last income verification date.
- If the property wishes not to disclose income information, the rent roll must list the addresses of households that hold a current income certification (re-certified within the past year) and meet the Department's income limits. Property management must sign and certify on the provided rent roll that the listed tenants have been certified up to 80% AMI following either Section-8, USDA, or LIHTC regulations the past year.

DOE

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EmP

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For projects with mixed income levels, the following rules apply:

### **Individual Units**

An individual unit is defined by possessing a unique street address, its own residential electric meter, and a building envelope that fully separates its conditioned space from neighboring units. These units may be weatherized regardless of the eligibility of other units within the building. Townhouses qualify as single units, if their attic and basement is separated from neighboring units.

### **Duplexes and Four-Unit Buildings (50% Rule)**

All units within a duplex or four-unit building are eligible for weatherization if fifty percent of the units in a duplex (50% = 1 unit) or four-unit building (50% = 2 units) are occupied by income eligible residents.

### **Triplexes (66% Rule)**

All units of a triplex are eligible for weatherization services if sixty-six percent of the units (2 of 3) are occupied by income eligible residents. All units must be contained within one structure and must share a common foundation for the entire building to be deemed eligible to receive services.

## **5.3. CLIENT DENIAL AND HEARING PROCESS**

Applicants are denied weatherization assistance if they do not meet the eligibility criteria. The most common reasons for denial of assistance are:

- Total household income exceeds the income guidelines of the program;
- The applicant did not provide sufficient documentation of the household income or other information within the prescribed time;
- The applicant is not cooperative;
- The dwelling unit has received comprehensive weatherization assistance previously and no opportunity for additional work;
- The dwelling unit is not eligible for funding under available funding source guidelines; or
- Other reasons specific to the case or program (Network Partner must specify).

If obvious discrepancies are found between the information supplied by the applicant on the application and observed conditions at the time of weatherization, the network partner must resolve these questions prior to weatherization. Some examples of discrepancies are a difference in the number of persons living in the dwelling unit, (fewer persons than listed or a person or persons not accounted for who may have income), evidence of business being conducted in the unit, etc. When a network partner

has first-hand knowledge or reason to believe that circumstances may have changed, the network partner may request an updated application.

In addition, if at any time prior to completion of the weatherization work the network partner determines that the building is no longer eligible, the unit cannot be completed and must be denied.

**DOE** Clients that have applied for assistance but cannot be serviced due to lack of funding are not denied but should be placed on an agency waiting list and notified accordingly.

The applicant and/or owner of a denied unit must be notified via the [denial process](#). A copy of the denial letter must be made available to the Program Monitor during their next visit.

**EmP** A [denial that occurs at the time of the audit](#) or after the audit, must be approved by a state inspector. Denials determined during the scheduling process do not require approval.

It is not necessary to send denial letters to households that have applied for assistance but cannot be assisted due to insufficient funding. However, the lack of funding and delays in service must be communicated clearly to the client.

**MEAP** A denial that occurs at the time of the audit or after the audit, must be approved by a state inspector.

### 5.3.1. DENIAL PROCESS

If the Network Partner determines that an applicant or a dwelling unit is ineligible, the applicant shall be notified within 10 business days of that decision. Notification shall include the following:

- Reason for denial;
- Specific guidance supporting the denial;
- Right to appeal the decision and the means to obtain a fair hearing.

A denial letter must be sent to the applicant within seven (7) calendar days of the date of denial. The denial letter is completed by the intake worker. The letter template is provided by DHCD, must be filled out completely, and uploaded to the Hancock documents folder. The Hancock record must be marked as denied and a comment of the denial reason must be left in the client comments.

If the denied applicant wishes to appeal the Network Partner's decision, the procedures described in the Review and Hearing Process must be followed.



### **5.3.2. REVIEW AND HEARING PROCESS**

In cases where a client would like to dispute ineligible status, or is concerned about the quality of work they have received, the Network Partner must try to settle the issue courteously and expediently. If the client cannot reach an understanding with the Network Partner, the client should be referred to HBEP, and a detailed back-up summary of the issue should be forwarded by the Network Partner. A review of the disputed items will follow.

All Network Partners are required to keep a log of complaints and resolutions. The complaint log must indicate:

- Date received
- Name of applicant or complainant
- Nature of complaint
- Date and description of actions taken to resolve the complaint
- The name of the person by whom the action was taken

Clients are guaranteed access to a fair hearing process if the Network Partner is unable to resolve a complaint.

The hearing process is multi-leveled. The first level of appeal is a local hearing before a hearing officer designated by the Network Partner. The second level of appeal is conducted by DHCD after the applicant's complaint has not been resolved through the local hearing process.

All hearings must conform to the following standards:

- The location must be convenient and accessible to the client or can be conducted via telephone;
- Adequate notice must be given to the client;
- Specified time frames must be met;
- The hearing officer must be a person not involved in the original disputed decision; and
- The client may bring legal counsel, a representative, or other interpreter, and may present evidence and examine witnesses. DHCD must be notified with a 10 day notice if a client is going to be accompanied by a legal council, a representative or other interpreter.

Hearings are to be rescheduled for applicants requesting postponements. Two postponements with prior notice are acceptable. If an applicant fails to appear for a scheduled hearing and does not provide notice, the hearing officer may render a decision based on the case file or reschedule the hearing based on adequate cause.

#### **5.3.2.1. PROCEDURES FOR LOCAL HEARINGS**

Clients requesting a review of a Network Partner decision or action, must request the local hearing within fifteen (15) working days of the date of notification of the decision.

Applicants requesting a hearing, due to the LWA's failure to make an eligibility determination on their

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application, may do so any time after 10 days have elapsed from the date that all required documents have been provided to the Network Partner.

Upon receipt of the hearing request form, the Network Partner enters the request on the Network Partner hearing log.

The local hearing must be held within fifteen (15) calendar days of receipt of the hearing request. Notice that Local Hearing Has Been Scheduled should be used to notify the applicant at least ten (10) calendar days in advance of the scheduled hearing.

The Network Partner hearing officer should attempt to resolve the client's concerns at the local hearing through review of the applicant's case file and explanation of the appropriate program regulations.

Following the hearing, the Network Partner hearing officer's decision must be issued in writing to the client along with a request for a State level hearing (Appeals Hearing Decision Letter Form). The decision must be sent within fifteen (15) calendar days of the hearing.

#### **5.3.2.2. PROCEDURES FOR STATE HEARINGS**

Clients who wish to appeal the decision rendered at the local hearing must submit a Request for State Level Hearing form within fifteen (15) calendar days of the date of the Network Partner hearing decision letter.

Upon receipt of the request for a State Hearing, the Network Partner completes the hearings log and forwards copies of all case documents to the State energy programs office.

The State Hearing must be held within fifteen (15) calendar days of receipt of the case file from the Network Partner. The State energy programs office will provide written notification to both the client and the Network Partner of the scheduled time and place of the hearing, at least ten (10) days in advance of the hearing (Notice that State Level Hearing Has Been Scheduled).

A written decision will be rendered by the State Hearing Officer within the 15 days following the scheduled hearing. Copies will be sent to the client and Network Partner.

## **6. LEAD MANAGEMENT AND SCHEDULING**

A lead is an income certified applicant that is assigned to a Network Partner by DHCD. Leads are pre-screened for re-weatherization eligibility and [other qualifying factors](#) based on application information, however the Network Partner must continue to verify eligibility at multiple steps of the weatherization process. DHCD will not reimburse Network partners for work that is performed on ineligible projects.

### **6.1. LEAD DISTRIBUTION PROCESS**

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Income certified and pre-screened OHEP and DHCD applicants are considered “leads” and are assigned to Network Partners, typically on a monthly basis. Leads are assigned through the Hancock database with consideration for the Network Partner’s contract rank, availability of funds, capacity, performance, and proximity to the client’s home. New leads may not be assigned, if:

- The contract/grant budget is depleted or
- The number of leads and clients currently assigned is expected to deplete the budget. Network Partners are expected to notify DHCD when they have sufficient leads to expend their budget.
- Hancock shows a large number of open leads from prior month assignments. Network Partners must contact all leads within 30 days and log such contact attempts as described here.
- DHCD is concerned with the quality and quantity of services provided. Such concerns will be communicated to the Network Partner and lead assignment may resume after a solution is determined.

DHCD uploads the applicant information to the Client List in Hancock, and notifies the Network Partner via email when new leads are uploaded. New leads appear in the Client List with the status “Incomplete App”.

The following applicant information is provided for each lead:

- |  |   |
|--|---|
| ● Household Demographic Information                        | ● Living Arrangement, i.e. renter/homeowner |
| ● County of Residence                                      | ● Poverty Level Percentage                  |
| ● OHEP Certification Date                                  | ● Household Size                            |
| ● Applicant's Name   | ● Household Income                          |
| ● Applicant's Address                                      | ● Seniors (over 60) in Residence            |
| ● Applicant's Telephone Number(s)                          | ● Disabled Persons                          |
| ● Applicant's Email Address, if available                  | ● Children in Residence                     |
| ● Utility Vendor and Account #                             | ● Annual Household Energy Consumption       |
| ● Housing Type (i.e., single-family home, apartment, etc.) |   |

The information provided for each lead is based on data transmitted from OHEP and from client applications as available to DHCD. DHCD does not guarantee that the provided information is accurate and Network Partners are responsible for confirming all critical information with the client before work begins.

**MEAP  
-C**

Network partners are notified of new crisis leads via email. The records are created and assigned in Hancock, and marked as MEAP-C clients.

If MEAP funding will be leveraged on an active weatherization project, the MEAP measures must be added to the weatherization scope of work. Only one job should be created within the client record whenever possible.

Network Partners must notify DHCD before using MEAP-C funding on a job by submitting the [Critical Service Referral Form](#).

### **6.1.1. APPROVED DUPLICATES**

“Approved Duplicates” are leads who have received prior weatherization services, but are deemed eligible for re-weatherization or other program services based on the information available. “Approved Duplicates” are assigned in Hancock and marked with a D before the address and “DUPE” in the Client Tag field.

The entry for each duplicate indicates which program(s) the client is still eligible for in the Client Tag field. Network Partners are encouraged to inquire with DHCD about previously performed work to aid in determining final eligibility.

### **6.1.2. COLD LEADS**

Cold Leads: Quarterly, DHCD will send a list of customers that were identified as potentially eligible for the programs by the utility companies. Network Partners should attempt to make contact with them through mailings or door knocking attempts. DHCD has created a postcard that is available along with [general marketing materials](#) to better help Network Partners in these efforts.

Cold leads are not pre-qualified and must still undergo eligibility verification. There is a high chance that they are categorically eligible through OHEP or other programs, so this option should be explored first to speed up the application.

### **6.1.3. MULTIFAMILY LEADS**

Network Partners looking for additional leads can sign up to receive multifamily leads. Every month, DHCD sends out a list of applicants who have self-reported that they live in a multi-family unit. These leads should be screened for building type eligibility. If the property type appears to be a candidate for the program, the network provider should call the customer to acquire landlord contact information, and attempt to get the whole building into the program.

If a building appears to be a better candidate for the MEEHA program, the network provider should then send a list of these non-LIEEP customers with property information and building type description back to DHCD to treat as potential MEEHA customers. Network Partners that are an approved MEEHA energy audit firm, can pursue this property as a MEEHA lead.

## **6.2. SCHEDULING PROCESS**

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It is the responsibility of the Network Partner to contact leads to schedule an energy audit. Clients can be contacted by phone, text, or email. If unable to reach the client, the Network Partner is required to send a notification letter with contact information and instructions regarding next steps to schedule an energy audit. Network Partners are expected to take reasonable attempts to contact an applicant. Network Partners shall attempt contact at least three distinct times and days to accommodate an applicant's availability. A visit to the applicant's home is strongly encouraged when other means of contact have failed. All contact attempts must be documented in Hancock. After at least three contact attempts are made and documented and the client is still unresponsive, [denial procedures](#) should be performed to close out the lead. An excessive number of open leads may cause reduced or non-assignment of future leads.

DHCD provides the client with forms that are required in order for work to begin, during the intake process, but may need to be re-sent by the Network Partner. It is advised that these forms are collected before the audit commences.

Network Partners are expected to monitor the leads in their Client list regularly, continue to contact leads as described above, and log each outreach activity in Hancock within one week of such activity occurring.

**DOE** The first consideration for scheduling must be by priority category as defined in 10 CFR 440.16 and identified under [target population](#).

The scheduling process above particularly applies to leads provided by DHCD but should be used as a best practice for scheduling of all clients. The timing of service to an applicant that is in a priority category may be set so services can be coordinated with another funding source.

If there is a waiting list, additional DHCD leads will not be provided. Subgrantees must contact DHCD if additional leads are needed in the future. Remember that all applicants are required to re-verify for the program annually and thus all applications are no older than one year.

**EmP** Clients must be contacted within 30 days of receiving the lead information.

DHCD will screen the leads it provides for Washington Gas accounts as best as possible. Note that not all OHEP applicants disclose their heating fuel provider if they are applying only for electric bill assistance. If the gas data is available, it will be included in the client records. When calling clients to schedule the energy audit, Network partners should ask all customers in the following counties whether they have a Washington Gas account and request a copy of the utility bill or their account number to verify:

- Calvert
- Charles
- Frederick
- Montgomery

- Prince George's
- St. Mary's

Network Partners must then create a Washington Gas record in Hancock under the Energy Consumption Section. This should occur before the job is scheduled in Hancock.

At the time an audit is scheduled in Hancock, DHCD is prompted to enter energy consumption data for the client's file.

- An automated email notifies DHCD when an audit is scheduled and prompts a lookup of the client's account in the utility database.
- The utility verification is typically completed within 48 hours.
- Energy consumption data is entered in the Hancock record and a note is left in the comment section that the energy data is verified.

Network Partners shall not proceed with the audit or any other work until the energy data is verified. DHCD must be notified if the energy consumption information is missing from the client's Hancock record at the time of the audit. Contact DHCD at [dhcd.energyuse@maryland.gov](mailto:dhcd.energyuse@maryland.gov).

MEAP  
-C

During each system's respective crisis season, a household is considered to be in a life threatening situation, as defined by COMAR 07.03.21.10, and partners must conduct a system assessment and establish a plan to provide a form of assistance within 36 hours of being assigned a lead / identifying a client in need of service.

Outside of the respective crisis season, partners are expected to conduct a system assessment and establish a plan of assistance within 5 business days of being assigned a lead / identifying a client in need of service. The correct assessment date must be entered in the Audit Information section of the client record.

Network Partners must contact DHCD if they can take on additional leads.

Difficulties experienced in reaching the client must be noted in the Client Comments section of the Hancock record. The MEAP Program Coordinator must also be notified via email.

### 6.3. CRITICAL MEDICAL NEEDS/AT-RISK CLIENTS

DOE

DOE does not recognize critical medical needs as a priority however "at-risk" clients as defined

under the [Health and Safety Plan](#) will receive the highest priority.

At-risk clients must meet at least one of the DOE priorities identified under [target population](#).

EmP

Applicants with critical medical needs may be eligible for “fast tracking” to an energy audit and project completion. The critical medical needs process enables applicants with documented medical conditions to receive help on an accelerated basis.

Applicants with critical medical needs are either referred to DHCD by navigators working in the medical and social assistance field who assist in the client’s application process for energy assistance or directly by network partners working with the applicant. If OHEP processes the applicant’s income certification it will be completed within 10 days. If certified by OHEP, the certified application, together with a checklist of the client’s energy program needs, and a copy of the physician’s certification of the medical condition is to be forwarded by the navigators, or OHEP, CSF or OPC to DHCD’s intake team. DHCD will assign the applicant to the network partner deemed best suited to assist the client and tag the client record as “CMN”.

If a network partner is referring the client to DHCD they must use the [Critical Services Referral](#) form following instructions for Critical Medical Need referrals. Physician’s letter showing proof of medical condition must include a reference to refrigeration, heating and cooling, or hot water heating. Once the applicant has been approved, DHCD will assign the applicant to the referring network partner and tag the client record as “CMN”.

The network partner must contact the lead within the same business day. At a minimum the auditor must assess the measures marked as critical for this client (“crisis measures”), which may include a refrigerator, HVAC system, or hot water heater. Systems that are gas-fueled require regular combustion testing procedures. The implementation of such crisis repairs or replacements are exempted from certain EmPOWER technical requirements and may follow the CMN guidelines outlined in the [measure requirements section](#).

The auditor does not have to perform a full audit at the initial crisis visit, however it is recommended to do so to ensure that the entire job will meet all EmPOWER job requirements. Projects that do not meet program requirements will not be reimbursed.

The network partner must resolve the crisis within 36 hours of assignment. Resolution may include temporary relief such as the use of space heaters, electric water kettles, or mini-fridges for up to 2 weeks until the new equipment can be installed. All technical and cost-effectiveness requirements for replacements remain as specified in the current POM. The network partner may use other qualifying funding sources to repair or replace a measure that does not qualify for EmPOWER benefits under this process. The agency must notify DHCD ([dhcd.lieep@maryland.gov](mailto:dhcd.lieep@maryland.gov)) and the client immediately when the crisis is resolved or determined it cannot be resolved with available resources.

If an audit was not performed at the time of crisis intervention, the auditor should return to complete the energy audit and the agency can install additional non-crisis measures as specified in the current POM. The weatherization job (Whole Home Efficiency or Base Efficiency as applicable) must be completed within 30 days of assignment. The network partner must notify DHCD ([dhcd.lieep@maryland.gov](mailto:dhcd.lieep@maryland.gov)) and the client immediately when the job is completed.

## 6.4. ELIGIBILITY VERIFICATION

Network Partners are required to conduct additional checks for eligibility at the time of scheduling and auditing. The scheduler shall interview the client before the audit to confirm that [the eligibility requirements](#) of building type, homeownership, occupancy, re-weatherization rules, and other eligibility requirements are satisfied to their best ability. If there is any doubt, contact DHCD at [dhcd.lieep@maryland.gov](mailto:dhcd.lieep@maryland.gov) for clarification.

Work performed on non-eligible projects will not be reimbursed.

## 6.5. REQUIRED JOB FORMS

It is the network partner's responsibility to collect a number of forms throughout the weatherization project. All required forms are provided in digital versions to the Network Partner.

### 6.5.1. ENERGY ASSESSMENT AGREEMENT

The Network Partner and the building owner must both sign the Energy Assessment Agreement for each dwelling unit prior to work being started. This form not only provides protection for the Network Partner, but it also explains pertinent weatherization assistance policies to the owner. In no case should Network Partner staff enter the building to conduct an energy audit, perform work or collect documentation before this form is signed.

The owner of the property must agree to allow local, state, and federal staff to enter the premises after weatherization services have been provided for the purpose of conducting a quality control and other necessary program inspections. This allowance for quality control inspections must be part of the Energy



Assessment Agreement form and the Building Owner Agreement form. A refusal to allow access for post service inspection is cause for denying services to the property and may result in the owner reimbursing the agency for all costs associated with the delivery of the services.

### **6.5.2. BUILDING OWNER AGREEMENT**

When a rental property is weatherized, a Building Owner Agreement form between the Network Partner and the owner must be signed before installation of measures can begin. The Owner Agreements are not fully executed until the eligibility documentation is received for each eligible client, the energy audit estimation has been performed by the Network Partner and the owner's investment (if applicable) and scope of work have been negotiated and included in the agreement.

The Building Owner Agreement with the Network Partner includes all necessary information to allow the weatherization improvements to proceed in an expeditious and cost-effective manner in accordance with federal regulations and guidelines, as well as State and local contract law. The Building Owner Agreement includes:

- The approval signatures of the building owner(s) or legal representative(s)
- A description of the owner's obligations including any financial contributions, if applicable
- A description of the Network Partner's obligations including the scope of work
- Rental clauses that allow rent increases only for specific causes or set limits on the increases such as the prorated share of increased property taxes, increased operating expenses, or the pro-rated and amortized cost of property improvement outside the scope of weatherization;
- Protection against the sale of property clause
- A definition of a breach in the agreement and the remedies to be taken if such a breach occurs, including liquidated damages.

The list of services to be provided (BOA: Agency's Scope of Work), the list of units and rents (BOA: Eligible Dwelling Units & Rent); and if applicable, the owner's list of work to be performed (BOA: Owner's Scope of Work/Owner's Investment), are to be developed during negotiations, initialed by the owner and the Network Partner representative and attached to the Agreement. The owner and the Network Partner sign the agreement and the Exhibits.

In addition to DHCD's Building Owner Agreement, contractors may enter into contracts with property owners for work to be completed, as required by Maryland law. Contractors are not instrumentalities of the State of Maryland. Contractors enter into agreements with property owners for services to be provided from the contractor to the property owner. The Department pays for those services, but is not a party to that agreement. Contractor will obtain a release of liability from the owner of the property that is the subject of the Project prior to performing any work on the Project, which releases the funding utility and the State from liability for any and all claims, damages, or other losses resulting from Contractor's work on the Project

EmP	Base Efficiency jobs that do not include measures beyond the direct installs listed on the Energy Assessment Agreement are not required to execute a building owner agreement, however it is recommended.
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### 6.5.3. TENANT SYNOPSIS OF THE BUILDING OWNER AGREEMENT

All tenants in a rental building must be given a copy of the Tenant's Synopsis of the provisions contained in the Building Owner Agreement. This is a plain-language explanation of the Agreement and notifies the tenants of their rights which generally focuses on the following elements:

- Rental clauses that allow rent increases only for specific causes or set limits on the increases.
- Protection against sale of property and/or eviction.
- Description of the process the tenant should follow if they believe the landlord has violated the agreement.

The Tenant's Synopsis Form must be completed in its entirety before its distribution to tenants. Signatures are not required.

Network Partners must provide one copy of the Building Owner Agreement to any tenant that requests it.

### 6.5.4. DEFERRAL FORM

The deferral form is needed, when a home is deferred from Whole Home Efficiency, or classified as an EmPOWER Base Efficiency job, or deferred from the DOE program, regardless of the reason for the deferral. Network Partners must clearly state what the reason for deferral is and what the client can do to become eligible for whole house weatherization, if applicable. In conjunction with the deferral form the Network Partner must also provide clear instructions on how the client can re-apply for services directly with the Network Partner after any issues may have been repaired.

### 6.5.5. BASE EFFICIENCY JOB COMPLETION FORM

EmP	At the completion of a Base Efficiency job, the Base Efficiency Job Completion Form must be filled out in its entirety. A complete scope of measures installed, including energy measures, H&S and incidental repairs must be listed on the form, must match the selected measures in Hancock, and the scope must be explained and demonstrated to the client. The client and a qualified Network Partner representative must sign the form certifying that the scope stated
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on the form reflects the work performed in the home.

## 7. ENERGY AUDITS

A comprehensive energy audit must be performed on each dwelling unit that is intended to receive weatherization services. Auditors are required to use the Hancock field application to record all data for input HEAT/MINT , in order to comprehensively record findings and effectively compile an effective list of measures.

Energy auditors shall accurately and completely identify and input existing conditions and develop energy models that consider all feasible energy saving opportunities. The energy model will assist the energy auditor with developing a comprehensive scope of work that is program compliant. Note that, per WPN 23-6, measure skipping could also be the result of failure to evaluate all applicable energy savings measures for the dwelling.

The energy auditor determines the pre-weatherization conditions of the home and identifies what weatherization measures are appropriate. Energy Audits must follow the DHCD Maryland Field Guide.

Required client documentation (including utility bill copies or signed homeowner forms) should be collected prior to the commencement of the energy audit.

### MEAP -C

During crisis season, a system inspection is to be conducted within 36 hours of client assignment, to determine what is needed to resolve the crisis. Assessments should be performed within 5 days of assignment outside of the crisis season.

If it is determined during the visit that the dwelling is an appropriate candidate for weatherization and is eligible for weatherization (consult with DHCD), a whole-home audit should be performed as well. The goal is for each crisis case to become a weatherization case. For crisis cases that are deemed weatherization eligible, the auditor shall take into account any thermal and air infiltration improvements when preparing the manual J load calculation to ensure the new system will be right sized post-weatherization. Any case in which an existing health and safety issue may prohibit the installation of new equipment must be discussed with DHCD's Senior Program Manager or Client Production Manager before [being deferred](#). Depending on the associated costs, health and safety issues may be addressed using MEAP funding.

### 7.1. GENERAL ENERGY AUDIT REQUIREMENTS

An Energy Audit must meet the following requirements:

- Data collected in the field must be accurate and reliable
- Include client education to the homeowner/client, which considers energy costs and applicable energy conservation strategies.
- Be based on current building-science principles and include the use of appropriate equipment in diagnosing opportunities for improving energy efficiency, and minimizing health and safety hazards.
- Utilize HEAT to produce a cost-effective work scope of specific energy efficiency and health/safety measures warranted by the site-specific circumstances.
- Enter comments related to existing conditions and proposed work scope in the Detailed Measures comment boxes.

There may be cases where a home has significant issues, including but not limited to structural damage, extensive mold, or animal infestations, that make the home ineligible for weatherization. In cases such as these, the energy auditor must record the issues in detail on the required forms and document the concerns in writing and with photographs.

The energy audit shall:

- Not exclude any portion of the building i.e. attics, basements, crawl spaces, attached enclosed porches, etc.
- Not endanger the occupants or the auditor.
- Include accurate measurements of all spaces
- Include an interview of the occupant(s) about their awareness of energy-related home Hazards and other factors, including pets, occupants, etc.
- Include a test of all combustion appliances in accordance with the MD Field Guide.
- Evaluate ventilation requirements.
- Identify signs of moisture problems.

The energy auditor shall:

- Identify existing hazards and hazards that may develop when the measures are installed and specify preventative measures.
- Inform clients about identified and potential fire, structural, health, and safety hazards related to energy systems and retrofit work.
- Specify in the recommendations that workers do not disturb known or suspected lead, asbestos, or mold, unless the workers are qualified and use appropriate containment, cleaning, and/or abatement procedures.
- Specify in the work scope that identified electrical hazards, which may hinder planned ECMs, are mitigated.
- Specify appropriate safe work practices in the work scope.

The energy audit shall result in a work scope detailing proposed ECMs as described in this section. This

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work scope shall be based on an evaluation of the whole house according to the requirements of this standard. The objective of the work scope is to optimize home performance cost effectively, while maintaining or improving health and safety.

An energy audit expires if work is not started within one year of the audit and must be repeated.

Approved auditing tools are as follows:

**Single Family:** HEAT energy modeling tool is approved for multi-unit developments of buildings with 4 and fewer units not centrally heated/cooled and single-family dwelling units.

**Manufactured Housing:** HEAT energy modeling tool is approved for manufactured homes.

**Multi-Family:** DHCD is not approved for auditing multifamily buildings in excess of 4 units or where units are centrally heated/cooled.

EmP	Base Efficiency and Whole Home Efficiency Priority List jobs do not require a full energy model to be run. The job must be set to "Other / no energy model" and measures must be created according to the requirements in this section. If HVAC replacements are included in the work scope, house dimensions must be entered in Hancock's audit information section.
EmP	

MEAP -C	MEAP crisis jobs do not require a full energy model to be run. The job can be set to "Other / no energy model" and measures must be created according to the requirements in this section. If HVAC replacements are included in the work scope, house dimensions must be entered in Hancock's audit information section.
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### 7.1.1. INTRODUCTION AND VISUAL INSPECTION

The energy auditor must confirm that all [required documentation](#) is signed and collected.

The energy auditor shall provide the client a short overview of what to expect from the audit.

Before performing any diagnostic testing, the energy auditor must perform a visual inspection of all parts of the home to determine if:

- There are any health and safety concerns present that prevent the performance of diagnostic testing.
- There are any conditions present that warrant a deferral or denial of the home.
- There are indications that the home had previously received weatherization services. If weatherization measures have been installed prior to the visit, DHCD should be notified. DHCD will make a determination if the dwelling is eligible for additional weatherization services based on the [re-weatherization guidelines](#).

- All eligibility requirements are satisfied based on building type, occupancy, homeownership, etc.

After it has been determined that the audit can proceed, the energy auditor must accurately and completely enter the building data into HEAT. The audit assesses overall building energy use and must include all existing systems and appliances using energy. The energy auditor shall collect data for consideration of all feasible energy saving opportunities for baseload equipment, water fixtures, and other items that consume or conserve energy in the home.

### 7.1.2. DIAGNOSTIC TESTING

Diagnostic testing must be performed following the MD Field Guide and all applicable BPI 1200 standards and protocols. Conditions preventing combustion testing or blower door testing are outlined in the MD Field Guide. In cases where diagnostic testing cannot be performed, the reason must be noted in Hancock.

All findings must be documented with photos and description in Hancock. If diagnostic combustion testing cannot be completed and the system cannot be replaced, the job shall be deferred.

#### EmP

When blower door diagnostics cannot be performed because of health and safety reasons and the unit is modeled for efficiency improvements, Hancock requires the entry of a pre-test value and a target value on the Air Infiltration screen. In such cases, take the following steps:

- For the pre-test CFM50, enter an estimated value of 2x the square footage of the home.
- For the target CFM50 enter a value 1 less than the pre-test value.
- Leave a comment in Hancock that the blower door was not run, what conditions prevented the blower door from being run, and that the entered values are estimates.

#### EmP

Base Efficiency jobs do not require diagnostic testing, unless fossil fuel appliances are present. In such cases, combustion testing on the appliances and the applicable combustion appliance zone (CAZ) must be performed. In the event of a fossil fuel appliance replacement, pre and post diagnostic testing is required.

#### MEAP -C

If the affected system is fossil fuel fired, combustion testing of the appliance is required at the time of the assessment as well as post-installation.

### 7.1.3. DIRECT INSTALLS

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Direct install measures are measures that typically meet or exceed SIR requirements such as light bulbs, faucet aerators, smart strips, etc. and may be installed at the time of the energy audit.

**DOE** Low-cost/No-cost weatherization activities may be carried out provided that only those measures that have been approved by DOE through WPN 23-6, Attachment 7 (Appendix A to Part 440) or waiver are installed.

**EmP** All measures must meet the job SIR requirements. Direct install measures not meeting SIR requirements will not be reimbursed. This does not apply to jobs performed using the Whole Home Efficiency Priority List.

**EmP** All measures must meet the Base Efficiency measure requirements.

#### 7.1.4. CLIENT EDUCATION

The energy audit must conclude with client education. The client shall be provided with the following information:

- Verbal description of what was found in the home and what the next steps in the program may be.
- Verbal description of any health and safety concerns, including recommendations to maintain or improve existing levels of health and safety and mitigate identified hazards.
- Written description of any health and safety concerns that cannot be repaired under program guidance, but should be addressed by the client. In the case of a deferral or Base Efficiency job, this information is provided on the deferral form. The deferral form must be filled out completely and provided as a copy to the client as well as uploaded to Hancock.
- Copies of any educational materials provided by DHCD. DHCD will make available copies of the required materials upon request.
- Tips on how to save energy through behavioral changes, based on opportunities found in the home, observed behavior, and energy use analysis.

**DOE** The educational materials at the time of the audit include the following:

- [DOE Energy Savings Guide](#) needs to be reviewed and left with the client
- Radon form
- “List of Additional Resources” sheet

EmP

The educational materials include the following:

- [DOE Energy Savings Guide](#) needs to be reviewed and left with the client
- “List of Additional Resources” sheet

## 7.2. AUDIT DOCUMENTATION

All findings from the energy audit must be uploaded to the Hancock job file. Descriptions of existing conditions must be true to the actual existing conditions or at least true to the best knowledge of the auditor when a condition can't be verified through visual, diagnostic, or other means.

### Photos

The job file for every weatherized dwelling shall contain specific photographic documentation of pre, interim, and post-weatherization conditions. Circumstances, events, or measures requiring mandatory photographic documentation shall include, but not be limited to:

- Conditions causing deferral or denial
- Unusual or hazardous conditions encountered during the course of work
- Justification for an atypical measure or course of action
- Verification of Lead-Safe work practices
- Photographs required for State Historic Preservation Office (SHPO) compliance
- Existing HVAC, appliances, and equipment
- Replacement HVAC, appliances, and equipment
- Verification of measures installed
- Insulation levels with insulation ruler (cellulose) properly installed
- Photos of manometer for blower door and fan flow.
- Photo of CAZ and combustion testing results

Photographic documentation shall comply with the following minimum specifications:

- Images shall be digital
- Shall be clear and easy to view
- Shall be taken in a perspective manner (i.e. show entire furnace, attic as able)
- Shall contain captions which identify the job site and the specific events being depicted
- Shall be date and time stamped
- Image source files shall be retained electronically
- The quantity of photographs taken shall be adequate to document all applicable circumstances, events, and measures
- Equipment installations must be documented with photos of nameplates or equipment technical specification sheets to confirm equipment make, model, capacity, and efficiency.



The energy data entered in Hancock must be reviewed for accuracy. Some sections in Hancock that can skew projected energy savings are:

- Assigning a building's Air Leakage as greater than Uniform, Normal, and Normal on the Audit Information screen in Hancock. Photos and comments must be uploaded to support the described conditions.
- Overestimating duct leakage in the distribution system. If the duct leakage is categorized as Significant Leaks or Catastrophic Leaks, photos and comments must be uploaded in Hancock to verify the conditions.
- Improperly rating the existing attic insulation. Existing R-values in attics should be evaluated based on conditions as found, not based on disturbance during weatherization.
- Not entering correct data on existing heating/cooling systems.
- Failure to enter data for existing large appliances such as domestic water heaters, refrigerators, and freezers.

### 7.3. JOB CLASSIFICATION

The results of the energy audit determine the job classification. The job classification determines if work can proceed and what type of measures can be included in the work scope. Energy auditors must make the determination of job type throughout the auditing and energy modeling process based on the criteria described in this section.

#### 7.3.1. DOE DEFERRAL PROCESS

##### DOE

The decision to defer work in a dwelling or, in extreme cases, deny weatherization services, is difficult but necessary in some cases. This does not mean that assistance will never be available, but that work must be postponed until the problems can be resolved.

Reasons for deferral are identified at the time of the audit. LWAs who make an initial determination that a home is beyond the scope of DOE WAP are required to adhere to the following:

Before a house is deferred, Subgrantees are required to consult with a DHCD Quality Assurance Inspector, document Hancock by providing a description of the repairs needed, upload photographic evidence to support the repairs needed, and provide cost estimates. Pending the QA Inspector's approval, a Deferral form that is signed by the client must also be uploaded in Hancock.

When a home has been deferred, the applicant shall be notified within 10 working days of that

decision. Notification shall include the following:

- Reason for deferral
- Testing results (if applicable)
- Corrective actions necessary for weatherization to continue
- Process for applicant to appeal to a higher level in the Subgrantee's organization

The Deferral Form is completed by the Subgrantee. The form template is provided by DHCD, must be filled out completely, and uploaded to the Hancock documents folder. The Hancock record must be marked as deferred and a comment of the deferred reason must be included.

Subgrantees are expected to make reasonable efforts on behalf of their clients to find alternative assistance when DHCD funds for weatherization are unable to address conditions that lead to deferral. When possible, the notice shall include a list of potential agencies with funding designed to address the specific issue which precludes a client from participating.

Whenever appropriate, educational information on how to address the hazard should be shared with the occupant. Please refer to the [MD Health and Safety Plan](#) for additional information on condition-specific client education.

Deferral conditions may include but are not limited to:

- **Condemned** - The house has been condemned or is scheduled for demolition or electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities.
- **Extensive Work Scope** - the building is in need of extensive rehabilitation, and no such rehabilitation has been provided for.
- **Health or Safety Issues/Hazards** – \*reference Health and Safety items above for specific deferral conditions.
- **Excessive Clutter or Hoarding Conditions** – If the house has excessive clutter that would impede the installation of the weatherization work performed.
- **Uncooperative Client** - The client is uncooperative, abusive, or threatening to the crew, subcontractors, auditors, inspectors, or others who must work on or visit the house. When an eligible client is uncooperative with the LWA or SWC, either in demanding that certain work be done and refusing higher priority work which is needed (e.g., demanding only windows), by being abusive to the work crew or subcontractor, or by being unreasonable in allowing access to the unit, every attempt should be made to explain the program and the benefits of the work. If this fails, work must be suspended and the DHCD Quality Assurance Inspector consulted.
- **Illegal Activities** - Illegal activities are being conducted in the dwelling unit.
- **Structure for sale** - building or dwelling unit that is for sale, or subject to bankruptcy or

foreclosure.

- Legal Dispute - building or dwelling unit where ownership cannot be confirmed due to a legal dispute. Clear title must be established before services can be provided.
- Conflict of interest or appearance of conflict - when the structure is owned, managed or occupied by an employee, board member, officer or relative of a Network Partner employee, prior approval must be obtained from the regional supervisor before any work is started. If the client is a board member or senior staff member of the LWA or SWC prior approval will not be granted.

In unusual situations not covered above or where other problems of a unique nature exist, the DHCD Quality Assurance Inspector should inspect the property.

If obvious discrepancies are found between the information supplied by the client on the application and observed conditions at the time of weatherization, the LWA must resolve these questions prior to weatherization. Some examples of discrepancies are an obvious change in the client's income, (e.g., an unemployed client who is now back to work), a difference in the number of persons living in the dwelling unit, (fewer persons than listed, a person or persons not accounted for who may have income), evidence of business being conducted in the unit, etc.

If at any time prior to the beginning of the actual weatherization work, the LWA determines that the client is no longer eligible, the unit cannot be weatherized. When an LWA has first-hand knowledge, or reason to believe that circumstances may have changed, the LWA should request an updated application from the client.

### 7.3.2. DOE WAP WEATHERIZATION READINESS FUND (WRF)

#### DOE

Weatherization Readiness Fund will be utilized to address deferral conditions on a case by case basis. DHCD and subgrantees will comply with WPN 22-6. Weatherization Readiness Funds can only be used on homes that will receive weatherization services following the deficit correction. Weatherization Ready jobs must result in a DOE completion. The following deferral conditions may be considered to be addressed with the Weatherization Readiness Fund:

1. The building structure (such as the roofing structure) or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that conditions cannot be resolved in a cost effective manner.
2. The house has sewage or other sanitary problems that would further endanger the client and weatherization installers if weatherization measures were installed.

3. Electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities and cannot be corrected by the delivery of WAP funded services.
4. Moisture or site drainage problems are so severe they cannot be resolved under existing allowable health and safety measures or with minor repairs.
5. Severe Mold and Moisture problems are so severe they cannot be resolved under existing health and safety measures and with minor repairs. Severe Mold is defined as an area of more than 10 square feet.
6. Pest Infestation may be cause for deferral if the pests cannot be removed and pose a health and safety risk to the workers.
7. Any other health or safety condition present or created by, exacerbated by, and cannot be corrected by the delivery of WAP funded services.

The average cost per unit of Weatherization Readiness Funds that can be used on a home to address these deferral conditions is \$15,000. The funds will be distributed to subgrantees based on the same formula for determining allocations for annual DOE program funds.

Subgrantees will conduct 100% inspections on Readiness units and DHCD will monitor a minimum of 10 percent.

Subgrantees must submit a request in writing to the Program Manager to request the use of the Weatherization Readiness funds at a job. The written request must provide a detailed description of the deferral issue that needs to be addressed at the home, provide photo documentation to support the need for the readiness funds, and provide a not to exceed estimate of the cost of the improvement.

1. If the subgrantee has a wait list of deferred homes in a service area, these homes should be considered immediately for Weatherization Readiness funds to get them in the cue for weatherization services. Clients should be contacted and scheduled for assessment.
2. Normally, deferrals are identified at the time of the assessment when someone goes to the home. For a new client that is being assessed for Wx. services, if there are serious issues identified that are beyond the scope of eligible conservation and H&S recommendations utilizing the funds available, this home would be categorized as Deferred until the deficiency is corrected. These clients have been identified following the normal prioritization and wait list process so this should continue to be followed.
3. In either case the subgrantee would create a scope, contract for services or engage with a licensed contractor to do the work so that the building would then be eligible for weatherization work. Readiness work should be identified by measure in the client file.

4. Once the Readiness work is complete, the client needs to sign off on a detailed list of the measures installed and then should be scheduled as soon as possible for weatherization services. (If this occurs during a transition between program years, that is acceptable, just keep the information from the Readiness work in the client file moving forward.) Jobs receiving Readiness funds will receive a Quality Assurance inspection upon the completion of weatherization.
5. Client files for each job shall contain the intake, measure, cost, and inspection information for Readiness.

#### Weatherization Readiness Fund Reporting

In accordance with DOE guidance, Subgrantees are required to track and prepare a summary of units receiving WRF. To assist in tracking these units, DHCD will utilize the DOE-developed tracker which can be located [here](#). This report is due 30 days after the end of each quarter.

### 7.3.2. EMPOWER JOB TYPES

EmP

At the time of the audit, a participant’s home is either identified as a Denial, Base Efficiency, or Whole Home Efficiency job based on the conditions found. The charts in the following section are to assist with determining the action to take based on project conditions. When in doubt, please consult a state inspector.

#### 7.3.2.1. EMPOWER DENIAL

EmP

If the home is in jeopardy of structural failure, abandonment, or other similar severe conditions, the home shall be denied services to protect ratepayer funds from being invested in property of imminent failure. It is incumbent upon the contractor to examine the structural integrity and severity of health and safety conditions of a home before proposing or starting any work. See the following examples when a home should be denied:

Examples of Denials	
	Reasons for Denial
Fuel Type	N/A

Opportunity	The house is not eligible for the program due to utility provider, building setup, ownership concerns, or apparent income eligibility fraud, or the home has already received comprehensive weatherization and there is no opportunity for any energy measures under the current program requirements.
Structural	The house has been condemned or electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities. The auditor determines that the structure of the home is in imminent failure based on the condition of structural elements such as beams, joists, and studs.
Sanitation	The house has severe sanitation problems such as infestation with pests or feces, threatening the health of the crew, subcontractors, auditors, inspectors, or others who must work on or visit the house.
Moisture / Mold	The house has severe and widespread moisture damage or mold on structural building elements that put the house in a state of imminent failure.
Asbestos	N/A
Lead Paint	N/A
Client Health	The client is not available or responsive due to extensive and prolonged health conditions.
Client Behavior	The client is uncooperative, abusive, or threatening to the crew, subcontractors, auditors, inspectors, or others who must work on or visit the house. Illegal activities are being conducted in the dwelling unit.
Structure for sale	Building or dwelling unit that is for sale, or subject to bankruptcy or foreclosure.
Other	Identified conditions not stated in this list that reasonably prevent any measures from being installed.

No audit fee and no measures are billable for a denied home client.

Every denial at the time of the audit or after the audit requires state inspector approval. After inspector approval of the denial, a denial letter has to be filled out, provided to the client, and uploaded to the client record in the Documents tab. The client record has to be marked as a Denial and a detailed denial reason must be provided in the comments section.

### 7.3.2.2. EMPOWER BASE EFFICIENCY JOB

**EmP** A Base Efficiency project is a project that is in a condition of disrepair due to the lack of maintenance, or health and safety conditions that cannot be corrected within program budget

and SIR guidelines to allow the installation of building shell measures. See the following chart for examples when a home should be treated as Base Efficiency job:

<b>Reasons for Deferral to the Base Efficiency Program:</b>	
Fuel Type	<ul style="list-style-type: none"> <li>Client with oil, propane, or wood as primary heating fuel AND summer or winter use is not at least 2,000kWh higher than baseload.</li> <li>Delmarva, PE, Pepco, or Smeco client with Natural Gas as primary heating fuel (gas provider is NOT WGL or BGE), AND summer or winter use is not at least 2,000 kWh higher than baseload.</li> </ul>
Opportunity	The home is already sufficiently air-sealed and insulated, however Base Efficiency energy measures qualify for installation according to program guidelines.
Structural	The building structure or its mechanical systems, including electrical and plumbing, are in a state of disrepair that they cannot be repaired with the program's allowable expenses for such repairs, but not in imminent failure.
Sanitation	The house has sewage or other sanitary problems that would further endanger the client and weatherization installers if full weatherization work were to be performed and repair is beyond the scope of reasonable cost justification.
Moisture / Mold	Moisture problems are an indoor air quality concern, but do not affect the structural components of a home and are only on the surface of drywall or other finishing materials. They are at a level that they cannot be resolved within the program's allowable expenses for such repairs.
Asbestos	Friable asbestos building materials or vermiculite are present.
Lead Paint	The extent and condition of lead-based paint in the house would potentially create further health and safety hazards if disturbed and cannot be resolved within the program's allowable expenses for such repairs.
Client Health	The client has known health conditions that prohibit the installation of insulation and/or other weatherization materials, such as allergies to materials. Client behavior - such as not wanting insulation when it is appropriate for the program to do, should not be an excuse for performing a Tier 1 project when a Tier 2 should be done.
Client Behavior	N/A
Other	Identified conditions not stated in this list that reasonably prevent air sealing or insulation measures from being installed. State approval required.

This type of job does not require an energy model. Base Efficiency jobs do not require diagnostic testing, unless fossil fuel appliances are present. In such cases, combustion testing on the appliances and the applicable combustion appliance zone (CAZ) must be performed pre- (and post-) replacement.

Any measures other than building envelope changes must be considered for upgrades as the Base Efficiency measure requirements allow.

A Base Efficiency project may qualify for the replacement or repair of HVAC systems and combustion water heaters where the replacement does not cause a negative impact on the health and safety of the occupants or degradation of the building materials. HVAC systems can be repaired or replaced in cases where they don't negatively affect the indoor air quality of the home. **Sound building science principles must be used in making this determination.** The client file must also clearly describe why the project is considered eligible for such measures and that the action will not cause or create undesirable conditions in the home. Remember that all HVAC and combustion appliance measures require state approval.

Health & safety measures and Incidental Repairs as they pertain to the proposed energy measures are allowed.

For each Base Efficiency job a deferral form must be provided to the client and uploaded to Hancock, explaining the actions to resolve any H&S concerns and how to re-enter as a Whole Home Efficiency job.

Base Efficiency jobs are exempt from full QC inspections, but require a job completion form to be filled in, signed, and uploaded. Refer to [QC requirements](#) for additional details. Base Efficiency jobs are included in the sample for QA inspections.

A job that was completed as a Base Efficiency job, and that has had health and safety and other concerns resolved, is eligible to receive building shell and other measures as a Whole Home Efficiency job. Network Partners must instruct Base Efficiency clients to contact the Network Partner directly when the health and safety conditions are resolved and provide proof of such resolution.

### 7.3.2.3. EMPOWER WHOLE HOME EFFICIENCY JOB

EmP

A Whole Home Efficiency job is a comprehensive retrofit job. It shall receive all measures that meet program requirements and follow the regular job procedures as specified in this document. This is considered a full weatherization job.

Qualifiers for a Whole Home Efficiency Job	
Fuel Type	<ul style="list-style-type: none"> <li>Client with electric primary heating system, and / or central AC system, and /or summer use is at least 2,000kWh above baseload.</li> <li>Client with Natural Gas as primary heating source and gas provider is BGE or WGL.</li> </ul>
Opportunity	The home has sufficient opportunity to perform full weatherization and meets program guidelines for all such measures.



Structural	The building structure or its mechanical systems, including electrical and plumbing, are in a state of disrepair that can be resolved within the program’s allowable expenses for such repairs.
Sanitation	The sanitary problems can be resolved by the client or within the program’s allowable expenses for such items.
Moisture / Mold	The moisture concerns can be resolved within the program’s allowable expenses for such items.
Asbestos	No friable asbestos building materials or vermiculite are present or can be resolved within the program’s allowable expenses for such items.
Lead Paint	The lead paint concerns can be resolved within the program’s allowable expenses for such items.
Client Health	The client has no known health conditions that would be exacerbated by weatherizing the home.
Client Behavior	N/A
Other	N/A

A job that was previously completed as a deferral, Tier 1 job, or Base Efficiency job, and that has had health and safety and other concerns resolved, is eligible to receive building shell and other measures as a Whole Home Efficiency job. A Whole Home Efficiency job can be performed at any time after the Base Efficiency job has had all necessary repairs performed. The 5-year re-weatherization rule does not apply in this case.

Network Partners must instruct Base Efficiency clients to contact the Network Partner directly when the health and safety conditions are resolved and provide proof of such resolution. If their income certification is still valid, the network partner can create a second job under the same client record in Hancock and proceed with the Whole Home Efficiency job. If the income certification has expired, a [new application has to be submitted to DHCD](#).

Network Partners must verify on site that the health and safety issues were resolved and re-test diagnostics such as blower door and combustion tests. Another full audit is not required unless one year has passed since the initial audit. However, the auditor must verify that the existing conditions have not changed otherwise and make corrections in the job file.

The Whole Home Efficiency job can only receive measures it hasn’t received as part of the Base Efficiency scope. The energy savings and costs from the Base Efficiency scope (and / or from a DHCD provided Energy Kit) can be credited towards the SIR of a Whole Home Efficiency job, provided that Whole Home audit occurs within one year of the previously achieved savings.

## 7.4. MULTI-UNIT ENERGY AUDITS

Energy audits for multi-unit properties follow the same guidelines as described for single family homes. An audit must be performed for each individual unit at the property. While Hancock allows the ability to copy job information from a similar unit, the energy auditor is responsible for verifying that all data is correct for the unit it is reported for.

## 7.5. PRIORITY LIST JOBS

DHCD offers the use of Priority Lists (PL) for the DOE WAP and EmPOWER Whole Home Efficiency programs. The use of the PL allows for streamlining of Single Family Site Built, Mobile/Manufactured Home and Low-Rise Multifamily Buildings. These optional, regional PL's are not exhaustive and do not include every measure which may be cost effective on a site-specific basis.

Priority Lists can be used in place of energy modeling in certain cases:

**DOE** In accordance with DOE WPN 22-8, 10 CFR 440.21(g) allows for energy audits to be conducted using a predefined PL when “similar dwelling units without unusual energy-consuming characteristics” exist. DOE has determined what these similar dwelling unit types are and what measures should be considered for installation in these dwelling types based on regional differences in climate and energy costs. Dwelling unit needs which include any measure(s) not included within the PL or if the home does not meet the basic requirements of the PL, would then require a site-specific energy audit be run in compliance with DHCD’s most recently DOE-approved energy audit procedures.

Eligible dwelling units must meet the following criteria in order to be considered for PL use:

- The Single-Family PL applies to any wood-framed, single family site-built dwelling that meets the following:
  - Is not more than 3 stories above grade;
  - The primary heating system is NOT as sealed combustion gas furnace originally rated at or above 90 AFUE; OR a heat pump manufactured after 2006;
  - Job will not exceed \$500.00 in incidental repairs
- The Manufactured PL applies to any single-wide or double-wide manufactured homes that meets the following:
  - Is manufactured before 2010;

- Has an accessible unconditioned subspace;
- Does NOT have an attached conditioned additions;
- Primary heating system is NOT a natural gas furnace originally rated at or above 80 AFUE;
- Job will not exceed \$500.00 in incidental repairs
- The Low-Rise Multifamily PL applies to any wood framed low-rise multifamily structure that meets the following:
  - Five (5) or more dwelling units per building;
  - No more than 3 stories above grade;
  - Incidental repairs will not exceed 10% of the projects total ECM package

EmP

Project Eligibility:

- Building type must be either Single-Family Site-Built, Manufactured Home, or Low-Rise MultiFamily
- Cannot include a dishwasher, clothes washer, and/or clothes dryer in the scope of work.

When the priority list is used, the following guidelines for the work scope apply.

DOE

[See this section for the DOE priority lists.](#)

- All Health and Safety Measure installations are mandatory as per the POM, and for DOE as per the DOE H&S Plan.
- If the Regional PL is used, any measure listed as MANDATORY it may only be skipped if the measure physically cannot be installed regardless of funding source used.
- If a non-DOE funding source is used for a mandatory measure, it must meet all requirements of the DOE WAP as outlined in the PL. Optional measures may only be installed if all other mandatory measures are installed as well.
- All job cost or Average Cost Per Unit requirements apply.
- Individual measure cost caps, if applicable, are detailed in the appropriate Regional PL.

EmP

[See this section for the EmPOWER priority lists.](#)

- Measures can only be replaced if they meet the existing conditions requirements and the new efficiency requirements listed in the [Energy Measures section](#).
- An explanation of why the measure meets the requirements for installation must be included in the Hancock measure's description
- Measure selection must follow the priorities laid out in the priority lists

- All measures are mandatory unless; noted on the priority lists, are physically unable to be installed, or they do not meet requirements.

If the auditor determines that the dwelling unit needs measures not on the PL, or does not meet all of the eligibility requirements listed above, the home shall receive a full-house energy model. For homes requiring a full house model, all applicable regulations and standards must be met according to the POM and Technical Policy and Procedures Manual.

The PL does not remove any established requirements of energy auditing; and all energy audits are to be conducted in accordance with the requirements of the POM section 7 (Energy Audits), SWS-Aligned MD Field Guide and the Technical Policy and Procedures guide. The PL also does not remove any of the established requirements of Quality Control Inspections (QCI). The Inspector shall note any missed opportunities that are eligible for the PL.

## 8. WORK SCOPE

Based on the energy audit findings, decisions have to be made as to which measures can be installed. The work scope shall meet the following requirements:

- Prioritization of health and safety improvements according to their urgency and importance.
- Prioritization of ECMs according to cost effectiveness, and feasibility.
- Pre-work and post-work documented verification, such as diagnostic testing and all measures identified as part of the audit.
- Work scope is designed in Hancock, reflecting the actual conditions on site.
- The network partner must follow all current guidelines regarding measure availability and HEAT modeling. Only services that pass the savings to investment ratio tests may be installed.

**EmP** Work scopes for re-weatherization projects are limited to the installation of measures not already installed during the initial weatherization effort.

Work scopes for Whole Home Efficiency jobs using the priority list method must follow the priority rules for installing measures.

**MEAP -C** Work scopes are limited to: Heating and cooling systems replacements/repairs, water heater replacements/repairs, health and safety measures and incidental repairs that are needed to facilitate the installation of a new cooling, heating, or water heating system.

**MEAP -Wx** Installed energy savings measures paid for with MEAP funds must have a Savings-to-Investment Ratio (SIR) of 1.0 or greater, with the exception of air sealing.

## 8.1. WEATHERIZATION STANDARDS

The [Standard Work Specifications \(SWS\)](#), developed by the National Renewable Energy Laboratory (NREL) and adopted by DOE, define the minimum requirements to ensure that the work performed during energy upgrades in single-family, multifamily, and manufactured homes is effective, durable, and safe. This set of Standards has been integrated into the new Maryland Field Guide.

The SWS-Aligned Maryland Field Guide is designed to be specific to Maryland relevant measures, provide clear measure installation guidance, and tie in the applicable Standard for each measure. The DHCD Field Guides and standards will be provided by DHCD to all weatherization partner organizations at the Annual Network partners meetings and is available on DHCD's website

All recipients shall sign a form acknowledging that they have received them. Mailings will also be sent to those not in attendance, which will require a mailed or emailed confirmation of receipt. Failure to do so will result in a "Stop Work" order from DHCD. An electronic version of the Maryland Field Guide is available online through a link on the bulletin page on Hancock and on DHCD's website on the energy efficiency programs page.

## 8.2. LEVERAGING MULTIPLE FUNDING SOURCES

Leveraging is the practice of utilizing two or more compatible funding sources at the same home to maximize the weatherization services. Leveraged funds are ancillary funds to complete EmPower/DOE jobs where additional funds are needed. Leveraging funds should allow more holistic jobs and maximize DHCD funding to serve additional citizens. It also allows for fewer denials and EmPOWER Base Efficiency jobs.

Network Partners must document leveraged funds on any DHCD EmPower or DOE WAP funded projects. This includes work such as roofing, lead/asbestos and microbial abatement and remediation, etc. Funding sources classified as "Leveraged" are any funding sources that are not managed by DHCD HBEP, such as MHRP, CDBG, HUD, USDA, HOME, etc. Use of the "Leveraged" fund source must have the source identified in the comments section.

The network partner must document its efforts to leverage funds on every job by entering comments in Hancock and provide an explanation as to why leveraging was not possible in specific cases.

Neither DOE, nor EmPOWER, nor MEAP-Wx can have only IR or HS measures tied to it. These funding sources must have at least one ES measure on each job they are used on. An IR measure must use the same funding source as the ES measure it relates to.

DOE

Although coordination is strongly encouraged, subgrantees are reminded that there are core

program principles that must be maintained as follows:

- Assisted households must be eligible under WAP rules; all WAP policies must be followed.
- There must be an approved DOE energy audit with an evaluation of energy-related health and safety (H&S) conditions, analyzing existing building conditions and building energy use. There must also be a written scope of work that documents the work that will be funded by WAP and the work that will be funded by other sources.
- Material and installation standards must meet DOE WAP requirements.

**MEAP -C** To maximize energy savings and comfort associated with HVAC replacements, leveraging with energy efficiency funds should be considered for units with weatherization opportunities.

### 8.2.1. FUNDING SOURCES COMPATIBILITY AND RULES

Leveraged funds may be used to offset measure costs so long as the measure meets all program requirements and the funding sources are allowed to be blended. The table below indicates (✓) which funding sources can be leveraged on the same job and which combinations are prohibited (X).

Leveraged Funds Compatibility					
	DOE/DOE BIL	EmPOWER	MEAP	Homeowner Contribution	Other "Leveraged"
DOE/DOE BIL		✓	✓	n/a	✓
EmPOWER	✓		✓	✓	✓
MEAP	✓	✓		n/a	✓
Homeowner Contribution	n/a	✓	n/a		n/a
Other "Leveraged"	✓	✓	✓	n/a	

The following program specific rules apply to leveraging:

**DOE** A DOE-approved energy audit must be completed. Energy savings measures installed and paid for with DOE funds must meet a Savings-to-Investment Ratio (SIR) of 1.0 or greater, but also

may include any necessary energy-related health and safety measures.

When combining other funding sources with DOE, the entire job must pass QCI/QA according to DOE standards.

**EmP**

Required homeowner contribution for EmPower jobs:

- Rental units where capital investments are being made. A contribution is required where identified in the [measure requirements](#).
- Only 85% of such measures can be paid for with EmPOWER funds
- The landlord is responsible to cover at least 15% of the measure cost, alternatively leveraged funds can be used to cover up to 15% of the measure cost.
- Contribution must be documented in Hancock and the BOA
- Landlord contributions are classified as the funding source “Homeowner Contribution” in Hancock.

Job Type:

- If EmPOWER is leveraged with DOE or MEAP-Wx on a home that is not eligible for Whole Home Efficiency based on fuel type, only Base Efficiency-eligible measures can be assigned to EmPOWER, however the funding source on a comprehensive job like this must be Whole Home Efficiency.

WGL funds should be applied in conjunction with other funds that cover electric measures and audit fees as far as possible. In addition to the funding sources listed above, they can be leveraged with any one of the electric EmPOWER utilities. There may be cases in which the client is not eligible for any electric funds or has already received all electric measures. In those cases, a WGL only project is possible after DHCD approval.

**MEAP**

MEAP funds can be leveraged with any other funding sources that will install weatherization measures. Other funding sources may also be leveraged to share the cost of measures.

## 8.2.2. DOCUMENTATION OF LEVERAGED FUNDS

Any leveraging has to be documented in the work scope in Hancock by applying the respective funding sources to each measure.

- DHCD-managed funding sources are available by name and program year in Hancock (e.g. MEAP-2018, DOE2017, etc.)
- EmPOWER Landlord Contributions are to be logged as “Homeowner Contribution”
- Any other non-DHCD-managed funding sources are documented as “Leveraged”.

- Any measures used to credit prior savings to a job, must be logged under the funding source “Credit Savings”.

Leveraging should occur within the same job (job/client number) whenever possible. Creating two separate jobs is not ideal and only to be used in exceptions when the scopes of the two funding sources are not applied at the same time.

When applying outside funding sources not provided by DHCD, make notes in the client comment section regarding the measure and source of leveraged funds. Select “Leveraged” as the fund source. Add a note in the specific measure that indicates the measure is leveraged.

**EmP**

**How to Document Homeowner Contribution:**

- Enter the full cost of the measure
- On the select measure screen select the middle button (looks like a piece of paper) this will pull up the Assign Measure Fund Source page
- Select the add record button
- From the drop-down menu select the primary EmPOWER funding source
- Select the quantity to 0.85;
- Hit save
- Select the add record button
- From the drop-down menu select “Leveraged” or “Homeowner Contribution” as the funding source, as appropriate.
- Click in the quantity box and it will automatically add the quantity to 0.15; this will account for the remaining balance of the measure
- Hit Save
- Select save and close.
- At the WAP Document section upload receipt of payment to the “Copy of Landlord Contribution Payment”
- Close out the job as normal
- When the job is invoiced only 85% of the measure cost will be processed for payment
- The network partner is responsible for the collection of the Landlord contribution

### 8.3. ALLOWABLE MEASURES

Measures are classified into three categories: Energy Conservation Measures, Health & Safety, and Incidental Repairs. All three categories are allowable for DHCD’s energy programs with certain measure specific requirements as defined in the following sections. The following sections define what existing conditions have to be present to allow a certain measure and any other restrictions that limit the application of a measure to a certain job. A measure must meet all requirements for the funding source



that funds it.

All materials must be installed in accordance with the SWS-aligned DHCD Field Guide, including applicable codes, regulations, manufacturers' specifications and recommendations and in accordance with generally accepted industry standards.

<b>EmP</b>	<p>A predefined list of measures is included in each program cycle's regulations.</p> <p>The following rules apply when selecting funding for measures:</p> <ul style="list-style-type: none"><li>• Measures producing only electric savings must be funded by the electric EmP utility</li><li>• Measures producing only gas savings must be funded by the gas providing EmP utility</li><li>• Measures producing both gas and electric savings may be charged fully to either the customer's electric utility or the gas providing utility, based on availability of funding or temporary program directives. Currently, gas funding must be used for building shell measures, when available.</li><li>• The cost of the energy audit will always be charged fully to the electric utility, unless a WGL-only job is performed.</li></ul>
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### 8.3.1. ENERGY MEASURES

All eligible energy measures must be considered for implementation. If the total scope of eligible measures exceed job cost limits, lower SIR measures must be removed or leveraged with other funds to meet program requirements.

The following sections list the requirements energy conservation measures ("ECM") have to meet.

<b>DOE</b>	<p>All DOE WAP energy measures must meet an SIR of 1 or greater with air sealing being the exception.</p> <p>Decisions as to which ECMs are to be installed are determined by the DOE approved energy audit results, WPN 23-6, Attachment 7 (Appendix A) and approved waivers, and in accordance with the SWS-aligned Field Guide. Any changes to the energy audit software must first be approved by DOE.</p>
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<b>EmP</b>	<p>EmPOWER measure requirements are defined by measure category. Please see the requirements in the following sections and refer to the approved measure list for more details regarding sizes and technical specifications of certain measures.</p> <p>Requirements for priority list jobs are specified in the Appendix.</p>
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MEAP -C	There are no SIR requirements for heating, cooling and water heater replacements.
MEAP -Wx	All energy measures must meet an SIR of 1 or greater with air sealing being the exception. Decisions as to which ECMs are to be installed are determined by the DOE approved energy audit results and 10 CFR 440, Appendix A and in accordance with the SWS-aligned Field Guide

**8.3.1.1. APPLIANCES AND BASELOAD**

REFRIGERATOR			
Category:	Appliances and Baseload		
Examples*:	Refrigerator only, Refrigerator/ Freezer Combination.		
Description:	Includes labor and material to install unit, remove, haul away and dispose of existing unit as per local/State code/laws. Replace existing appliance with comparable size and type unit.		
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency	CMN
Existing Energy Usage	One of these three methods can be used to determine existing energy consumption: <ul style="list-style-type: none"> <li>• a) Meter existing appliance,</li> <li>• b) Look up model number rated consumption, or</li> <li>• c) Use an approved reference for current consumption</li> </ul> OR: for PL only: If manufacturing date is 2001 or older.		Refrigerator has failed, i.e. does not keep temperature below 45 degrees.
<b>Measure</b>	Whole Home Efficiency	Base Efficiency	CMN
Measure Level SIR	1.0	N/A	N/A
New Efficiency	N/A	New appliance must be rated 40% more efficient than the existing appliance.	N/A
Technical Specifications	<ul style="list-style-type: none"> <li>• Energy Star certified or CEE Tier 2 or Tier 3 qualified</li> <li>• One year manufacturer's warranty</li> </ul>		
Documentation	Photo of old appliance, old appliance efficiency documentation, new appliance. Warranty information must be left with the owner. For Base Efficiency, information on how the auditor arrived at pre-usage must be noted in measure comments.		
Other	<ul style="list-style-type: none"> <li>• 15% landlord contribution required if appliances are not owned by the tenant.</li> <li>• Set temperature to 40°F max for refrigerator, 0°F for freezer.</li> </ul>		

FREEZER	
Category:	Appliances and Baseload
Examples*:	Chest Freezer, Upright Freezer
Description:	Includes labor and material to install unit, remove, haul away and dispose of existing unit as per local/State code/laws. Replace existing appliance with comparable size and type unit.
<b>Existing Condition</b>	Whole Home Efficiency      Base Efficiency

Existing Efficiency	One of these three methods can be used to determine existing energy consumption: <ul style="list-style-type: none"> <li>• a) Meter existing appliance,</li> <li>• b) Look up model number rated consumption, or</li> <li>• c) Use an approved reference for current consumption</li> </ul>	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency
Measure Level SIR	1.0	N/A
New Efficiency	N/A	New appliance must be rated 40% more efficient than the existing appliance.
Technical Specifications	<ul style="list-style-type: none"> <li>• Energy Star certified OR CEE Tier 2 or Tier 3 qualified</li> <li>• One year manufacturer's warranty</li> </ul>	
Documentation	Measure must be documented with photos of the existing unit, manufacturer specifications, photos of new appliance. Warranty information must be left with the owner. For Base Efficiency, information on how the auditor arrived at pre-usage must be noted in measure comments.	
Other	<ul style="list-style-type: none"> <li>• 15% landlord contribution required if appliances are not owned by the tenant.</li> <li>• Set temperature to 0°F for freezer.</li> </ul>	

### OTHER LARGE APPLIANCES

Category:	Appliances and Baseload	
Examples*:	Dishwasher, Clothes Washer, Clothes Dryer	
Description:	Includes labor and material to install unit, remove, haul away and dispose of existing unit as per local/State code/laws. Replace existing appliance with comparable size and type unit.	
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency
Existing Efficiency	To model appliances accurately one of these three methods can be used to determine existing energy consumption: <ul style="list-style-type: none"> <li>• a) Meter existing appliance,</li> <li>• b) Look up model number rated consumption, or</li> <li>• C) Use industry standard estimates for appliances based on age and size.</li> </ul>	
Existing Technical Specifications	Electric appliances only	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency
Measure Level SIR	1.0	N/A
New Efficiency	N/A	New appliance must be rated 20% more efficient than the existing appliance.
Technical Specifications	<ul style="list-style-type: none"> <li>• Energy Star certified OR CEE Tier 2 or Tier 3 qualified</li> <li>• One year manufacturer's warranty</li> </ul>	

Documentation	Measure must be documented with photos of the existing unit, manufacturer specifications, photos of new appliance. Warranty information must be left with the owner. For Base Efficiency, information on how the auditor arrived at pre-usage must be noted in measure comments.
Other	<ul style="list-style-type: none"> <li>15% landlord contribution required if appliances are not owned by the tenant.</li> </ul>

DEHUMIDIFIER	
Category:	Appliances and Baseload
Examples*:	Dehumidifier
Description:	Includes labor and material to install unit, remove, haul away and dispose of existing unit as per local/State code/laws. Replace existing appliance with comparable size and type unit.
<b>Existing Condition</b>	Whole Home Efficiency
	Base Efficiency
Age of Existing Equipment	Unit is 10 years or older, not Energy Star rated, or meets one of the following conditions: <ul style="list-style-type: none"> <li>Coils freeze up</li> <li>Unit runs constantly without dehumidification</li> <li>Unit in disrepair such as bent/broken fins, scale deposits, etc.</li> <li>Fan is running but the compressor is not running</li> </ul>
<b>Measure</b>	Whole Home Efficiency
	Base Efficiency
New Efficiency	N/A
	New appliance must be rated 25% more efficient than the existing appliance.
Technical Specifications	<ul style="list-style-type: none"> <li>Energy Star certified</li> <li>CEE qualified</li> <li>One year manufacturer's warranty</li> <li>Minimum capacity of 70 pints</li> </ul>
Documentation	<ul style="list-style-type: none"> <li>Photo documentation and description identifying the need for dehumidification. Photos of new appliance.</li> </ul>

CEILING FAN	
Category:	Appliances and Baseload
Examples*:	Ceiling Fan, Ceiling Fan with LED Lighting
Description:	Includes labor and material to install, remove, haul away and dispose of existing units as per local/State code/laws. Replace it with like unit in size and type. Only eligible for replacement of fans with non removable pin type halogen type bulbs.
<b>Existing Condition</b>	Whole Home Efficiency
	Base Efficiency

Existing Technical Specifications	Incandescent lighting	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>• Energy Star certified</li> <li>• LED lighting</li> <li>• One year manufacturer's warranty</li> </ul>	
Documentation	Photo documentation and description identifying the need for ceiling fan installation/replacement. Photos of new fan.	

ADVANCED POWER STRIP		
Category:	Appliances and Baseload	
Examples*:	Advanced power strip/supply	
Description:	Includes installation on electronic equipment, TVs, or computers. Includes homeowner education on use.	
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency
Existing Technical Specifications	At least one dependent device present, not currently hooked up to an advanced smart strip.	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>• Master controlled</li> <li>• Must have a minimum of 3 on-demand load appliances/devices attached</li> </ul>	
Documentation	Photo documentation of installed strip in Hancock	

### 8.3.1.2. LIGHTING

LIGHT BULBS	
Category:	Lighting
Examples*:	All types and sizes
Description:	<ul style="list-style-type: none"> <li>• Identify the most used fixtures in the dwelling based on information obtained during the customer interview.</li> <li>• A lamp must be on for 1 hour or more per day for a LED bulb to be installed.</li> <li>• Examine the existing light fixture to be replaced and determine the wattage/type of bulb to be used.</li> <li>• Obtain permission of the occupant to replace specific bulbs.</li> <li>• The use of dusk to dawn lamps for exterior applications is recommended.</li> </ul>

	<ul style="list-style-type: none"> <li>Remove light fixture cover, remove existing bulb, Install new bulb, wipe fixture cover if needed, re-install fixture cover, safely recycle old bulb.</li> <li>Replacement of CFL bulbs are prohibited</li> </ul>
<b>Existing Condition</b>	Whole Home Efficiency Base Efficiency
Existing Technical Specifications	Incandescent bulbs, or fluorescent tubes
<b>Measure</b>	Whole Home Efficiency Base Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>Energy Star certified (bulbs)</li> <li>DLC listed (TLEDs)</li> </ul>
Documentation	Document actual (approx.) hours of use in Hancock in baseload- lighting section with actual hours. Photos of new bulbs.
Other	Replace like with like bulb types

OCCUPANCY SENSORS	
Category:	Lighting
Examples*:	Wall mount sensor, vacancy or occupancy type
Description:	Remove existing light switch and replace with IR occupancy or vacancy sensor. Adjust sensor settings per occupant preferences. Install sensors only in agreement with the homeowner and compatible with the light source.
<b>Existing Condition</b>	Whole Home Efficiency Base Efficiency
Existing Technical Specifications	No occupancy sensor present and lights are on for at least 4 hours per day
<b>Measure</b>	Whole Home Efficiency Base Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>PIR technology</li> <li>No manual override</li> </ul>
Documentation	Photos of the new device.

### 8.3.1.3. DOMESTIC HOT WATER SYSTEMS

#### DOMESTIC WATER HEATER

Category:	Hot Water			
Examples*:	All sizes, eligible fuel types, and systems			
Description:	Replaces existing water heater of similar size. Includes all materials, permits, and labor to install, test and place unit in service.			
Existing Condition	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Existing Energy Usage	To model water heaters accurately one of these two methods can be used to determine existing energy consumption: <ul style="list-style-type: none"> <li>a) Look up model number rated consumption, or</li> <li>b) Use industry standard estimates for appliances based on age and size.</li> </ul>		Any of the following conditions exists: <ul style="list-style-type: none"> <li>Water heater has failed / does not provide water warmer than 100 degrees</li> <li>Estimated repairs exceed 50% of the replacement cost</li> <li>Life expectancy of the existing equipment is less than 3 years.</li> </ul>	
Other	Natural Gas DHW replacements in BGE/WGL territories only for health and safety reasons and if a repair is not possible.		<ul style="list-style-type: none"> <li>Electric DHW in all EmP territories</li> <li>Natural Gas DHW in BGE/WGL territories</li> <li>No oil or propane systems.</li> </ul>	All fuel types
Measure	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Measure Level SIR	1.0	N/A	N/A	
New Efficiency	N/A	New unit must be a minimum 25% more efficient than the existing appliance (based on EF).	N/A	
Technical Specifications	<ul style="list-style-type: none"> <li>Energy Star certified or qualified</li> <li>Replace electric water heaters with heat pump water heaters wherever possible.</li> <li>6 year manufacturer's warranty</li> <li>Set to: 120 degrees</li> </ul>			
Documentation	Measure must be documented with photos and a description of the existing unit's issues. Warranty information must be left with the owner. For Base Efficiency, information on how the auditor arrived at pre-usage must be noted in measure comments.			
Other	<ul style="list-style-type: none"> <li>15% landlord contribution required if DHW is not owned by the tenant.</li> <li>Water heaters that are dangerous or have combustion issues can be replaced under Health and Safety if the SIR or new efficiency cannot be met and it is approved by a Quality Assurance Inspector.</li> <li>Water heaters that are still within any warranty period may not be considered for replacement as an ES measure.</li> </ul>			N/A



FAUCET AERATORS	
Category:	Hot Water
Examples*:	Low flow faucet aerators for kitchen and bathroom faucets
Description:	Replace aerators. Ensure leak-free installation.
<b>Existing Condition</b>	Whole Home Efficiency Base Efficiency
Existing Efficiency	>= 2 gpm
<b>Measure</b>	Whole Home Efficiency Base Efficiency
Technical Specifications	<=1.5gpm
Documentation	Photo documentation of existing and replacement aerators

SHOWERHEADS	
Category:	Hot Water
Examples*:	Low flow showerheads (fixed and handheld)
Description:	Replace existing shower head. Ensure leak-free installation.
<b>Existing Condition</b>	Whole Home Efficiency Base Efficiency
Existing Efficiency	>= 2.5gpm
<b>Measure</b>	Whole Home Efficiency Base Efficiency
Technical Specifications	1.75 gpm or less
Documentation	Photo documentation of existing fixture and replacement.

WATER PIPE INSULATION	
Category:	Hot Water
Examples*:	Domestic water line insulation, ½ - ¾" thick
Description:	Install insulation on hot water pipes. Focus on unconditioned spaces and first 6 feet from the water heater. Insulation must be mechanically fastened for permanent installation. Corners must be mitered,

	and seams taped.	
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency
Existing Technical Specifications	No existing insulation, or existing but deteriorated and nominally ineffective	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>• Minimum requirement R-2, polyethylene</li> <li>• up to ¾" thick</li> <li>• Must be the proper diameter without gaps</li> </ul>	
Documentation	Photos in Hancock	

### WATER TANK INSULATION

Category:	Hot Water	
Examples*:	30-50 gallon hot water tank insulation blankets for gas and electric tanks	
Description:	Installed per manufacturer specifications, tape all seams, label with DHW specifications	
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency
Existing Technical Specifications	<p>All criteria must be met:</p> <ul style="list-style-type: none"> <li>• No existing blanket, or blanket has failed</li> <li>• Manufacturer specs allow additional insulation</li> <li>• Located in unconditioned area or mobile home closet</li> </ul>	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>• R-11 for tanks in unconditioned spaces</li> <li>• R8 for other applications</li> <li>• Electric tanks must have full thermal coverage including sides and top, and element/service locations must be clearly marked and labeled</li> </ul>	
Documentation	Photos in Hancock	

### THERMOSTATIC SHUT-OFF VALVE

Category:	Hot Water	
Examples*:	Showerstart Valve	
Description:	Obtain client approval prior to installing. Install together with existing or new showerheads. Ensure leak-free installation. Provide client education on the use of this device. Adjust hot water tank	

	temperature to 120 degrees F.	
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency
Existing Technical Specifications	No thermostatic shut-off valve existing. Shower used at least daily.	
Other	<ul style="list-style-type: none"> <li>• Electric DHW in all service territories.</li> <li>• Install on gas heated hot water only in BGE or WGL territory.</li> </ul>	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>• Showerstart brand or equivalent</li> <li>• Minimum flow rate of 45 psi and maximum flow to 80 psi</li> </ul>	
Documentation	Photos in Hancock.	

ADJUST WATER HEATER TEMPERATURE		
Category:	Hot Water	
Examples*:	All types of water heaters	
Description:	Discuss measure with client. Adjust hot water tank temperature to 120 degrees F.	
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency
Existing Technical Specifications	Current temperature exceeds 120 degrees F	
Other	Separately billed measure for electric DHW only	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency
Technical Specifications	Set to 120 degrees.	
Documentation	Photos in Hancock.	

#### 8.3.1.4. HEATING AND COOLING

FORCED AIR HEATING SYSTEM (FOSSIL FUEL FIRED) REPLACEMENT		
Category:	Heating and Cooling	
Examples*:	Replacement of fossil fueled heating systems	
Description:	Replaces the existing heating system. Includes all materials, permits, and labor to install, test and place unit in	

	service.			
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Age of Existing Equipment	10 years or older		N/A	
Existing Efficiency	85 AFUE or less		Steady State Efficiency is <50% of the rated capacity, OR see below	
Other	<ul style="list-style-type: none"> <li>• “Red-tagged” or inoperable system replacement is possible if current efficiency information is available. If the system repair or replacement provides a measure level SIR of 1.0 and the total project SIR does not fall below 1.1, it can be completed as an energy-saving measure. Efficiency testing results must be available “pre-failure.”</li> <li>• If the new system does not exacerbate health and safety concerns</li> <li>• Gas system replacement is allowable only in BGE or WGL territory, and only if required to replace a Central Air Conditioning system or for H&amp;S reasons.</li> </ul>		OR any of the following conditions exists: <ul style="list-style-type: none"> <li>• Proven cracked heat exchanger</li> <li>• Flue gas CO levels exceed WAP standards that cannot be abated via a clean and tune</li> <li>• CO is evident in ambient air that cannot be abated via a clean and tune</li> <li>• Fire hazard exists</li> <li>• No operable central heating system exists, however an existing distribution system exists that can be used for the new system</li> <li>• Estimated repairs to the central system exceed 50% of the replacement costs</li> <li>• Life expectancy is less than 3 years</li> </ul>	
			<ul style="list-style-type: none"> <li>• Gas system replacement in BGE or WGL territory only</li> </ul>	Primary heating system only
	<ul style="list-style-type: none"> <li>• No oil or propane system replacements.</li> <li>• .</li> </ul>			
<b>Measure</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
New Efficiency	New appliance must be rated a minimum of 10 AFUE more efficient than existing appliance.		N/A	
Technical Specifications	<ul style="list-style-type: none"> <li>• Minimum 1 year manufacturer warranty from the date of install including a 10 year warranty on heat exchanger.</li> <li>• Energy Star rated or approved equivalent</li> <li>• Replacements must be a minimum of 95 AFUE (If prohibitive by SHPO or code, seek inspector approval)</li> </ul>		<ul style="list-style-type: none"> <li>• Energy Star rated or approved equivalent</li> <li>• Replacements must be a minimum of 95 AFUE (unless prohibited by SHPO or code)</li> <li>• Energy Star rated or approved equivalent</li> </ul>	
Documentation	<ul style="list-style-type: none"> <li>• Manual J load calculation</li> <li>• Photos before and after</li> </ul>			
Other	Furnace replacement is allowed if required for successful cooling system replacement, so long as all other measure requirements are met.		Replacement of a connected cooling system is allowed to ensure equipment compatibility or to avoid imminent failure of the cooling system.	
	<ul style="list-style-type: none"> <li>• 15% landlord contribution required if the system is not owned by the tenant.</li> </ul>		<ul style="list-style-type: none"> <li>• Inspector approval</li> </ul>	

	<ul style="list-style-type: none"> <li>Inspector approval is required when seeking to replace more than one system</li> </ul>	<p>required</p> <ul style="list-style-type: none"> <li>Replacement of a heating fuel oil tank is allowed when the tank is the cause of the failed heating system, or will damage a newly installed heating system.</li> </ul>
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HEAT PUMP REPLACEMENT			
Category:	Heating and Cooling		
Examples*:	All sizes		
Description:	Replaces the existing heating system. Includes all materials, permits, and labor to install, test and place unit in service.		
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency	CMN
Age of Existing Equipment	10 years or older		N/A
Existing Efficiency	10 SEER or less		N/A
Existing Energy Usage	Summer and winter use at least 4,500 kWh above baseload		N/A
Other	<ul style="list-style-type: none"> <li>Existing units found to be operating on emergency back-up heat due to malfunction may be considered for replacement as long as the system meets all conditions above.</li> </ul>	Any of the following conditions exists: <ul style="list-style-type: none"> <li>Health and safety of family is at risk</li> <li>No operable central heating system exists, however an existing distribution system exists that can be used for the new system</li> <li>Estimated repairs to the central system exceed 50% of the replacement costs</li> <li>Life expectancy is less than 3 years</li> </ul>	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency	CMN
Technical Specifications	<ul style="list-style-type: none"> <li>Minimum: HSPF 9, SEER 16</li> <li>Minimum 1 year manufacturer's warranty from the date of install</li> </ul>		<ul style="list-style-type: none"> <li>Energy Star rated or approved equivalent</li> <li>Install per mfr. Instruction;</li> </ul>
Documentation	<ul style="list-style-type: none"> <li>Manual J load calculation</li> <li>Photos before and after</li> </ul>		
Other	<ul style="list-style-type: none"> <li>15% landlord contribution required if the system is not owned by the tenant.</li> <li>Inspector approval is required when seeking to replace more than one system.</li> </ul>		<ul style="list-style-type: none"> <li>Inspector approval required</li> </ul>

<b>CENTRAL AIR CONDITIONER REPLACEMENT</b>				
Category:	Heating and Cooling			
Examples*:	All sizes			
Description:	Replaces the existing central cooling system. Includes all materials, permits, and labor to install, test and place unit in service.			
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Age of Existing Equipment	10 years or older		N/A	
Existing Efficiency	10 SEER and less		N/A	
Existing Energy Usage	Summer use at least 2,500 kWh above baseload for the months of May through September (Baseload average minus the kWh for each month.		Any of the following conditions exists: <ul style="list-style-type: none"> <li>Cooling equipment must be inoperable</li> <li>Required estimated repairs exceed 50% of the replacement cost for new equipment.</li> <li>Life expectancy of the existing equipment is less than 3 years.</li> </ul>	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Technical Specifications	16 SEER manufacturer rated when installed with a compatible air handler.			
Documentation	<ul style="list-style-type: none"> <li>Manual J load calculation</li> <li>Photos before and after</li> </ul>			
Other	<ul style="list-style-type: none"> <li>15% landlord contribution required if the system is not owned by the tenant.</li> </ul>			<ul style="list-style-type: none"> <li>Inspector approval required</li> </ul>
				<ul style="list-style-type: none"> <li>The repair or replacement of a connected heating system is allowed at the time of a cooling system replacement to ensure equipment compatibility or to avoid imminent failure of the heating system</li> </ul>

<b>DUCTLESS MINI SPLIT HEAT PUMP</b>	
Category:	Heating and Cooling
Examples*:	All sizes

Description:	Replaces existing electric heating system. Includes all materials, permits, and labor to install, test and place unit in service.			
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Existing Technical Specifications	Electric baseboard heating			
<b>Measure</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Technical Specifications	<ul style="list-style-type: none"> <li>• HSPF 10 or higher</li> <li>• SEER 19 or higher</li> <li>• Minimum 1 year manufacturer's warranty from the date of install</li> </ul>			
Documentation	<ul style="list-style-type: none"> <li>• Manual J load calculation</li> <li>• Photos before and after</li> </ul>			
Other	<ul style="list-style-type: none"> <li>• 15% landlord contribution required if the system is not owned by the tenant.</li> </ul>			Inspector approval required

WINDOW AC UNIT				
Category:	Heating and Cooling			
Examples*:	All sizes			
Description:	Replaces existing window AC unit. Includes all materials and labor to install, test and place unit in service. Includes evaluation of the electrical receptacle the unit will be plugged into.			
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Existing Technical Specifications	<ul style="list-style-type: none"> <li>• Not Energy Star rated, OR</li> <li>• 10 years or older, if Energy Star rated</li> </ul>		Non-functioning unit OR no existing cooling system	
<b>Measure</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Technical Specifications	<ul style="list-style-type: none"> <li>• Energy Star certified</li> <li>• Minimum 12 CEER</li> <li>• Minimum 1 year manufacturer's warranty from the date of install</li> <li>• CEE qualified</li> <li>• Same or lesser capacity</li> </ul>			
Documentation	<ul style="list-style-type: none"> <li>• Photos before and after</li> </ul>			
Other	N/A		New window units can be installed in a home where no	

		central cooling system exists, or if a central cooling system cannot be repaired or replaced. The installation of new window units (not replacing existing units) is limited to one unit for a living space identified by the client, and one unit per bedroom of a vulnerable resident (elderly, disabled, documented medical condition, child under 5 years).
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HYDRONIC BOILER REPLACEMENT				
Category:	Heating and Cooling			
Examples*:	All sizes			
Description:	Replaces existing boiler. Includes all materials, permits, and labor to install, test and place unit in service. Distribution system must be evaluated for leaks.			
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Age of Existing Equipment	10 years or older		N/A	
Existing Efficiency	80 AFUE or less		Steady State Efficiency is <50% of the rated capacity, OR see below	
Other	<ul style="list-style-type: none"> <li>Gas system replacement is allowable only in BGE or WGL territory, and only for H&amp;S reasons.</li> <li>No oil or propane system replacements.</li> </ul>		OR any of the following conditions exists: <ul style="list-style-type: none"> <li>Flue gas CO levels exceed WAP standards</li> <li>CO is evident in ambient air</li> <li>Fire hazard</li> <li>No operable central heating system exists, however an existing distribution system exists that can be used for the new system. Distribution system must be evaluated for leaks.</li> <li>Estimated repairs to the central system exceed 50% of the replacement costs</li> <li>Life expectancy is less than 3 years</li> </ul>	
	<ul style="list-style-type: none"> <li>“Red-tagged” or inoperable system replacement is possible if current efficiency information is available. If the system repair or replacement provides a measure SIR of 1.1 and the total project SIR does not fall below 1.1, it can be completed as an energy-saving measure. Efficiency</li> </ul>		<ul style="list-style-type: none"> <li>Natural Gas system replacement in BGE and WGL territory only.</li> <li>No oil or propane system replacements.</li> </ul>	



	testing results must be available "pre-failure."			
<b>Measure</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
New Efficiency	New appliance must be rated a minimum of 8 AFUE more efficient than existing appliance			
Technical Specifications	<ul style="list-style-type: none"> <li>• Minimum of 85 AFUE</li> <li>• High efficiency integrated HWB/DHW allowable at minimum 92 AFUE</li> <li>• Minimum 10 year manufacturer warranty on new system from date of manufacture.</li> <li>• Minimum 1 year manufacturer's warranty on parts from the date of purchase.</li> </ul>			
Documentation	<ul style="list-style-type: none"> <li>• Manual J load calculation</li> <li>• Photos before and after</li> </ul>			
Other	<ul style="list-style-type: none"> <li>• 15% landlord contribution required if the system is not owned by the tenant.</li> </ul>		<ul style="list-style-type: none"> <li>• Inspector approval required</li> </ul>	

STEAM BOILER REPLACEMENT				
Category:	Heating and Cooling			
Examples*:	All sizes			
Description:	Replaces existing boiler. Includes all materials, permits, and labor to install, test and place unit in service. Distribution system must be evaluated for leaks.			
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Age of Existing Equipment	10 years or older		N/A	
Existing Efficiency	N/A		Steady State Efficiency is <50% of the rated capacity, OR see below	
Other	<ul style="list-style-type: none"> <li>• Gas system replacement is allowable only in BGE or WGL territory, and only for H&amp;S reasons.</li> <li>• "Red-tagged" or inoperable system replacement is possible if current efficiency information is available. If the system repair or replacement provides a measure SIR of 1.1 and the total project SIR does not fall below 1.1, it can be completed as an energy-saving measure. Efficiency testing results must be available "pre-failure."</li> </ul>		OR, any of the following conditions exists: <ul style="list-style-type: none"> <li>• Flue gas CO levels exceed BPI standards</li> <li>• CO is evident in ambient air</li> <li>• Fire hazard</li> <li>• No operable central heating system exists, however an existing distribution system exists that can be used for the new system. Distribution system must be evaluated for leaks.</li> <li>• Estimated repairs to the central system exceed 50% of the replacement costs</li> <li>• Life expectancy is less than 3 years</li> </ul>	
	No oil or propane system replacements.			

Measure	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Technical Specifications	<ul style="list-style-type: none"> <li>Replacements must be a minimum of 82 AFUE</li> </ul>			
Documentation	<ul style="list-style-type: none"> <li>Manual J load calculation</li> <li>Photos before and after</li> </ul>			
Other	<ul style="list-style-type: none"> <li>15% landlord contribution required if appliances are not owned by the tenant.</li> </ul>			<ul style="list-style-type: none"> <li>Inspector approval required</li> </ul>

### CLEAN AND TUNE - FURNACE

Category:	Heating and Cooling			
Examples*:	Clean and tune on gas furnace or gas boiler system			
Description:	Includes combustion efficiency and smoke tests before and after service, clean and vacuum system, inspect all control devices, test for gas leaks, check gas meter, test manifold pressure, inspect for cracked heat exchanger, inspect electrical connections and safety devices, inspect chimney and smoke pipes and clean as necessary, inspect flue vent damper and draft controls, lubricate motor and moving parts, clean and test thermostat, replace air filter, place sticker on the unit indicating service details. If applicable, bleed radiators, clean and level sight glass.			
Existing Condition	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Existing Technical Specifications	System meets at least one of these criteria: <ul style="list-style-type: none"> <li>CO test results 26 PPM or higher</li> <li>Combustion testing shows measurements out of acceptable parameters</li> <li>Unit is greater than 5 years old and has not been serviced in five years</li> </ul>		N/A	
Other	<ul style="list-style-type: none"> <li>No oil or propane systems, unless classified as H&amp;S measure.</li> <li>Gas systems in BGE or WGL territory may be C&amp;T under ES.</li> <li>Gas systems in all other territories must be listed as H&amp;S measure</li> </ul>			N/A
Measure	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Documentation	<ul style="list-style-type: none"> <li>Pre and post combustion and CAZ testing</li> <li>Copy of combustion analysis uploaded to Hancock</li> </ul>			

### CLEAN AND TUNE - HEAT PUMP

Category:	Heating and Cooling
Examples*:	Clean and tune on electric system

Description:	Includes inspection of electrical connections and refrigerant lines, vacuum indoor and outdoor coils and chemical clean as necessary, inspect and service all drains and condensate pump, check refrigerant level, test emergency heat system and unit defrost if equipped, inspect safety devices, ensure proper insulation of refrigerant lines, lubricate motor and moving parts, clean and test thermostat, replace air filter, place sticker on the unit indicating service details.			
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Existing Technical Specifications	Heat pump is found to have a dirty evaporator coil or outdoor condenser, or loose fitting, dirty, or missing filter.			
<b>Measure</b>	Whole Home Efficiency	Base Efficiency	CMN	MEAP-C
Other	N/A			

### CLEAN AND TUNE - CENTRAL AC

Category:	Heating and Cooling		
Examples*:	Clean and tune on electric system		
Description:	Includes inspection of electrical connections and refrigerant lines, vacuum coils and chemical clean as necessary, inspect and service all drains and condensate pump, check refrigerant level, test unit defrost if equipped, inspect safety devices, ensure proper insulation of refrigerant lines, lubricate motor and moving parts, clean and test thermostat, replace air filter, place sticker on the unit indicating service details.		
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency	MEAP-C
Existing Technical Specifications	AC is found to have a dirty evaporator coil or outdoor condenser, or loose fitting, dirty, or missing filter.		
<b>Measure</b>	Whole Home Efficiency	Base Efficiency	MEAP-C
Other	<ul style="list-style-type: none"> <li>• N/A</li> </ul>		

### SMART THERMOSTAT

Category:	Heating and Cooling	
Examples*:	Smart Thermostats as defined by Energy Star criteria	
Description:	Replacement must be installed, tested and placed in service. Owner/operator education required	
<b>Existing Condition</b>	Whole Home Efficiency	Base Efficiency

Existing Technical Specifications	<ul style="list-style-type: none"> <li>Any analog or non-functional thermostat.</li> <li>Existing programmable thermostat can be replaced with smart thermostat.</li> </ul>
Other	<p>If existing thermostat is a utility provided demand response device:</p> <ul style="list-style-type: none"> <li>If wifi is available, propose to install an eligible smart thermostat. Inform the client that removing the existing thermostat will cancel their bill credit and that they must re-enroll in the demand response program, or get an outdoor switch installed to continue their bill credits. Contact the utility so that the old thermostat can be collected and advise the client to re-enroll in the demand response program.</li> <li>If wifi is not available, keep the existing thermostat in place.</li> </ul>
<b>Measure</b>	<div style="display: flex; justify-content: space-between; padding: 5px;"> <span>Whole Home Efficiency</span> <span>Base Efficiency</span> </div>
Technical Specifications	<ul style="list-style-type: none"> <li>Energy Star certified</li> <li>Minimum 1 year manufacturer's warranty from the date of install</li> <li>Discuss settings with occupants. Preferred Cool <math>\geq 78</math>; Heat <math>\leq 68</math>.</li> </ul>
Documentation	Photos before and after.
Other	<ul style="list-style-type: none"> <li>BGE, Pepco and Delmarva: Use model compatible with thermostat optimization program.</li> </ul>

### 8.3.1.5. DISTRIBUTION SYSTEMS

DUCT SEALING	
Category:	Distribution Systems
Examples*:	Mastic application
Description:	Use mastic to seal all accessible joints, seams, connections. Perform system balancing, when required, using a "duct blasting" protocol or other acceptable means for measuring system distribution efficiency.
<b>Existing Condition</b>	<div style="display: flex; justify-content: space-between; padding: 5px;"> <span>Whole Home Efficiency</span> <span>Base Efficiency</span> </div>
Existing Technical Specifications	<ul style="list-style-type: none"> <li>Gaps on duct connections are present</li> <li>For SF and MF priority list jobs and Base Efficiency: only ducts outside the thermal boundary may be sealed.</li> <li>For mobile home priority list jobs and energy modeled jobs: all accessible ducts may be sealed.</li> </ul>
Other	<ul style="list-style-type: none"> <li>Duct system with Gas heat and no central AC: BGE and WGL territory only</li> <li>Duct system with other fossil fuel AND central AC is allowed.</li> </ul>
<b>Measure</b>	<div style="display: flex; justify-content: space-between; padding: 5px;"> <span>Whole Home Efficiency</span> <span>Base Efficiency</span> </div>
Technical Specifications	<ul style="list-style-type: none"> <li>Materials must meet ASTM standards</li> <li>Pressure pan required for audit and QCI</li> <li>Target value is 1 Pascal per register</li> </ul>
Documentation	Photos

DUCT INSULATION	
Category:	Distribution Systems
Examples*:	Insulating flex duct or rigid ducts
Description:	For ducting in unconditioned spaces (attic and crawls), foil faced fiberglass. Tape all seams.
<b>Existing Condition</b>	Whole Home Efficiency
	Base Efficiency
Existing Technical Specifications	No existing insulation or existing but deteriorated and nominally ineffective
Other	<ul style="list-style-type: none"> <li>● Duct system with Gas heat and no central AC: BGE or WGL territory only</li> <li>● Duct system with other fossil fuel AND central AC is allowed.</li> </ul>
<b>Measure</b>	Whole Home Efficiency
	Base Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>● R-8 or better</li> <li>● Install in unconditioned spaces</li> <li>● Materials must meet ASTM standards</li> </ul>
Documentation	Photos before and after

BOILER PIPE INSULATION	
Category:	Distribution Systems
Examples*:	Insulation for hot water and steam heating system distribution
Description:	100% coverage of all pipes, mitered corners, seams sealed. Hot water boiler pipes to be insulated in unconditioned spaces only. Steam distribution systems must be insulated in unconditioned spaces and may be insulated even in conditioned spaces.
<b>Existing Condition</b>	Whole Home Efficiency
	Base Efficiency
Existing Technical Specifications	No existing insulation or existing but deteriorated and nominally ineffective.
Other	On Natural Gas systems in BGE or WGL territory only
<b>Measure</b>	Whole Home Efficiency
	Base Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>● Steam systems minimum R value of 12.7</li> <li>● Hot water boilers minimum R value of 7</li> <li>● Materials must meet ASTM standards</li> </ul>
Documentation	Photos and description/justification in Hancock

### 8.3.1.6. AIR SEALING

BLOWER DOOR GUIDED AIR SEALING											
Category:	Infiltration										
Examples*:	<ul style="list-style-type: none"> <li>Seal at window A/C units</li> <li>Weather-strip all windows, doors, and access openings between heated and unheated areas</li> <li>Install thresholds and/or door sweeps, repair broken windows</li> <li>Caulk/seal door frames, window frames, fixed windows, building corners, along chimneys, areas where different materials meet, service entries, and other areas where infiltration and moisture can be stopped</li> <li>Close off unused fireplaces (should be flagged and easily removable).</li> <li>Seal all wall tops, by-passes and penetrations in the attic space(s). Required before insulating attics.</li> </ul>										
Description:	Must be performed on every Whole Home dwelling unit unless the installation of this measure is not cost effective.										
<b>Existing Condition</b>	Whole Home Efficiency										
Other	N/A										
<b>Measure</b>	Whole Home Efficiency										
Technical Specifications	<ul style="list-style-type: none"> <li>UL rated materials for air sealing around flue pipes and other potentially hazardous areas</li> <li>Materials must meet ASTM standards</li> <li>Target value follows the table below:</li> </ul> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Pre test CFM50</th> <th>Target CFM</th> </tr> </thead> <tbody> <tr> <td>&gt; 5,000 CFM50</td> <td>2 CFM/sq. ft.</td> </tr> <tr> <td>3,000-5,000 CFM50</td> <td>1.5 CFM/sq. ft.</td> </tr> <tr> <td>1,500- 2,999 CFM50</td> <td>1 CFM/sq. ft.</td> </tr> <tr> <td>&lt;1,500 CFM50</td> <td>.75 CFM/sq. ft.</td> </tr> </tbody> </table>	Pre test CFM50	Target CFM	> 5,000 CFM50	2 CFM/sq. ft.	3,000-5,000 CFM50	1.5 CFM/sq. ft.	1,500- 2,999 CFM50	1 CFM/sq. ft.	<1,500 CFM50	.75 CFM/sq. ft.
Pre test CFM50	Target CFM										
> 5,000 CFM50	2 CFM/sq. ft.										
3,000-5,000 CFM50	1.5 CFM/sq. ft.										
1,500- 2,999 CFM50	1 CFM/sq. ft.										
<1,500 CFM50	.75 CFM/sq. ft.										
Documentation	Photo documentation and descriptions in Hancock										
Other	Attics may not be insulated until air sealing of the space(s) is completed										

WINDOW REPLACEMENT	
Category:	Infiltration
Examples*:	Exterior windows
Description:	Remove old window and replace with new window per manufacturer instructions. Up to windows size 3x5ft.

<b>Existing Condition</b>	Whole Home Efficiency
Other	Broken window pane, or window sash leaving a gap of ¼ inch or more that is not repairable.
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>● Energy Star certified</li> <li>● Low-E Rated, double pane</li> <li>● U-Factor ≤ 0.30</li> <li>● SHGC ≤ 0.40</li> </ul>
Documentation	Photo documentation and descriptions in Hancock Lead safe work practices apply for mobile manufactured homes built prior to 1978

RECOVERY VENTILATOR	
Category:	Infiltration
Examples*:	Energy Recovery Ventilator (ERV), or Heat Recovery Ventilator (HRV)
Description:	Install, test and place ERV (preferred) or HRV in service. Includes electrical and structural support.
<b>Existing Condition</b>	Whole Home Efficiency
Other	If additional ventilation is needed following air sealing.
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>● 100-200 CFM capacity</li> <li>● MERV 8 filter standard</li> </ul>
Documentation	Photo documentation and descriptions in Hancock

### 8.3.1.7. INSULATION

FLOOR INSULATION	
Category:	Insulation / Floor
Examples*:	Crawl space ceiling, cantilevers and unconditioned basement ceilings
Description:	Floor insulation should be installed when practical in the joist spaces over unheated crawl spaces. Areas where furnaces are located are considered passively conditioned, should not be taken out of the conditioned space and will require perimeter insulation. Floor insulation over Basement areas is not an allowed practice unless the room is being completely taken out of the conditioned space.

<b>Existing Condition</b>	Whole Home Efficiency
Existing Efficiency	<ul style="list-style-type: none"> <li>No existing insulation</li> <li>OR Existing insulation is below the requirement for the zone</li> </ul>
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>Install to levels as required by the climate zone, or fill joist bay to capacity.</li> <li>Materials must meet ASTM standards</li> </ul>
Documentation	Photo documentation and descriptions in Hancock
Other	Unconditioned crawl spaces and basements may not be insulated until air sealing of the space(s) are completed

RIM JOIST INSULATION	
Category:	Insulation / Wall
Examples*:	Code compliant foam board, 2 part foam for sills/rims/bands
Description:	Insulate and seal all band/rim joist areas between subfloor and foundation or top plate of wall below
<b>Existing Condition</b>	Whole Home Efficiency
Existing Efficiency	<ul style="list-style-type: none"> <li>No existing insulation</li> <li>OR Existing insulation is below the requirement for the zone</li> </ul>
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	Materials must meet ASTM standards
Documentation	Photo documentation in Hancock

UNFRAMED WALL / PERIMETER INSULATION	
Category:	Insulation / Wall
Examples*:	Crawl space walls, unfinished basement walls
Description:	Interior use of perimeter insulation may not be an acceptable alternative where basement areas are finished, where small children use these areas, or where moisture cannot be effectively controlled. Ventilation would not normally be used when the perimeter is being insulated.
<b>Existing Condition</b>	Whole Home Efficiency
Existing Efficiency	<ul style="list-style-type: none"> <li>No existing insulation</li> <li>OR Existing insulation is below the requirement for the zone</li> </ul>



<b>Measure</b>	Whole Home EfficiencyEmP
Technical Specifications	Materials must meet ASTM standards
Documentation	Photo documentation in Hancock

### EXTERIOR WALL INSULATION

Category:	Insulation / Wall
Examples*:	Cellulose dense pack
Description:	Where cost effective, install blown insulation into exterior wall cavities to achieve a "dense pack" when such a measure is deemed cost effective.
<b>Existing Condition</b>	Whole Home Efficiency
Existing Efficiency	No existing wall insulation, verified by visual inspection or thermal imaging
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>• Install per mfr instructions; achieve 3.5 lbs/cubic foot with complete coverage</li> <li>• Materials must meet ASTM standards</li> </ul>
Documentation	Photo documentation in Hancock Lead safe work practices apply for mobile manufactured homes built prior to 1978

### KNEE WALL INSULATION AND SHEATHING

Category:	Insulation / Attic
Examples*:	Knee walls in attics
Description:	Where cost effective, install insulation in attic cavities created by knee wall construction. The result of installation must create insulation coverage on all surfaces between conditioned and unconditioned space. Knee wall bottom cavities and the bottoms of the sloped ceiling areas shall be insulated with rigid insulation. An effective/approved air barrier shall be added after insulation is installed (ref SWS 4.0104.2)
<b>Existing Condition</b>	Whole Home Efficiency
Existing Efficiency	<ul style="list-style-type: none"> <li>• No existing insulation</li> <li>• OR Existing insulation is below the requirement for the zone</li> </ul>
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>• Materials must meet ASTM standards</li> <li>• Install to R-15, or fill to capacity.</li> </ul>
Documentation	Photo documentation in Hancock

Other	All bypasses and penetrations shall be sealed prior to installing insulation
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### ATTIC ACCESS TREATMENT

Category:	Attic
Examples*:	Attic hatch insulation / seal, attic stair cover, knee wall access insulation/seal
Description:	Includes insulation, weather-stripping, caulking trim, and mechanical fastening.
<b>Existing Condition</b>	Whole Home Efficiency
Existing Efficiency	<ul style="list-style-type: none"> <li>No existing insulation</li> <li>OR Existing insulation is below the requirement for the zone</li> </ul>
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>Materials installed must meet program standards. Insulation to the access must be equal to or greater than the surrounding insulation; includes knee wall doors/accesses, walk up stairs and other attic accesses.</li> <li>Materials must meet ASTM standards</li> </ul>
Documentation	Photo documentation and descriptions in Hancock

### ATTIC INSULATION

Category:	Insulation / Attic
Examples*:	Batts, or blown insulation
Description:	Install approved insulation materials in ceiling (attic) areas where deemed cost effective. Insulation shall be installed per climate zone, BPI and program requirements.
<b>Existing Condition</b>	Whole Home Efficiency
Existing Efficiency	<ul style="list-style-type: none"> <li>No existing insulation</li> <li>OR Existing insulation is below the requirement for the zone</li> </ul>
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>Install to R-49 (R-60 for Western Allegany and Garrett County)</li> <li>Materials must meet ASTM standards.</li> </ul>
Documentation	Photo documentation and descriptions in Hancock
Other	Attic space(s) may not be insulated until air sealing of the space(s) are completed

ROOF INSULATION	
Category:	Insulation / Attic
Examples*:	Flat roof cavity, sloped ceiling
Description:	Where needed and cost effective, install insulation materials to the roof area of the dwelling. Materials include batt, loose fill, dense packing (3.5 lbs/cubic foot) and rigid insulation materials.
<b>Existing Condition</b>	Whole Home Efficiency
Existing Efficiency	<ul style="list-style-type: none"> <li>● No existing insulation</li> <li>● OR Existing insulation is below the requirement for the zone</li> </ul>
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>● Install to cavity capacity</li> <li>● Materials must meet ASTM standards</li> </ul>
Documentation	Photo documentation and descriptions in Hancock
Other	Attic space(s) may not be insulated until air sealing of the space(s) are completed

### 8.3.1.8. MOBILE HOME MEASURES

MOBILE HOME BELLY INSULATION	
Category:	Insulation / Floor
Examples*:	Blown fiberglass or batt insulation to the underside of mobile homes
Description:	Includes labor and appropriate loose fill or dense pack fiberglass materials to 3.5 lbs/cubic foot (for dense packing only)
<b>Existing Condition</b>	Whole Home EfficiencyEmP
Existing Efficiency	Less than R-19 existing
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>● Materials must meet ASTM standards</li> <li>● Fill all belly cavities to full capacity and prescribed R-value ensuring that all ductwork and plumbing has sufficient insulation value to prevent condensation or freezing</li> </ul>
Documentation	Photos in Hancock
Other	Belly space(s) may not be insulated until interior penetration shave been sealed

MOBILE HOME ROOF INSULATION	
Category:	Insulation / Attic
Examples*:	Blown fiberglass and cellulose for mobile and manufactured homes
Description:	Where needed, insulate mobile/manufactured home attic where deemed cost effective. Acceptable techniques include edge lift method, gable end removal, through the roof and interior drill and fill.
<b>Existing Condition</b>	Whole Home Efficiency
Other	N/A
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	Materials must meet ASTM standards Fill to capacity
Documentation	Photos in Hancock
Other	Verify coverage with thermal camera and add images to Hancock

MOBILE HOME DOOR REPLACEMENT	
Category:	Infiltration / Door
Examples*:	Exterior door for mobile and manufactured homes
Description:	Remove existing door, install new door per manufacturer specifications.
<b>Existing Condition</b>	Whole Home Efficiency
Other	When the exterior door is broken and / or does not properly seal and causes significant air infiltration and cannot be corrected with a weather strip kit.
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>• Energy Star certified</li> <li>• Install as per SWS 3.0202.2</li> </ul>
Documentation	<ul style="list-style-type: none"> <li>• Photos in Hancock</li> </ul>
Other	Lead safe work practices apply for mobile manufactured homes built prior to 1978

MOBILE HOME WINDOW REPLACEMENT	
Category:	Infiltration / Window
Examples*:	Exterior windows

Description:	Remove old window and replace with new window per manufacturer instructions. Up to windows size 3x5ft.
<b>Existing Condition</b>	Whole Home Efficiency
Other	Single-paned metal framed windows (without storm windows)
<b>Measure</b>	Whole Home Efficiency
Technical Specifications	<ul style="list-style-type: none"> <li>● Low-E double paned windows</li> <li>● U-value ≤.33</li> <li>● Reference SWS Subtopic 3.0201 for appropriate application</li> </ul>
Documentation	Photos in Hancock
Other	Lead safe work practices apply for mobile manufactured homes built prior to 1978

### 8.3.2. HEALTH & SAFETY

Health and Safety (H/S) issues are a critical component to be included in the auditing protocol used by DHCD’s weatherization programs. DHCD regularly assesses new health and safety regulations and training to ensure that weatherization activities do not cause or exacerbate health and safety problems for workers and/or occupants.

Health and safety funds are allowed to be expended by subgrantees where direct weatherization activities occur. The Department of Housing and Community Development (DHCD) budgets health and safety costs as a separate category from Program Operations and, thereby, excludes such costs from the Savings to Investment Ratio (SIR) and the average per-unit cost calculation.

Allowable energy efficiency-related health and safety actions are those actions necessary to maintain the physical well-being of both the occupants and/or weatherization workers where:

- Costs are reasonable; AND
- The actions must be taken to effectively perform weatherization work; OR
- The actions are necessary as a result of weatherization work.

Health and safety measures are allowed to be conducted only where energy efficiency measures are identified for installation. We need to ask:

- What must we do within reasonable costs to get the home to a point we can go forward with weatherizing, where the weatherization work will be lasting and effective?
- What must we do to ensure that the weatherization work we conduct does not create a health or safety problem for the occupants?

Not all observed health and safety conditions need to be corrected in order to proceed with weatherization; however, the client will still be notified of any observed conditions and if the condition is not corrected, it should be clearly explained in the client's electronic file in Hancock how the condition is not related to the planned weatherization work.

When deferral or denial becomes necessary due to Health and Safety reasons, the standard procedures for deferrals / Base Efficiency jobs, or denials, should be followed and accompanied with photo and written documentation.

**DOE** DOE WAP Health and Safety measures are grouped by category and defined in the State Plan as part of the Master File. In this section, health and safety is addressed in accordance with 10 CFR 440.16(h), 440.18(d)(15), 440.21(5), and DOE's most recent Health and Safety guidance, WPN 22-7.

The following categories are considered incidental repairs and can never be charged to the H&S category:

- Drainage(gutters, downspouts, extensions, flashing, sump pumps, landscape, etc.)
- Electrical, other than Knob-and-Tube Wiring
- Electrical, Knob-and-Tube Wiring
- Building structure and roofing

DHCD sets health and safety expenditure limits using historical data pulled from the Hancock Energy Software. The current approved H&S expenditure average is 20% of the per unit cost for Program Operations. This percentage will vary based on actual expenditures and will be averaged across all units.

Subgrantees are required to maintain their budget limitation; exceeding budget limits shall result in disallowed costs. DHCD requires subgrantees to track H&S costs and related measures in order to support future budget requests.

**EmP** Refer to the EmPOWER Price List and specific measure requirements for allowable health and safety measures. Note that not all health & safety conditions listed here are classified as Health & safety measures, but instead may be deemed [incidental repairs](#).

Health and safety spending is capped at \$1000 per job and included in the hard caps for total job budget. Refer to Tiered Job descriptions for additional detail.

**MEAP  
-C** When health and safety measures are required to facilitate the installation of an HVAC system replacement, the H&S expenditures cannot exceed 50% of the cost of the related system replacement.

**MEAP  
-Wx**

The HS allowance is a 20% HS cost average of the MEAP-Wx job cost (ES+IR measures). The average HS spending must be monitored by the Network Partner and will be evaluated annually by DHCD. Overspent HS funds would require a reimbursement.

### 8.3.2.1. AIR CONDITIONING AND HEATING SYSTEMS

Space conditioning system repair, replacement, or installation is allowed when it qualifies as an ECM and meets all other measure requirements. If the ECM measure requirements are not attainable, then other funds may be leveraged.

When a space conditioning system does not qualify as an ECM, the following conditions must be met before the unit can be replaced or repaired with H&S funds:

- Red tagged, inoperable or nonexistent heating systems replacement, repair or installation is allowed due to Maryland's climate conditions.
- A Manual J is required when installing or replacing a heating or cooling appliance. The manual J MUST take into account all energy upgrades, including but not limited to post-weatherization R values and air infiltration targets.

Replacement or installation of secondary units is not allowed. Unsafe units must be repaired, removed, or rendered inoperable, or deferral is required.

#### **Testing Protocol:**

- Ensure systems are present, operable, and performing correctly. Check audit to determine if the system can be installed as an ECM prior to replacement as an H&S measure.
- Determine and document presence of "at-risk" current occupants when installing air-conditioning as a H&S measure.
- On combustion equipment, inspect chimney and flue and test for CAZ depressurization.
- For solid fuel appliances look for visual evidence of soot on the walls, mantel or ceiling or creosote staining near the flue pipe. Perform required combustion analysis and ensure all code complaint items are evaluated (i.e. proper clearances, venting and floor/surface protection).

#### **Client Education:**

- When deferral is necessary, complete the deferral form and upload it to the client file in the energy software.
- Discuss appropriate use and maintenance of units.
- Provide all paperwork and manuals for any installed equipment.
- Discuss and provide information on proper disposal of bulk fuel tanks when not removed as part of the weatherization work.
- Where combustion equipment is present, provide safety information including how to recognize depressurization.

**DOE**

Only primary heating systems are considered. If unsafe primary units can't be repaired, replaced, removed, or rendered inoperable, the home must be deferred.

Furnaces and/or air conditioning system replacement, repair or installation that do not qualify as ECM will be considered in homes occupied by [at risk occupants](#) when climate conditions are warranted. Per WPN 22-7, no homes may be left without a safe primary heating system. This includes homes with no existing primary heating system and applies even if there are no at-risk occupants. If unable to meet this requirement, deferral is required

An at-risk occupant is a household member with a medical condition documented by a health practitioner that requires air conditioning. Medical documentation must be no older than 180 days. Medical documentation is not required for household members 65 years and older and for children under 5. Air conditioning may be repaired when practical and costs are less than replacement.

Fuel switching may be considered on a case by case basis with DHCD inspector AND DOE approval. All requests for fuel switching must meet the requirements of WPN 19-4. This also pertains to any MEAP-WX job that has a requested fuel switch.

For case-by-case fuel switching requests, the subgrantee shall prepare the following and submit to the DHCD monitor for review and submission to DOE for final approval.

1. A short description of the proposed fuel switch and the reason for doing so
2. A complete energy audit with all supporting documentation that either; a. Demonstrates fuel switching is cost-effective when interacted with all other appropriate energy conservation measures for the building, or b. Properly supports the proposed switch as an H&S measure.
3. Supporting documentation must include the initial site assessment, available photos, additional ancillary equipment necessary for the fuel switch, e.g., new natural gas lines and additional or upgraded electrical equipment, and the energy audit's Input Report and Recommended Measures Report. The entire cost of the installation must be included in the cost of the ECM evaluation, including all ancillary costs (e.g. new utility line installation).

**EmP**

If unsafe primary units can't be repaired, replaced, removed, or rendered inoperable, the home can be treated as a Base Efficiency job.

Fuel switching with EmPower Whole Home or Base Efficiency is prohibited.

**MEAP  
-C**

Systems may be replaced if they meet the guidelines specified in section 5.2.6.

Fuel switching may be considered on a case by case basis with inspector approval.

Justification must be made that clearly shows a health and safety issue documented with one of the following:



- Chimney issues that a standard liner cannot correct
- Leaks in the fuel tank or fuel distribution line(s)

When possible, the most cost effective option shall be considered for system replacement.

- For example, an oil hot water boiler may be replaced with a combo/integrated system with domestic instant hot water, reducing the need for a chimney liner and associated costs

### 8.3.2.2. AIR POLLUTANTS

Formaldehyde vapors may be slowly released by some new carpets, Oriented Strand Board (OSB), plywood, etc. VOCs are also emitted by some household cleaning agents. Removal of pollutants is allowed and is required if they pose a risk to workers. If pollutants pose a risk to workers and removal isn't possible or allowed by the client, the unit must be deferred. Documentation for deferral must include notes of the inspections and photographic evidence to support the inspections.

#### Testing:

- Visual and sensory inspection is the primary mechanism for determining the hazards of VOCs and other air pollutants.

#### Client Education:

- Inform the client in writing of observed hazardous conditions and associated risks. Provide client written materials on safety issues and proper disposal of household pollutants.

### 8.3.2.3. ASBESTOS IN SIDING, WALLS, AND CEILINGS

When it is suspected that asbestos containing material is identified, unless testing proves otherwise, assume it contains asbestos and take precautionary measures. Every crew member must be able to identify suspected asbestos materials so that they are protected by inadvertent exposure to this hazard. Encapsulation of asbestos is allowed by an AHERA asbestos control professional and should be conducted prior to blower door testing.

Removal of siding is allowed to perform energy conservation measures. All precautions must be taken not to damage siding. Never cut, drill, or sand suspected asbestos containing material. General abatement of asbestos siding or replacement with new siding is not an allowable health and safety measure.

#### Testing:

- Visually inspect exterior wall surfaces and sub-surfaces, floors, walls, and ceilings for suspected ACM prior to any work (including drilling or cutting).
- Materials containing or suspected of containing asbestos identified during the evaluation must be brought to the attention of the owner/occupant.

- The condition of the asbestos must be assessed and occupants advised not to disturb the material.
- Testing is only allowed by a certified AHERA asbestos control professional.

**Client Education:**

- Client must be informed in writing that suspected asbestos is present and what precautions (such as not to disturb material containing asbestos) will be taken to ensure the occupants and worker safety.
- When asbestos is the cause for deferral, and the client addresses the issue, the client must provide documentation that the asbestos removal or encapsulation was conducted by a certified professional before the home is eligible for weatherization.
- If suspected asbestos is present, the client must be provided U.S. EPA’s “Learn About Asbestos” and “Asbestos, Protect Your Family”. The documents can be found at <http://www2.epa.gov/asbestos>.

**DOE**

Major asbestos problems should be referred to the appropriate state agency and/or the Environmental Protection Agency (EPA). AHERA certification is required to conduct testing.

**8.3.2.4. ASBESTOS IN VERMICULITE**

When vermiculite is present, unless testing performed by an AHERA certified tester proves otherwise, assume it contains asbestos and take precautionary measures. Every crew member must be able to identify suspected asbestos materials so that they are protected by inadvertent exposure to this hazard. Use proper respiratory protection while in areas containing vermiculite. Do not perform a blower door test if it will disturb the vermiculite. Partial weatherization is not an option when vermiculite is present. For homes with identified vermiculite, base efficiency measures may be installed, but no shell or air infiltration improvements may be undertaken until the vermiculite is abated. If vermiculite cannot or will not be abated, and any major measures are required, then the home must be deferred. DOE funds may not be used for base efficiency measures installed in homes with assumed or confirmed vermiculite.

When friable ACM’s are suspected (meaning the material can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand), assume they contain asbestos and take precautionary measures such as not disturbing the materials and wearing respirators in the area.

Asbestos may be encapsulated by an AHERA certified professional but this may be cost prohibitive. Removal is not allowed.

**Client Education:**

- Client must be informed in writing that suspected asbestos is present and what precautions (such as not to disturb material containing asbestos) will be taken to ensure the occupants and workers safety.

- When asbestos is the cause for deferral, and the client addresses the issue, the client must provide documentation that the asbestos removal or encapsulation was conducted by a certified professional before the home is eligible for weatherization.
- If suspected asbestos is present, the client must be provided U.S. EPA’s “Learn About Asbestos” and “Asbestos, Protect Your Family”. The documents can be found at <http://www2.epa.gov/asbestos>.

**DOE**

In cases where encapsulation is not cost-effective, a home should be deferred.

Major asbestos problems should be referred to the appropriate state agency and/or the Environmental Protection Agency (EPA). AHERA certification is required to conduct testing.

**EmP**

In cases where encapsulation is not cost-effective, a home should be considered for a Base Efficiency job.

### 8.3.2.5. ASBESTOS ON PIPES, HVAC, OR OTHER SMALL SURFACES

When friable ACM’s are suspected (meaning the material can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand), assume they contain asbestos and take precautionary measures such as not disturbing the materials and wearing respirators in the area. Every crew member must be able to identify suspected asbestos materials so that they are protected by inadvertent exposure to this hazard. Encapsulation of asbestos is allowed by an AHERA asbestos control professional and should be conducted prior to blower door testing. Removal is not allowed. Only costs directly associated with testing and encapsulation may be charged. When deferral is necessary due to asbestos, the occupant must provide documentation that a certified professional performed the remediation before work continues.

**Testing:**

- Inspect pipe and other coverings for asbestos.
- Assess the condition of the asbestos and inform occupants not to disturb the material.

**Client Education:**

- Client must be informed in writing that suspected asbestos is present and what precautions (such as not to disturb material containing asbestos) will be taken to ensure the occupants and worker safety.
- When asbestos is the cause for deferral, and the client addresses the issue, the client must provide documentation that the asbestos removal or encapsulation was conducted by a certified professional before the home is eligible for weatherization.
- If suspected asbestos is present, the client must be provided U.S. EPA’s “Learn About Asbestos”

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and “Asbestos, Protect Your Family”. The documents can be found at <http://www2.epa.gov/asbestos>.

<b>DOE</b>	In cases where encapsulation is not cost-effective, a home should be deferred.  Major asbestos problems should be referred to the appropriate state agency and/or the Environmental Protection Agency (EPA). AHERA certification is required to conduct testing.
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<b>EmP</b>	In cases where encapsulation is not cost-effective, a home should be considered for a Base Efficiency job.
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#### 8.3.2.6. BIOLOGICAL AND UNSANITARY CONDITIONS

Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowed. Small occurrences (less than 10 total square feet) may be addressed using program funds during the normal course of weatherization activities. Work must be approved prior to starting. Approval will be granted on a case by case basis. Use of weatherization funds to address bacteria and viruses is not allowed however, program workers frequently encounter these conditions.

The decision on next steps to remediate these issues begins with the certified Auditor and the determination if a remediation specialist, or other hazardous materials removal specialist specific to the issue, should be involved.

Other considerations include identifying the cause of the issue ([moisture](#), etc.). Program funds may be used if the source of these conditions is identified and can be resolved to allow effective weatherization work and/or to assure the immediate or future health of workers and clients. Caution should be taken when selecting air tightness limits for dwellings with these problems.

Since these conditions are often related to moisture, the Auditor should assess moisture conditions as a part of the initial audit procedure and treat them as part of the weatherization work. If necessary, weatherization services may need to be delayed until the problem can be referred to another agency that can take remedial action. In cases where a known biological agent is present and may create a serious risk to occupants or weatherization crews/contractors, the home should be deferred (Base Efficiency for EmPOWER) and the homeowner immediately alerted to the risk. The auditor must document the client file by uploading a write-up in the energy software as well as photographic evidence supporting the visual inspection.

##### **Client Education:**

- Inform client of observed hazardous conditions and that they must be corrected by a certified professional and signed clearance notification must be provided to the agency prior to

weatherization continuing.

- Non-hazardous conditions can be corrected by the client.

<b>DOE</b>	If non-hazardous conditions are corrected by the client within 30 days, weatherization can continue.
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### 8.3.2.7. BUILDING STRUCTURE AND ROOFING

While conducting the initial audit, the building structure shall be inspected for structural integrity.

Minor repairs necessary to effectively perform or preserve weatherization materials/measures are allowed. Examples of these include sealing minor roof leaks to preserve new attic insulation and repairing water damaged flooring as part of replacing a water heater. Minor repairs shall not include cosmetic applications, such as replacing a floor covering such as carpet or linoleum.

Dwellings whose structural integrity is in question are beyond the scope of the energy efficiency programs and should be referred to appropriate agencies with funds that deliver these types of services. Weatherization services may need to be delayed or deferred until the dwelling can be made safe for crews/contractors and occupants.

#### Client Education:

- Provide information in writing describing conditions that must be met in order for weatherization to commence and follow standard deferral procedures.

<b>DOE</b>	If the building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and the conditions cannot be resolved cost-effectively, the home must be deferred. Documentation for deferral must include notes of the visual inspections, diagrams of the visual inspection, photographic evidence to support the visual inspection, and cost estimates for repairs.
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<b>EmP</b>	If the building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and the conditions cannot be resolved cost-effectively, the home must be denied and cannot receive any measures. Documentation for denial must include notes of the visual inspections, diagrams of the visual inspection, photographic evidence to support the visual inspection, and cost estimates for repairs.
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### 8.3.2.8. CODE COMPLIANCE

State and Local codes must be followed while installing weatherization measures. These vary by jurisdiction and it is the responsibility of each Network Partner to know what the codes are in each of the areas they work, as well as what permits and licenses are required in each of the areas they work.

Correction of pre-existing code compliance issues is not an allowable cost unless triggered by weatherization measures being installed in a specific room or area of the home. When correction of a pre-existing code compliance issue is triggered and paid for with program funds, cite specific code requirements in the client file in the energy software.

Condemned properties and properties where “red tagged” health and safety conditions exist that cannot be corrected under this guidance should be deferred (denied for EmPOWER). When code issues lead to deferral / denial, cite specific code requirements in the client file in the energy software. Documentation must include notes of the visual inspections, diagrams of the visual inspection, and photographic evidence to support the visual inspection.

#### **Client Education:**

- Inform client of observed code compliance issues in writing when it results in a deferral / denial.

#### **DOE**

Workers must be qualified and adequately trained according to state and local codes specific to the work being conducted (electrical, plumbing, etc.).

### 8.3.2.9. COMBUSTION GASSES

Proper venting to the outside for combustion appliances, including gas dryers and refrigerators, furnaces, vented space heaters and water heaters is required. Correction of venting is allowed when testing indicates a problem. Check the energy model / cost-effectiveness to determine if the appliance can be justified as an ECM prior to replacement as an H&S measure. If replacing as H&S, document comparison of costs of replacement vs. repair by uploading it into the client file in the energy software.

When dangerous CO levels are present, the worker is required to contract a licensed service contractor to visit the home and eliminate the health and safety hazard. Reference the field guide for additional information.

UNVENTED SPACE HEATERS- For instances where fossil fueled unvented space heaters are present as either a primary or secondary heat source, the units must be removed prior to energy conservation measures. If the unvented fossil fuel space heater cannot be removed, or the client refuses, the jobs shall be deferred.

#### **Testing:**

Combustion safety testing is required when combustion appliances are present. A complete mechanical systems assessment is required to be completed on every home. The procedure must include:

- Testing naturally drafting appliances for spillage and CO during CAZ depressurization testing pre- and post-weatherization and before leaving the home on any day when work has been done that could affect draft (e.g., tightening the home, adding exhaust).
- Visual and diagnostic inspection of the venting of combustion appliances and confirming adequate clearances.

**Client Education:**

- Client must be informed of safety hazards of CO including the importance of using exhaust ventilation when cooking and keeping burners clean to limit the production of CO.
- The agency must provide either the U.S. EPA document “Protect Your Family and Yourself from Carbon Monoxide Poisoning” located at [www.epa.gov/iaq/pdfs/co\\_factsheet\\_en.pdf](http://www.epa.gov/iaq/pdfs/co_factsheet_en.pdf), or the Center for Disease Control’s “What is Carbon Monoxide?” located at [www.cdc.gov/co/pdfs/faqs.pdf](http://www.cdc.gov/co/pdfs/faqs.pdf), or both.

DOE

Further guidance on appliance specific-information is referenced in WPN 22-7.

**8.3.2.10. ELECTRICAL**

Minor electrical repairs are allowed where health or safety of the occupant(s) may be at risk.

Upgrades and repairs are allowed when necessary to perform specific weatherization measures as incidental repairs. DHCD prohibits installing insulation over knob-and-tube wiring. Prior to insulating around Knob and Tube wiring, cost effectiveness for removal must be evaluated or barriers must be installed to keep insulation at least three inches from the Knob and Tube.

Aluminum wiring should be thoroughly inspected before any insulation work is done. If aluminum wiring is found to be active and in the areas to be insulated, no insulation should be added. When electrical repairs within the scope of the program are required, the typical standard of remedy shall be to subcontract the repair work to a licensed electrician. All appropriate procurement procedures shall be followed when subcontracting.

**Testing:**

- Licensed electricians shall perform visual inspection, as well as voltage drop and voltage detection testing.

**Client Education:**

- Provide client information on overloading circuits and electrical safety and risks.

#### **8.3.2.11. FUEL LEAKS**

When a minor gas leak is found on the utility side of service, the utility service must be contacted before work may proceed. Notify utilities and temporarily halt work when leaks are discovered that are the responsibility of the utility to address. Minor repairs necessary to effectively perform or preserve weatherization materials/measures are allowed where it has been determined that the fuel leak is the responsibility of the client.

**Testing:**

- Exposed gas lines should be tested for fuel leaks from utility coupling into, and throughout, the home.
- A sensory inspection should also be conducted on bulk fuels to determine if leaks exist.

**Client Education:**

- Inform clients in writing if fuel leaks are detected.

#### **8.3.2.12. GAS OVENS AND RANGES**

When testing indicates a problem, agencies may perform standard maintenance on, or repair, gas cooktops and ovens. Replacement is not allowed.

**Testing:**

- Test gas oven for CO.
- Inspect cooking burners and ovens for operability and flame quality

**Client Education:**

- Inform clients of the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit the production of CO.

#### **8.3.2.13. HAZARDOUS MATERIAL DISPOSAL**

Hazardous waste materials generated in the course of weatherization work shall be disposed of according to all local laws, regulations and/or federal guidelines, as applicable. The replacement of refrigerators, air conditioners and any other appliances containing refrigerant requires agencies to follow the Clean Air Act 1990, section 608, as amended by 40 CFR 82, 5/14/93. Document proper disposal requirements in contract language with the responsible party.

**Client Education:**

- Inform the client in writing of hazards associated with hazardous waste materials being generated/handled in the home. Provide EPA Refrigerant Disposal Brochure.



#### 8.3.2.14. INJURY PREVENTION

Workers should inspect for dangers that would prevent weatherization and take all reasonable precautions against performing work on homes that will subject workers or occupants to health and safety risks. Porch or stair repairs that would be required to make a home safe for weatherization workers are not an allowable measure. Such situations are considered to be beyond the scope of the energy efficiency programs.

**Client Education:**

- The client must be informed in writing of any hazards and the associated risks that may have been observed.

#### 8.3.2.15. LEAD BASED PAINT

DHCD requires that weatherization crews install measures in a lead safe manner in accordance with the SWS and Environmental Protection Agency (EPA) protocols and that DHCD monitors and inspectors verify that crews are using lead safe work practices in pre-1978 housing. Deferral is required when the extent and condition of lead-based paint in the house would potentially create further H&S hazards or the repair would exceed program allowances. Only those costs directly associated with the testing and lead safe practices for surfaces directly disturbed during weatherization activities are allowed. Job site set up and cleaning verification is required by a Certified Renovator.

**Testing:**

- In all pre-1978 homes, crews/contractors must assess the physical condition of the home prior to conducting an audit. DHCD recommends assuming that lead paint may be present in any house built prior to 1978 and to follow the proper SWS, EPA protocols, and OSHA regulations in all pre-1978 homes.
- Testing to determine the presence of lead in paint that will be disturbed by measure installation is allowed per RRP requirements.
- Testing methods must be economically feasible and justified.

**Client Education:**

- Client must be informed of the hazards of lead paint.
- Each affected family must be provided with the EPA booklet "The Lead-Safe Certified Guide to Renovate Right" prior to the start of work. Have the client sign and date the confirmation of receipt of the lead pamphlet and upload it in the client file in the energy software. The "Renovate Right" document can be found at [www.epa.gov/sites/production/files/documents/renovaterightbrochure.pdf](http://www.epa.gov/sites/production/files/documents/renovaterightbrochure.pdf).

### 8.3.2.16. MOLD AND MOISTURE

Minor water damage repairs that can be addressed by weatherization workers and source control (correction of moisture and mold creating conditions) are allowed when necessary in order to weatherize the home and to ensure the long term stability and durability of the measures. Source control is independent of latent damage and related repairs. Suspected mold of individual areas less than or equal to 10 square feet are considered minor and weatherization can continue as long as adequate ventilation or dehumidification can be provided and the homeowner is instructed in cleaning the area. In cases where mold-like substances have been detected, assessors must document the square footage of the area affected.

Where severe mold and moisture issues cannot be addressed, deferral is required. Surface preparation where weatherization measures are being installed (e.g., cleaning mold off window trim in order to apply caulk) must be charged as part of the ECM, not to the H&S budget category.

#### Testing:

- Visual assessment is required and diagnostics such as moisture meters are recommended pre and prior to final inspection.
- The assessment shall assure existing mold-like conditions are noted, documented and disclosed to the client; and, shall assure existing building envelope conditions do not contribute to mold-like growth when weatherization measures are applied.
- Mold-like substance assessment means a visual assessment combined with certain allowable diagnostics. It does not mean testing for mold. Program funds may not be used to test for mold.

#### Client Education:

- Client must be provided written notification and disclaimer on mold and moisture awareness.
- The client must be provided the US EPA's "A Brief Guide to Mold and Moisture and Your Home" which includes information on the importance of cleaning and maintaining drainage systems and proper landscape design and the impact on site drainage and moisture control. The document can be found at [A Brief Guide to Mold, Moisture, and Your Home EPA-402-K-02-003, September 2010](#)

DOE

Weatherization workers at all levels are required to take a mold awareness class.

### 8.3.2.17. PESTS

Pest removal is allowed only where infestation would prevent weatherization, poses a health and safety concern for workers, and can be managed within H&S funding parameters. If removal is a viable and cost-effective option, take the necessary steps to remove the pest infestation problem so that the weatherization work can proceed. Screening of windows and points of access and incorporating pest

exclusion into air sealing practices to prevent intrusion is allowed.

If removal is not a viable and cost-effective option or significant health and safety risks exist, defer the weatherization work and provide the client with appropriate referral information. When deferral is necessary, the client file must also include cost estimates for the removal of the pests from a pest removal specialist.

**Client Education:**

- Client must be informed in writing of observed condition and associated risks.

**8.3.2.18. RADON**

In homes where radon may be present, work scope must include precautionary measures based on “EPA Healthy Indoor Environment Protocols” for Home Energy Upgrades, to reduce the possibility of making radon issues worse. Per WPN 22-7, *certain radon precautionary measures are **required** in all homes*, regardless of the known presence of radon. These include: (1) covering of exposed dirt floors within the thermal boundary; (2) covering sump well/pits with airtight covers; (3) implementing ventilation per ASHRAE 62.2-2016.

Other measures that are required include sealing floor/foundation penetrations, isolating basement from conditioned space and crawlspace ventilation.

Whenever site conditions permit, cover exposed dirt floors within the pressure/thermal boundary with 6 mil (or greater) polyethylene sheeting, lapped at least 12” and sealed with appropriate sealant at all seams, walls and penetrations.

If the auditor or other WAP personnel determines air sealing is prohibited by an identified radon problem, then the house must be deferred from DOE WAP). Per WPN 23-6 no cost-effective major measures may be skipped under any circumstances, or the house must be deferred. This includes air sealing. Neither radon testing nor radon mitigation is an allowable cost. Major radon problems should be referred to the appropriate local environmental organization or agency for mitigation or abatement.

**Client Education:**

- Client must be informed of the hazards of radon and provided the EPA’s [“A Citizen's Guide to Radon”](#).

**DOE**

Clients must sign an informed consent form prior to receiving weatherization services. This form must be uploaded in the client file in the energy software. The consent form includes:

- Information from the results of the IAP Study that there is a small risk of increasing radon levels when building tightness is improved.
- A list of precautionary measures WAP will install based on EPA Healthy Indoor Environment Protocols;
- Some of the benefits of Weatherization including energy savings, energy cost savings,

improved home comfort, and increased safety, and

- Confirmation that EPA's "A Citizen's Guide to Radon" was received and radon related risks discussed with the client.

Auditors, assessors and inspectors must have knowledge of radon, what it is and how it occurs, including what factors may make radon worse, and precautionary measures that may be helpful. Workers must be trained in proper vapor retarder installation. A zonal map can be located at [www.epa.gov/radonpdfs/zonemapcolor.pdf](http://www.epa.gov/radonpdfs/zonemapcolor.pdf)

#### 8.3.2.19. SAFETY DEVICES

Installation of smoke alarms is mandatory where detectors are not present or are inoperable. WAP DOE allows for replacement of functional smoke and CO alarms that are beyond the manufacturer's stated life expectancy using DOE funds. There must be at least one smoke alarm per floor. Replacement of operable smoke alarms is not an allowable cost, unless the alarm meets the requirements noted above.

Installation of CO detectors is required to comply with ASHRAE 62.2. There must be at least one CO detector per floor. Replacement of operable CO detectors is only allowable when the existing alarm(s) have surpassed the manufacturer's stated life expectancy..

Testing:

- Check existing alarms for operation.
- Also verify operation of newly installed alarms

Client Education:

- Client must be provided with verbal and written information on the use of devices installed.

DOE

Local code compliance is required when installing or replacing smoke alarms.

Providing fire extinguishers is allowed only when solid fuels (such as wood) are present.

#### 8.3.2.20. OCCUPANT HEALTH AND SAFETY

Agencies should be aware that some individuals' health problems could be exacerbated by weatherization activities. During the initial visit to the home, Energy Auditors are required to discuss with the homeowner the work that will be done during the audit and during installation, including details regarding materials and installation procedures, and potential impacts on the occupant's health.

The auditor must allow the occupant to identify any preexisting health conditions or concerns that could be exacerbated by the audit or work. Occupant revealed health concerns or conditions must be noted on

the audit form as necessary to direct installation staff to isolate work or use alternate methods.

Health conditions will not preclude clients from receiving weatherization if reasonable accommodations can eliminate the issue. The Energy Auditor must plan to address any preexisting health conditions or concerns through isolation of work tasks, or if the occupant determines that the weatherization work will cause undue stress on an existing condition, the house will be deferred.

**Client Education:**

- Client will be informed in writing of any known risks.
- Agency should provide the client with point of contact information in writing so the client can inform of any issues.

**8.3.2.21. VENTILATION AND INDOOR AIR QUALITY**

DHCD has fully implemented the requirements of ASHRAE 62.2-2016. Ventilation is only required if ASHRAE 62.2 calculations indicate added ventilation. When ventilation is required, the installed ventilation system shall meet both the spot ventilation requirement (table 5.1 of ASHRAE 62.2-2016) and any additional whole home ventilation requirements. Exhaust appliances may only be installed in ceilings and walls (floor installations are prohibited). In addition, ASHRAE 62.2 addresses dryer venting, CO alarm, and air sealing to isolate attached garages requirements. Existing fans and blower systems should be updated if not adequate. Take actions to prevent zonal pressure differences greater than 3 pascals across closed doors. *DHCD requires the RED CALC floor area to include all areas which are included in the blower door test.*

Clients cannot refuse mechanical ventilation. Subgrantees who install ventilation must educate the clients on effective use of the exhaust ventilation equipment by:

- Leaving owner's manual with client
- Demonstrating how to use the exhaust fans.
- Providing client education information on ventilation systems installed.
- Providing client education on proper operation and maintenance including location of switch and cleaning instructions.
- Include disclaimer that ASHRAE 62.2 does not account for high polluting sources or guarantee indoor air quality.

**8.3.2.22. WINDOW AND DOOR REPLACEMENT**

Replacement, repair, or installation is not an allowable H&S cost.

**8.3.2.23. WORKER SAFETY**

Network Partners must follow OSHA standards and Safety Data Sheets (SDS) and take precautions to ensure the H/S of themselves and other workers. SDS must be posted wherever workers may be exposed to hazardous materials. OSHA's Hazard Communication Standard is designed to ensure that all hazardous

chemicals in the workplace and on worksites are identified, cataloged and labeled, and that information about the hazards are communicated to weatherization workers along with training on steps workers can take to protect themselves.

**DOE** DHCD requires each subgrantee to produce a Hazard Communication Plan (HCP) that is specific to their workplace and materials used. The HCP must be shared with weatherization workers through comprehensive training. The HCP must remain accessible. Subgrantees are advised to maintain copies in the workplace in an accessible location as well as in the vehicles used for weatherization services for access at work sites. The HCP must be reviewed and updated annually.

DHCD monitors and inspectors will verify that subgrantees, crews and contractors follow safe work practices.

### 8.3.3. INCIDENTAL REPAIRS

Incidental Repair Measures (IRM) include materials and installation which are performed because they are deemed necessary for the preservation and effectiveness of one or more energy savings measures. IRM costs are not added to any individual or partial group of energy saving measures costs. The total cost of all IRMs is added to the cost of the package of weatherization measures to calculate the whole unit - cumulative SIR.

The energy savings measure that requires the installation of an incidental repair must be documented in Hancock. The Department of Energy (DOE) Weatherization Assistance Program (WAP) is not a rehabilitation or general repairs program. This guidance strictly prohibits stand-alone roof replacements, structural repairs, or other non-energy related rehabilitation work. Incidental Repair Measure (IRM) is a repair necessary for the effective performance or preservation of newly installed weatherization materials, but not part of a standard installation. IRM installations must be associated with a specific ECM or group of ECMs. IRMs must be justified by written and photo documentation in the client file. IRM costs must be included in the SIR calculation of the total package of weatherization measures. (Weatherization Program Notice (WPN) 19-5). Each incidental repair MUST be tied to the ECM it is allowing to be installed and use the same funding source.

**EmP** Refer to the EmPOWER Price List for allowable incidental repairs.

**EmP** Spending for incidental repairs cannot exceed 20% of total job cost.

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MEAP -C	Refer to the HVAC Price List for allowable incidental repairs.
MEAP -Wx	Refer to the EmPOWER / Weatherization Price List for allowable incidental repairs.

### 8.3.4. MEASURE PRICING

DOE	<p>In the DOE WAP program, all allowable expenditures must be properly documented as costs incurred on eligible dwelling units in the subgrantee's records. The LWA must bill for actual costs incurred and retain sufficient supporting documentation, i.e., receipts, inventory, and personnel records to justify actual costs billed. Subgrantees must make supporting documentation available to DHCD upon request.</p> <p>Subgrantees that have procured contractors/subcontractors to provide weatherization services must adhere to their own procurement policies and guidelines in accordance with 2 CFR 200.318 (General procurement standards) through 200.326 (Contract provisions).</p> <p>DHCD will reimburse for measure pricing that is documented through the subgrantee's completed and approved procurement process to include valid executed contracts with vendors/subcontractors.</p>
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EmP	<p>The approved EmPOWER price list is to be used as not-to-exceed values for measures billed. Costs for measures must be equal to or less than the values listed on the Price List.</p> <p>SWCs working as subcontractors for LWAs cannot charge the LWA in excess of the specific pricing incorporated in their contract with DHCD.</p>
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MEAP	<p>The price list connected to the contract / agreement is to be used as not-to-exceed values for measures billed. Costs for measures must be equal to or less than the values listed on the Price List.</p> <p>SWCs working as subcontractors for LWAs cannot charge the LWA in excess of the specific pricing incorporated in their contract with DHCD.</p>
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## 8.4. JOB REQUIREMENTS

In addition to the [measure requirements](#) listed above, a job also has to meet certain requirements based on its work scope as a whole. The job requirements vary by funding source.

<b>DOE</b>	<p>All DOE WAP measures must meet an SIR of 1 or greater. Additionally, the total package of measures must also meet an SIR of 1 or greater.</p> <p>The cost of weatherization for single-family dwellings is dictated by the approved average cost per unit (ACPU). DHCD determines the ACPU through a simple calculation - dividing the number of units reported as completed to DOE into the amount of expenditures reported during the previous program period. Once the ACPU is determined, it is submitted to DOE in the Annual State Plan for approval. DHCD's ACPU will not exceed DOE's adjusted average cost per unit as outlined in the annual WPN.</p> <p>It is the responsibility of each LWA to maintain a running ACPU on agency projects that have a work order in an effort to meet production goals in units completed and dollars expended.</p>
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<b>EmP</b>	<p>A Whole Home Efficiency scope must have a minimum job SIR of 1.1, unless the priority list is applied.</p> <p>Overall job cost caps apply. Note that the soft caps are inclusive of all measure costs, including energy saving measures, incidental repairs, and health &amp; safety. Hard caps are inclusive of all costs, including audit fees.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr style="background-color: #a6a6a6;"> <th colspan="3" style="padding: 5px;">Job Cost Caps</th> </tr> <tr style="background-color: #d9d9d9;"> <th style="width: 33%; padding: 5px;">Soft Cap for all Measure Costs</th> <th style="width: 33%; padding: 5px;">Health &amp; Safety Cap</th> <th style="width: 33%; padding: 5px;">Hard Cap</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;"> <ul style="list-style-type: none"> <li>● \$7,500 (ES, IR, and HS)</li> </ul> </td> <td style="padding: 5px;"> <p>NTE \$1,000</p> </td> <td style="padding: 5px;"> <ul style="list-style-type: none"> <li>● Hard cap for EmPOWER funding at \$16,000</li> </ul> </td> </tr> </tbody> </table> <p>All jobs having selected measures costing a total of \$7,500.00 or higher must include justification by the auditor indicating the reason(s) why the job will exceed \$7,500.00. Such justifications must be concise and must describe the measures, with pricing, that generate the job cost. For example, <i>"The home has a very large crawl space with no existing insulation and no vapor barrier. The cost to insulate the crawl space and install a vapor barrier was</i></p>	Job Cost Caps			Soft Cap for all Measure Costs	Health & Safety Cap	Hard Cap	<ul style="list-style-type: none"> <li>● \$7,500 (ES, IR, and HS)</li> </ul>	<p>NTE \$1,000</p>	<ul style="list-style-type: none"> <li>● Hard cap for EmPOWER funding at \$16,000</li> </ul>
Job Cost Caps										
Soft Cap for all Measure Costs	Health & Safety Cap	Hard Cap								
<ul style="list-style-type: none"> <li>● \$7,500 (ES, IR, and HS)</li> </ul>	<p>NTE \$1,000</p>	<ul style="list-style-type: none"> <li>● Hard cap for EmPOWER funding at \$16,000</li> </ul>								



\$4,275.00.”

**EmP** Overall job cost caps apply. Note that the soft caps are inclusive of all measure costs, including energy saving measures, incidental repairs, and health & safety. Hard caps are inclusive of all costs, including audit fees.

Job Cost Caps		
Soft Cap for all Measure Costs (ES, IR, and HS)	Health & Safety Cap	Hard Cap
<ul style="list-style-type: none"> <li>• \$7,500 per funding source</li> <li>• Can only be exceeded if HVAC system replacement is included.</li> </ul>	NTE \$1,000	<ul style="list-style-type: none"> <li>• Hard cap for each funding source at \$12,500</li> </ul>

**MEAP -C** There is no SIR requirement for crisis heating system replacements or cooling and hot water heater replacements.

**MEAP -Wx** All ECM measures must meet an SIR of 1 or greater. Additionally, the total package of measures must also meet an SIR of 1 or greater.

### 8.5. HISTORIC PRESERVATION REVIEW

Energy efficiency projects may adversely affect properties that are listed in or are eligible for listing in the National Register of Historic Places. Such projects have to be reviewed in accordance with the Maryland Historical Trust Act of 1985, State Finance and Procurement Article §§5A-325 and 5A-326 of the Annotated Code of Maryland. For more information, please review Maryland’s [Agreement](#) and [Amendment](#) with the State Historic Preservation Office.

An energy efficiency project requires DHCD’s review if

- The property is older than 45 years, AND/OR any part of the project area is recorded in the Maryland Inventory of Historic Properties.

- AND the work scope includes any of the following measures:
  - Installation of storm windows or doors and installation of screen doors
  - Repair of windows, doors, and door frames
  - Replacement of non-historic windows, doors, and door frames
  - Replacement of historic windows, doors, and door frames when they are deteriorated beyond repair and replacement features conform to the Standards
  - White roofs, cool roofs, green roofs, sod or grass roofs
  - Repair or replacement of exterior siding
  - Roof replacement
  - Lead-based paint abatement
  - Repairing masonry, including re-pointing and rebuilding chimneys.
  - Installing vents (such as ridge vents, roof vents, bath and kitchen vents, crawl space and foundation vents, soffit and frieze board vents, or combustion appliance flues.

All work scopes are reviewed for historic preservation requirements by DHCD's architect at the time of work order. After the review, a note is left in the Hancock record that the review was completed and if the project passed.

If a project meets the above criteria for a historic review, the Network Partner must ensure that the review was completed before proceeding with installing work. If the review was not completed, Network Partners must send an email to [dhcd.energyuse@maryland.gov](mailto:dhcd.energyuse@maryland.gov), referencing "Historic Preservation Review" and the job number in the subject line. Provide the following information in the email:

- Photographs showing general views of all sides of the exterior of the building.
- Photographs showing the features that will be affected by the proposed work (e.g. the window to be repaired for example).
- List the work to be undertaken, please be specific (for example; replace broken glazing in first floor living room window, 2'6"x3'4" double hung wood windows, wood frame to remain).

Once approved or denied, the DHCD Historical Architect will notify the Network Partner and DHCD by email of the results of the review and the project is released from Hancock. **No work may begin until the project has been reviewed.**

If the review results in a determination that the project may adversely affect historic properties, an alternative project version can be submitted for review and comment. The original rejected version cannot be implemented.

## 8.6. WORK SCOPE REVIEW

Work Scope reviews are remote reviews of planned measures through a DHCD inspector by way of Hancock job data. These reviews are optional for any job the network partner prefers to have reviewed, and mandatory for every job reported as completed at the time of invoicing. To request a review before

work begins, email [dhcd.jobreviews@maryland.gov](mailto:dhcd.jobreviews@maryland.gov). The email subject line should reference the job number and the reason for review. Review requests are typically fulfilled by the end of the next business day.

See [this section](#) for desk reviews at the time of invoicing.

MEAP  
-C

Work scope reviews are required for all jobs before work begins. Email [dhcd.jobreviews@maryland.gov](mailto:dhcd.jobreviews@maryland.gov) when the audit is locked down.

## 9. WEATHERIZATION SERVICE DELIVERY

Network Partners are responsible for completing all weatherization work in accordance with the DHCD SWS-aligned Field Guide, and Program Operations Manual. NREL's Standard Work Specifications Tool (<https://sws.nrel.gov/>) has been integrated into the DHCD Maryland Field Guide, to ensure that DHCD's technical standards for weatherization comply with DOE and national weatherization standards. An electronic PDF Maryland Field Guide can be found here:

[http://www.dhcd.maryland.gov/Website/Programs/WAP/documents/Field\\_Guide.pdf](http://www.dhcd.maryland.gov/Website/Programs/WAP/documents/Field_Guide.pdf). Printed copies of the DHCD Field Guide can be obtained by contacting HBEP. All Network Partners should have copies of the Field Guides in their weatherization vehicles. All three should be referenced for guidelines, application and standards. These standards apply to both direct hire crews and private contractors. Quality Control and Quality Assurance inspections will be conducted with these tools as a guide.

The Housing and Building Energy Programs unit recognizes that it is impossible to address all situations that may arise in the field when a dwelling is being estimated, audited or when work is being performed. Professional results depend on good judgment being used at the work site. Network Partners are encouraged to contact DHCD's Quality Assurance Inspection staff with any questions or for clarifications regarding work quality or policy.

### 9.1. SERVICE DELIVERY PROCESS

Network partners are required to stay involved in the process of service delivery by managing the installation through skilled trade crews and weatherization crews, and must be available to the client and DHCD staff for questions about the project. In some cases, problems with installations arise and it is important that network partners handle such issues promptly according to their problem escalation procedures.

Network partners must organize the service delivery in an order that minimizes the risk of having to abandon work due to unforeseen circumstances. This strategy may include to fix any health & safety related measures as well as modifications to combustion appliances first, in case additional issues are

found.

The Hancock database must be updated throughout the service delivery process within one week of any activity occurring.

### **9.1.1. CHANGE ORDERS**

Change orders may become necessary during the course of service delivery. The purpose of the change order is to capture measures that were not addressed through the energy audit due to lack of access or data available at the audit. DHCD expects that network partners will conduct a thorough energy audit and be able to capture all eligible energy savings, health/safety and incidental repair measures.

Change orders are to be entered in Hancock via the Change Audit tab and following the change audit process. Additionally, any and all changes must be noted in the comments section of the client information section of Hancock. The documentation shall include the measure added/deleted, justification for the change, the price of the change and the new total. Jobs requiring a change order shall be left in the job's current status; at no point should a work order be deleted to add additional measures. Some change orders may require a second desk review; for those cases the desk review process shall be followed.

DHCD will monitor and track change orders and may require T&TA for network partners and auditors if a trend of change orders is observed.

## **9.2. MULTI-UNIT PROPERTY SERVICE DELIVERY**

Multi-unit properties can be serviced in batches for maximum efficiency of operations, following this process:

- Network Partner provides DHCD with a production schedule for the property. Production may be scheduled building by building as they become income certified or in groups if the whole development qualifies for weatherization. Weekly communication between the project manager and DHCD's inspector to coordinate production and monitor progress is required.
- Network Partner must gather the following forms for each housing unit at some point before any reimbursable work is performed. Requests for reimbursement will be denied if any of these forms are not located in Hancock at the time of invoicing:
  - Units certified lead-free by MDE only require a copy of the lead-free certificate for the property. Otherwise - a signed "Renovate Right / Protect Your Family from Lead in the Home" form for each tenant is required to be uploaded to Hancock.
- Weatherization projects must be performed in accordance with program guidance.
  - Cost guidelines for each funding source are consistent with those for the weatherization of Single-family Homes.
  - Network Partner must notify the assigned DHCD QA Inspector when units are completed

- and ready for QA inspection.
- The Hancock client record for each unit must be updated in real time as it moves through the production process.
- Completed units must be invoiced immediately after QCI inspection. Batch processing is allowed only in weekly increments. The following documents must be present in each job's case file in HES for an invoice to be approved:
  - Property rent roll and roster
  - Building owner agreement (including Memorandum of Agreement, if landlord contribution applies).
  - Tenant synopsis.
  - Lead-free certificate OR tenant signed "Renovate Right / Protect Your Family from Lead in the Home".

**EmP**

Utility provider and usage must be verified by DHCD for all participating units to be weatherized with EmPOWER funds. Network Partners must gather signed utility consent forms for each tenant at some point before any reimbursable work is performed. Signed utility consent form with valid account number must be present in each job's case file in HES for an invoice to be approved. Requests for reimbursement will be denied if any of these forms are not located in Hancock at the time of invoicing.

## 10. QUALITY CONTROL AND QUALITY ASSURANCE

### 10.1. QUALITY CONTROL INSPECTIONS

After work is completed, every weatherized unit must receive a quality control inspection by the network partner to ensure that all work meets the minimum specifications outlined in the SWS.

The purpose of the Quality Control inspection is:

- To provide services in a manner that meets the highest level of professionalism and to comply with standards established by DHCD, the federal government, and the industry; and
- To provide services in a timely fashion and with the highest level of resource accountability possible in accordance with the scope of work provided.

#### 10.1.1. QCI REQUIREMENTS

The following are mandatory for QC Inspectors:

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- QCI competency must be demonstrated by BPI Certification as a HEP- Quality Control Inspector (HEP QCI)
- The Network Partner is responsible for ensuring that all Quality Control Inspectors are adequately trained and credentialed.
- Quality Control Inspectors must be independent of the work they are inspecting. The Quality Control Inspector cannot be the same individual who audited the property or performed any of the work for the property they are inspecting.

It is the responsibility of the Quality Control Inspector to ascertain the completeness and quality of work according to the work order of each dwelling unit before certifying in the Hancock system that the unit is complete.

At a minimum, Quality Control Inspections must contain these elements:

- Agency must set job status to “measures installed” or “inspected”;
- Perform a blower door test to verify and record results of air infiltration reduction achieved;
- Perform a combustion efficiency test and combustion appliance zone (CAZ) testing of the central heating system(s) (fossil fuels) to verify results of furnace service contractor;
- Perform a walk-through inspection of the property to verify that all possible ECM’s were called out/completed and the presence of all installed materials and that the installation of materials as recorded on the Work Order and Invoice documents meet SWS quality;
- Verify all building characteristics as entered into the audit software. QCI shall confirm audit field data is correctly documented in Hancock. This shall include but is not limited to dimensions, orientations, number of bedrooms, windows/doors dimensions and locations, etc...
- Document client comments and obtain client signature and dates on the appropriate forms which verifying the work performed; and
- Certify completeness and quality of all items listed in the work scope in the Hancock system;
- Upload clear and concise photos of every measure installed. Document any issues with the work and add pertinent notes in Hancock.
- Upload signed QCI form in Hancock.

When the QC inspector finds issues with workmanship or work not completed to SWS, quality or quantity of measures, or missed opportunities, the QC inspector shall mark the job as failed and issue a rework work order. The network partner is encouraged to follow [DHCD’s Technical Assistance process](#) when repeated issues are found with the same subcontractor or crew.

The rework order shall include, but not be limited to the following:

- Photo documentation and description of the failed measure in Hancock;
- The description shall include the SWS that was not met;
- Client information comment section shall be noted as to why the case has failed and a rework order shall be prepared;

- The rework order shall be uploaded to Hancock under Misc. Documents and titled “Failed QCI”
- The rework order shall state rework must be scheduled within 5 business days and complete within 10 business days of the failed QCI. For any measures that failed that pose imminent life, health/safety issues the rework shall be ordered to be completed within 48 hours;
- Upon completion of the rework order, the QC inspector shall schedule a follow up inspection to verify and document that all failed and/or missed items have been corrected;
- Upon successful re-inspection, Hancock shall be updated and documented to reflect the status of the passed inspection.

**DOE**

Agencies with limited capacity/staff can have the same QCI perform the audit and QC on a property but never should the QCI perform any of the work for the property. Because of the exception, DHCD QAs 10% of all jobs.

**EmP**

Base Efficiency jobs are exempt from full QCI and instead have to be submitted with a Job Completion Form that can be signed by any network partner employee who can certify that the work was completed as stated. The form must also be signed by the program participant. Any job that involves the replacement or repair of combustion equipment also requires a post-install combustion test performed by any BPI certified professional. The test results must be entered in Hancock.

**MEAP**

Agencies with limited capacity/staff can have the same QCI perform the audit and QC on a property but never should the QCI perform any of the work for the property. Because of the exception, DHCD QAs 10% of all jobs.

### 10.1.2. QCI DOCUMENTATION

All QCI inspections shall be documented in the Hancock job and client record as well as on agency QC forms. The agency QC form is provided for every job through the Hancock QC functionality.

Hancock documentation required:

- QCI personnel shall be indicated on the “inspection” screen and the QCI’s BPI number added to the “inspection detail” comment box
- All measures will be evaluated for compliance with SWS and graded as PASS or FAIL
- Any measure found to be FAILED shall have the deficiencies documented in the “inspection detail” section and documented in the QC measure section
- Photos shall be uploaded for ALL installed measures and measures that were not completed (due to missed opportunities or budget issues)

- Upload signed agency QC form to WAP Documents under “Signed Homeowner QC Form”
- If using subcontractors, upload a copy of the failed QC report to “WAP documents” under “misc document upload”

Agency QC form:

- Agency QC form shall be filled out completely for all measures completed and evaluated.
- Agency QCI shall enter their BPI number on the QC form and sign off on the job regardless of pass/fail status
- If there is a callback for failed items or missed opportunities, a second QC form may be used to document the rework and evaluation of the work.
- Homeowner/tenant signature is required
- QCI shall document all failed measures and indicate rework needed. This includes any missed opportunities.
- All QCI forms shall be uploaded into Hancock (see above)

### **10.1.3. No Show Policy**

It is anticipated that a small percentage of units will not receive Quality Control inspections or installation cannot be completed due to a variety of extenuating circumstances including:

- Client moves/dies & property is vacant or occupied by a second party; or
- Client is unavailable after several attempts to re-enter and inspect.

The following are the procedures for reporting "no show" properties:

- Network Partner completes the weatherization services as far as possible and forwards the Work Order to the Quality Control Inspector.
- Quality Control Inspector will be responsible for contacting landlords/property managers to seek assistance in completing the inspection process, as required.

Quality Control Inspector must make several attempts to enter the property, including:

- Contacting the client by telephone to schedule an appointment;
- Forwarding of a letter setting a time and date for the inspection;
- Conducting an unscheduled site visit to the dwelling; and
- In the case of rental properties, performing the previous steps with the landlord as well as the client.
- The Quality Control Inspector alerts DHCD staff that the unit cannot be accessed and provides documentation of each attempt to contact.

In the event that a network partner is unable to gain access to the property after following all guidelines above, DHCD's program management staff should be immediately notified for advice on how to seek reimbursement. Decisions regarding these matters will occur on a case by case basis. DHCD reserves the right to remedy these situations in whatever fashion it deems is in the best interest of the State.



## 10.2. QUALITY ASSURANCE INSPECTIONS

DHCD Quality Assurance Inspectors provide additional program oversight to all field work, energy audits, energy modeling, and Quality Control Inspections to ensure the work is done according to all program guidelines and standards.

### 10.2.1. QA REQUIREMENTS

DHCD's HBEP Quality Assurance inspectors are required to review not less than 10% of each Network Partner's completed units. If the Quality Assurance Inspector finds a consistent pattern of missing or poor quality work a higher percentage of units will be inspected until the issue is resolved. Training and technical assistance will also be provided to assist in the resolution process.

DHCD's HBEP QA staff will inspect only those units that have been certified as complete in the Hancock system by the Network Partner's Quality Control Inspector.

When performing desk reviews, the inspectors may have pre-selected certain jobs for QA monitoring. The Network Partner must notify the inspector when one of the selected jobs is ready for inspection as they cannot be invoiced before being accepted by a QA inspector.

### 10.2.2. QA DOCUMENTATION

If a unit is rated "Poor" the contact person at the LWA/SWC will be notified via email by the QA inspector and will receive an automated email from the software advising of the poor-rated QA. The agency must access Hancock and create a work order of all items rated poor. The software will email the QA Inspector to inform them that a call-back work order has been created. Once the installation of the call-back work order is entered and certified by the LWA/SWC Quality Control Inspector, the software will email the Quality Assurance Inspector that the unit is ready for re-inspection.

"Poor" rated units must be scheduled for resolution by subgrantees within five working days. Issues impacting occupant health and safety must be resolved within 24-72 hours, depending on the seriousness of their nature. Subgrantee failure to adhere to this policy could result in the withholding of referrals, back-charges, stopping payment on current invoices and, in extreme cases, suspension or removal from the WAP. Please note the following:

- A unit will receive a poor QA inspection if materials reported as installed cannot be found;
- A unit will receive a poor QA inspection if measures were not installed to program standards;
- A unit may receive a poor QA inspection if major weatherization services or leveraging opportunities were missed (e.g., no attic insulation installed and could have been, no furnace work performed etc.) and the file does not indicate why the service was omitted.

A unit will receive a poor QA inspection if additional, uninstalled health and safety measures are still required.

**DOE**

In accordance with DOE WPN 11-3, as a general rule, subgrantees may not charge the WAP for additional work on homes that have already been reported to DOE as completed, weatherized units. Once a home is reported to DOE as complete, the required final inspection indicates that all applicable work performed was done so in a workmanlike manner, including all work that may have been contracted out such as furnace work, etc. Performing activities such as routine maintenance, repairs, or warranty-type work is not permitted using DOE funds for work beyond those costs already invoiced.

Subgrantees may use other funds that are not included as a part of their DOE WAP budget plans to pay for the costs associated with these activities. The only method to address “call-backs” where DOE funds must be used to pay for the additional work is to have these previously completed units taken out of the DOE reporting system and subtract the associated costs from the DOE funds category.

After making any necessary repairs, the subgrantee must re-inspect the unit and report the completion to DHCD. DHCD will then report the unit to DOE, including all final costs for the unit in the month the completed work takes place. In considering this option, it should be noted that this process is time-consuming and should be utilized only on a limited case-by-case basis.

Any proposed exception to this guidance must be provided by the subgrantee to DHCD. DHCD will submit it to DOE for approval.

Subgrantees that primarily use contractors are likely not to have this issue. The contracts for HVAC or other work using DOE funds must ensure that adequate guarantees of workmanship, implied or otherwise, are part of the bid process. These costs are generally built into the contract including the equipment, workmanship, and the length of time covered by any implied warranty required in the bid specifications.

Under no circumstances can any of the activities described above be covered under the reweatherization provisions of 10 CFR 440.18(e)(2)(iii) of the program regulations.

## 11. INVOICING AND PAYMENTS

The Hancock Energy Software is the Network Partner’s reporting and payment system. It is therefore incumbent upon the Network Partner to maintain the accuracy and integrity of the database.

Complete and accurate data for all weatherization buildings and dwelling units must be entered into the

Hancock database. Before a building or dwelling unit can be presented to DHCD for payment, the Network Partner must enter data that certifies that:

- The building or dwelling unit is eligible to receive assistance.
- The applicable budget period and funding source is correctly entered.
- All work performed on the building or dwelling unit has been completed.
- The amounts invested in each project are correct and reasonable.
- The estimated energy savings that will accrue from the work is correct and was calculated in accordance with program rules.
- A post inspection of the work has been conducted, if required.

### **11.1. INVOICING PROCESS**

Network Partners are required to submit invoices for completed jobs in Hancock on an ongoing basis. Holding jobs for batch processing is not permitted and causes delays in payments. Only one job can be included per invoice, and each funding source has to be billed on separate invoices. Jobs not invoiced through Hancock will not be paid.

Submitted invoices are pre-screened by Hancock for required documents and then reviewed by DHCD's invoicing team and inspectors. Once the invoice is submitted and the job file includes all required supporting documentation, DHCD staff will verify and review to ensure all [invoice requirements](#) have been met. Invoices that meet all [invoice requirements](#), are approved.

Invoices that don't meet all [invoice requirements](#) are released and the subgrantee is required to correct any issues before processing is completed. In some instances (when an invoice contains 3 or more jobs), a job may be released from the invoice (rather than the entire invoice being released) so that the remainder of the invoice may be paid. This process can be lengthy and time-consuming. If it is determined that the same jobs are repeatedly being released, for the same reasons, DHCD may release the entire invoice until the job has been correctly submitted. Prior to the re-submission of an invoice, check the "comments" section in the "client information" screen, as this section contains pertinent information on any job which has previously been released. The issues should be fully resolved prior to re-submission of the invoice.

When the invoice review process has been completed, the invoice is marked "approved" in Hancock. The status of "approved" only means that your invoice has met all program requirements and has been approved for payment processing.

The invoices are then submitted to DHCD Finance for budget coding and verification. Once that process is complete invoices are submitted to the Maryland Comptroller's Office to render payment. Up to date payment information can be obtained from the [Maryland Comptroller's website](#). The State of Maryland's processing time for invoices is 30 days and the Comptroller takes up to one week to issue payments. If you have not received payment within 60 days or have questions about the payment, use the "One Stop Vendor Payment Inquiry" to check the status of your payment. Once registered, only a Taxpayer

Identification Number (TIN) is required, then select "unpaid." If additional information is needed, please contact your designated DHCD Financial Officer with the invoice number, paid date, and full client name.

After an invoice has been paid, but modifications to the job's scope of work are necessary to ensure compliance, the invoice will be released. If the required modification changes the total invoice amount, and the payment has already been made, the network partner must issue a refund for the original payment before the job can be billed again.

Network Partners can use the "invoice list" in Hancock to track all open, submitted, and paid invoices. The following is a description of each stage on the invoice list:

- Open Invoices: In the process of being built.
- Submitted Invoices: Invoices that have been submitted for approval and passed an initial automated check for required documents and photos. Hancock tracks the date on which the invoice was submitted.
- Approved Invoices: Have been approved for payment by DHCD and processed for payment.

In addition to submitting and tracking invoices, Network Partners are able to generate reports detailing invoice and job production activity. The "Paid Invoice Report" details paid jobs that have been approved by DHCD and categorized by funding source. This report does not detail manually created invoices.

**DOE**

**Allowable Expenditures**

Allowable expenditures shall mean the total of all expenditures qualifying as allowable expenditures in accordance with the terms and conditions of the Federal rules, 10 CFR 440 and at 2 CFR 200 and with all other pertinent guidance from DOE and DHCD, including this manual. All expenditures must be properly documented as costs incurred on eligible dwelling units in the subgrantee's books and records. Expenditures must be consistent with the latest approved budget.

This section identifies allowable expenses and the fund or sub-fund for which they can be charged. The list includes general expenses and is not all-inclusive; other expenses that are not included may also be allowable. Subgrantees should contact DHCD with questions about allowable expenses.

Administrative Costs

Administrative costs shall mean those costs which a subgrantee incurs that are not in direct support of individual WAP projects, but are necessary for the organization to operate the WAP. Subgrantees shall define their administrative costs consistent with the generally accepted accounting practices and procedures within the organization and as allowed by 2 CFR 200.

Typical expenditures found in this category are:

- salaries, wages, benefits, and payroll taxes for the performance of WAP-related activities. Actual payroll costs are charged by fund category or sub-category according to the activity being completed.
- Electronics (computers, software, printers used for WAP admin functions)
- Office (WAP share of furnishings, copy machines, faxes, phones, postage meters)
- Office supplies, postage and printing
- Consultants and professional services
- Indirect costs, pursuant either to a federally-approved indirect cost rate, or election of a de minimis rate (see 2 CFR 200.414), but only up to the amount allowable in a Subgrantee's administration budget, regardless of the federally approved or de minimis rate.

### Program Operations

Program Operations (Program Ops) includes two sub-categories: Direct Service and Program Support (Program Ops B). Both implement non-admin activities to deliver WAP services and meet program goals.

Direct Service: Direct Service costs are always entered in DHCD's Energy Software. Direct Service expenses entered in the Energy Software must be accurate and align with supporting fiscal data.

Expenditures in this category are:

- Materials installed in eligible dwellings: energy conservation, health and safety, and incidental repair measures
- Payments made to contractors for activities in eligible dwellings

Program Ops B: Costs associated with delivering weatherization services to households that are not reportable in DHCD's Energy Software. These costs are submitted through financial reporting to DHCD as frequent as monthly but at least quarterly.

Program Ops B expenses are included in the unit average calculation.

Typical expenditures in this category are:

- Energy audit expenses (including those resulting in deferral);
- Final inspection costs;
- Customer outreach, intake and scheduling appointments for agency field staff and contractors;
- Printing of client forms and client education materials;
- In-house crew personnel and applicable travel expenses;
- The cost of any permits required for work to be performed at a specific dwelling;
- Operations costs when a vehicle is used for audits or inspections;

- Insurance costs when a vehicle is used for program support functions;
- Health and safety supplies for staff (masks, respirators, etc.);
- Blower doors;
- Personal CO monitors;
- Cameras for auditor/QCI photos

#### Health and Safety

Allowable expenditures include work scope measures which promote energy-related H&S or costs related to the elimination of H&S hazards which are necessary before or because of installation of weatherization materials.

The Health and Safety budget category is a separate category and is not included in the unit average calculation.

#### Training and Technical Assistance (T&TA)

Training & Technical Assistance (TTA) TTA activities are intended to maintain or increase the efficiency, quality and effectiveness of WAP at all levels. Allowable T&TA expenditures shall include expenditures made in accordance with the approved program income budget for the Program Year in the Energy Software database.

T&TA funds for contractors may not be used to pay for licenses or certifications required by state, federal or local law. Funds may only be used to pay for contractors to attend trainings at the request of the Subgrantee or DHCD for WAP related training. This budget is provided in your initial grant agreement and subsequent budget amendments.

#### Transportation Costs

Transportation allowances shall be reimbursed in accordance with the subgrantee's established written policy. The reimbursement rate will be based on the latest State of Maryland mileage rate.

#### Maintenance of Vehicles

Maintenance (including repairs) of weatherization vehicles shall be limited to \$2,000 per vehicle per annual budget period, unless prior written approval of a higher amount is granted by DHCD. Vehicles subject to excessive repairs should be replaced as early in the budget period as possible.

#### Liability Insurance

Allowable liability insurance expenditures shall be the documented and allowable portion of the total cost to acquire liability insurance in accordance with the limits set forth in the grant agreement.

#### Financial Audit

Allowable financial audit expenditures shall be the documented and allowable portion of the total cost of producing the audit. DOE allows the WAP share of a fiscal audit to be charged to Program Ops B.

### **Advance Payments**

Subgrantees are encouraged to participate in the Advance Payment if they would experience an undue hardship by not receiving an advance. Requests for advances must include written justification. Justification must be submitted to DHCD for review and approval. Additionally, the Subgrantee must complete the [DOE WAP Request for Advance Payment Form](#). If approved, the Subgrantee may request up to 50% of its weatherization allocation upon execution of the grant agreement.

*In accordance with 2 CFR 200.305 (b), “[The Subgrantee] must be paid in advance provided it maintains or demonstrates the willingness to maintain both written procedures that minimize the time elapsing between the transfer of funds and disbursement by the [the Subgrantee], and financial management systems that meet the standards for fund control and accountability as established in this Part”.*

In addition to the requirements stated above, Subgrantees must meet the following criteria to be eligible:

- 50% or more of the prior program year contract total must have been expended.
- Quarterly financial reporting must be submitted on time (30 days after the end of the quarter) and reconciled with DHCD invoices processed.
- Subgrantees must demonstrate at annual monitoring that a sampling of contractors or vendors are issued payment and that payment is utilized within 45 days of invoice.
- Subgrantees operating under a Quality Improvement Plan will not be permitted to receive advance payments during the grant period.
- Advance payments to a Subgrantee must be limited to amounts needed and timed to be in accordance with the actual, immediate cash requirements of the Subgrantee in carrying out the purpose of the approved program or project.
- The timing and amount of advance payments must be as close as is administratively feasible to actual disbursements by the Subgrantee for direct program or project costs and the proportionate share of any allowable indirect costs.
- The Subgrantee entity must make timely payments to contractors.

Failure to comply with the above criteria may result in a reimbursement-only method of payment.

Once the initial advance has been disbursed, DHCD will reconcile expenditures with the

Subgrantee monthly. Hancock approved invoices will be deducted from the advanced amount given.

Subgrantees must submit any new request for advance by the 1st of each month by completing the DOE WAP Request for Advance Payment form. Upon approval, DHCD will disburse the difference of the remaining advance balance and the new request not to exceed 50% of the full award. Subgrantees must disburse funds available from program income (including repayments to a revolving fund), rebates, refunds, contract settlements, audit recoveries, and interest earned on such funds before requesting additional cash payments.

Should the full advance be expended prior to the 25<sup>th</sup> of the month, Subgrantees may request a subsequent advance at that time.

In the event that no units are completed within the 30 day period, no additional advances will be granted. The Subgrantee will have an additional 30 days to draw down the existing advance and complete units. At that time, the advance must be returned to DHCD.

Unless otherwise stipulated by the grant agreement, a grant recipient that receives an advance payment must fully expense the advanced funds before close-out of the grant period.

**EmP**

An invoice must be submitted within 75 days of completing the energy audit and no later than two weeks of job completion (QC date).

After an invoice has been paid, but modifications to the job's scope of work are necessary to ensure compliance, the invoice will be released. If the required modification changes the total invoice amount, and the payment has already been made, the network partner must issue a refund for the original payment before the job can be billed again.

Network Partners submitting invoices for WGL clients who are not eligible for any electric funds should email the job number to [energyinvoicing.dhcd@maryland.gov](mailto:energyinvoicing.dhcd@maryland.gov). Network partners will not need to submit an invoice for the job as one will be manually created and reviewed by DHCD in order to accurately update the audit fee associated with WGL only jobs. Proper documentation in the Hancock record is required to account for the reason funding sources providing electric measures could be leveraged.

**MEAP**

An invoice must be submitted within 75 days of completing the assessment / audit and no later than two weeks of job completion (QC date).



### **11.1.1. THE INVOICE DESK REVIEW**

All jobs are reviewed by DHCD inspectors at the time of invoicing. Inspectors either approve or deny a job based on its meeting requirements. If a job is rejected and returned to the partner to revise/rework, the partner shall notify the inspector that the job is ready for re-review. After corrections have been made. If, in the event the re-submitted job is rejected by the inspector, the network partner shall reassign the audit/data entry to another auditor for completion and resubmission. DHCD inspectors will monitor and track rejected desk reviews; if the inspectors identify trends with a partner or specific agency, T&TA shall be initiated for modeling. If the trend continues, inspectors may recommend retraining of the partner/auditor.

Rejection of the same job 3 times by a QA inspector: Job will need to have another auditor either review for corrections or re audit/model the dwelling.

- Three (3) of these type jobs in a quarter, by auditor will result in a 2 week suspension from auditing/modeling for the program(s)
- Six (6) of these type jobs in a quarter, by auditor will result in a 4 week suspension from auditing/modeling for the program(s)
- Nine (9) types of these jobs in a quarter, by auditor will result in an 8 week suspension from auditing/modeling for the program(s) and the auditor will need to be retrained

Rejection of multiple jobs (less than 3 times per job)

- Three (3) desk review rejections in a quarter, by auditor will result in a 1 week suspension from auditing/modeling for the program(s)
- Six (6) desk review rejections in a quarter by the auditor will result in a 2 week suspension from auditing/modeling for the program(s).
- Nine (9) desk review rejections in a quarter by the auditor will result in a 4 week suspension from auditing/modeling for the program(s).
- Ten (10) or more desk review rejections in a quarter by an auditor will result in an 8 week suspension from auditing/modeling for the program(s). In addition to the suspension, the auditor will be mandated to report for EA training and modeling training.

### **11.1.2. INVOICE REQUIREMENTS**

DHCD reviews every invoice thoroughly before approving it. An invoice that does not meet all requirements will be rejected, must be modified, and then re-submitted. Network Partners should check that all job requirements are fulfilled before beginning work and submitting an invoice in order to reduce

delays due to corrections.

The job record must meet the following requirements:

- The [home is eligible](#) for the funding sources selected.
- All audit sections of the client's Hancock file must be filled out and completed for jobs that require full energy models.
- [Measures must be eligible](#) for the selected funding source and funding sources must be [leveraged correctly](#).
- [Measure pricing](#) is in accordance with program guidance and [job budget caps](#) are not exceeded.
- All [job level requirements](#) are met.
- Photos must be uploaded for all measure categories that are included in the selected measures.

Additionally, the following conditions must be met:

- Data in Hancock must be thorough and accurate. Comments describing conditions found and measures to be installed must be entered in the appropriate comment boxes in Hancock.
- All applicable measures are called out or addressed. Measures that are not considered shall be documented as to the reason why the measure will not be added to the model/work scope (i.e. a wall could not be dense packed due to budget constraints)
- Heating source will be verified and must be shown on the "Client Information" screen.
- All [required forms](#) must be uploaded in the Hancock Documents section.
- A complete Manual J load calculation when furnace, boilers, heat pumps, and/or central air conditioning systems are to be replaced.
- A copy of the ASHRAE calculation (RED calculator) for pre and post ventilation requirements. The Pre RED CALC shall be run using conditions of the home at time of audit and the target air reduction number(as defined by DHCD on 3/25/2020). The Pre shall show the need for added ventilation and the Post RED CALC shall support the installation of installed fans and/or timers.
- Full combustion testing is required on all fossil fuel (natural gas, propane, oil) combustion appliances. Appliances to be tested are space heaters, gas ranges and ovens, furnaces, gas water heaters, gas clothes dryers, wood or coal-burning stoves, and fireplaces. The minimum data that is to be included for each appliance is: stack temperature, draft, O<sub>2</sub>, CO<sub>2</sub>, combustion efficiency and CO levels. The results are to be detailed in the "Combustion Test" section of "Weatherization" in Hancock. If there is a reason that combustion testing cannot be done (B-vent appliances, sealed combustion appliances where the exhaust port is inaccessible, etc.), the reason for the lack of testing must be specified in the comments section of Hancock.
- SIR results will be checked on each job, if applicable.

Every job must have clear photos of the following: Photos shall be dated and time stamped.

- a. Exterior elevations of each exterior wall
- b. Attic and attic access
- c. Basement and/or crawl space
- d. Heating source – (furnace-boiler-heat pump-baseboard). Include pictures of nameplates and specification sheets.

- e. Cooling system(s) - central and/or window air conditioning system(s). Include pictures of nameplates and specification sheets.
- f. Duct system. Hot water tank or hot water system.
- g. Refrigerator(s). Include pictures of metering, nameplates and specification sheets.
- h. Descriptive pictures and appropriate comments of Health and Safety measures
- i. All miscellaneous or general repair measures
- j. Photos of manometer to support blower door test in and test out CFM.
- k. Any other pictures that will provide support for specified measures

Depending on the funding source, building type, measures installed, and age of residence, specific documents must be included. Review the table below to determine necessary documentation:

<b>Document Requirements</b>						
Document	Applicable Only If	EmPOWER	EmPOWER	DOE or	MEAP-C	MEAP-Wx
				DOE BIL		
Contractor/Vendor Final Invoice	LWA	x	x	x	x	x
Tenant Synopsis Form	Building Type = Renter-occupied ...	x	x	x	x	x
Signed Homeowner QC Form		x		x	x	x
Energy Use Release Form	Alternative income verification was used for multi-unit projects	x	x			
MES-verified energy		x	x			

consumption data						
Manual J Report (furnace replacements )	Selected Measures include HVAC replacement	x	x	x	x	x
LEAD Renovate Right (home built prior to 1979)	Home built prior to 1979	x	x	x	x	x
Homeowners hip Affidavit (or other allowable documentation)		x	x	x	x	x
Energy Assessment Agreement		x	x	x		x
Landlord Consent For Weatherization (= Building Owner Agreement)	Building Type = Renter-occupied ...	x	x If scope includes HVAC or landlord owned appliances	x	x	x
Weatherization Deferral Form	If home is deferred / If EmP is Base Efficiency job.		x	x		

Base Efficiency Job Completion Form			x			
Copy of Landlord Contribution Payment receipt	Selected Measures includes funding source "Homeowner Contribution"	x	x			
Citizens guide to radon				x		

## 12. MEET PROGRAM

The Maryland Energy Efficiency Tune-up (“MEET”) program is intended to extend the life of installed energy measures for participants and increase long term energy savings via ongoing client engagement and maintenance of installed equipment. The MEET Program’s Scope of Work includes two main areas of focus; 1) a behavioral component to affect sustainable change of residents, and 2) a system maintenance component to provide necessary repairs and prevent the deterioration of energy saving equipment through repeated upkeep.

This program is a follow-up to DHCD’s core energy efficiency programs and tracked through Hancock Energy Software.

### 12.1. ELIGIBILITY AND INTAKE

Customers with electric primary heating who completed a project in the Whole Home Efficiency, Base Efficiency, or MEEHA program, are offered to enroll into MEET one year after their initial project. MEET clients can participate every three years. .

The Network Partner shall actively promote the program to any potentially eligible individual encountered through any of the Network Partner’s regular business activities. A MEET application must be provided to each client after completion of its weatherization projects. The application packet must include a brochure on the goals and process of the program and a client application form.

Network Partners shall identify MEET eligible clients by filtering the list of completed Whole Home and Base Efficiency jobs in their Hancock account for dates completed more than one year ago and who have electric as their primary heating source. DHCD will also identify these clients and provide MEET applications to them every three months and send the lead lists to the Network Partners. All individuals on such lead lists must be contacted within 14 days and followed up with until appointments can be scheduled.

The Network Partner shall screen program applications and verify that applicants meet all of the following eligibility requirements:

- Applicant has received EmPOWER LIEEP, Base Efficiency, or Whole Home Efficiency services more than one year ago.
- Applicant has not received MEET services within the prior three years.
- Applicant’s primary heating system is electric.

## 12.2. SERVICE DELIVERY

MEET clients can participate once every three years

For each service, a new job should be created within the existing Hancock client file.

### 12.2.1. HOME VISIT

Site visits are estimated to take from 1-2 hours. Each site visit must be performed by a trained individual (equivalent to BPI Building Analyst) to engage in personalized communication with each client to determine the current status of energy saving efforts and measures, discuss problematic energy consumption patterns, and identify the need for repair of energy saving equipment. The service provider shall:

- 
- Make recommendations to the client when opportunities for behavioral savings are identified while assessing the home.
- Analyze the 12 most recent months of energy consumption data. Compare consumption to pre-weatherization data. Identify any unusual patterns and recommend solutions.
- Physically examine the condition of energy-related components of the home to evaluate whether energy equipment has been changed or tampered with, or whether maintenance, such as the replacement of air filters, has been neglected. Identify whether opportunities for additional energy saving measures exist, similar to those provided on the MEET program measure list. A check shall be performed on all existing energy systems to assess, at a minimum:
  - Condition of refrigerator coils
  - Refrigerator temperature set points
  - Water heater tank condition
  - Hot water temperature set point
  - Thermostat settings
  - Condition of air filters
  - Condition of heating and cooling systems
  - Burnt-out light bulbs or use of inefficient bulbs
  - Building envelope - new penetrations
- Install or perform direct install measures as needed and allowed by program measure list. Measures must be performed or installed, not be left behind.
- If at the time of home visit the network partner identifies that one or more systems in the home are not electric (including hot water heating and/or HVAC) the partner may continue the site visit, but can only provide measures that provide electric savings.
- Educate the clients on how to perform no-cost maintenance tasks themselves.

- Recommend any follow-up measures provided by other parties, such as Clean and tune of HVAC system.
- Provide additional resources, such as information on additional programs or available assistance.
- Record all findings, recommendations, and installed measures on the Completion Form.

### 12.2.2.

#### MEET ELIGIBLE MEASURES

The following measures can be installed during a MEET service appointment:

Measure	If existing	Max Qty.
LED light bulbs	Incandescent bulb or fluorescent tube	15
LED night light	Incandescent night light, or where resident reports light is left on at night	2
Smart Strips	None existent	2
Low flow faucet aerator	>= 2 GPM	4
Low flow showerhead	>= 2.5 GPM	2
Thermostatic shutoff valve	None existing	2
Shower timer	None existing	2
Seal minor air leaks	Small, visible cracks that can be sealed with caulk or can of spray foam	20 minutes of time
Clean refrigerator coils	Dust is observed	1
Adjust fridge / freezer temperatures	Setting is lower than 40 degrees (fridge) / 0 degrees (freezer)	2
Hot water pipe wrap	Uninsulated hot water pipes in unconditioned space	20 lf
Water tank wrap	Tank in unconditioned space and older than 15 years	1
Adjust water heater temperature	Setting is higher than 120 degrees	1



Change thermostat settings	Settings are >70 degrees for heating / <76 for cooling	n/a
Duct sealing	Gaps on duct connections are present	20 minutes of time
Clean and Tune	System is dirty, has H&S issues, or hasn't had a check-up in 3 years	1
Miscellaneous HVAC repairs	Issues found at clean and tune	4 man hours
Replace air filter	Existing filter is dusty	1 (includes 2 filters)
Miscellaneous repairs to previously installed measures		1

Technical specifications of installed equipment must follow the requirements described in the price list

### 12.3. DOCUMENTATION AND INVOICING

The following items are required to complete the

- a. Complete and provide all required documentation to DHCD, including, but not limited to: MEET Application, Utility Consent Form, and Visit Checklist.
  - b. Current electric utility usage must be uploaded into the client's Hancock file.
  - c. The Network Partner shall document all project progress in Hancock Energy Solutions System. Each site visit has to be recorded as a new job. Any activity performed related to a job must be logged in Hancock within one week of the activity occurring.
  - d. Submit a proper invoice through the Hancock software for review and payment within two weeks of completing the site visit. A proper invoice includes all required project documentation and accurately reflects the work completed. Invoices must be submitted within one week of job completion.
2. DHCD will inspect a minimum of 10% of completed units for quality assurance.

## SECTION C - AGENCY ADMINISTRATION

### 13. TRAINING AND TECHNICAL ASSISTANCE

DHCD provides training and technical assistance (T&TA) to support Energy Program operations such as analysis, measurement, and documentation of program performance, skill development, and local monitoring, to improve program effectiveness.

To ensure consistent delivery of high-quality weatherization services, core competencies for the various staff positions that implement the programs including the types of training required for these job categories is described below. Increasing competency levels and workforce expertise helps assure that every home weatherized receives appropriate, properly installed cost-effective measures.

DHCD assists its Network Partners to provide the highest quality of services by offering ongoing education, technical assistance, and targeted Job Task specific training courses. All courses will be provided via the state's procured IREC certified training organization. The use of another provider may be allowable in the event DHCD's training organization is booked, or there is a wait list and recertification is necessary on a short timeline.

**DOE**

LWAs are encouraged to budget a portion of each allocation of funds for T&TA to develop a qualified workforce capable of providing the highest quality weatherization services.

#### 13.1. STAFF CERTIFICATIONS

Network Partner staff involved in performing weatherization services are required to obtain and maintain certain industry training and / or certifications. This section outlines the current certification requirements. Each network partner must submit a detailed report identifying the employee's current job description and certification levels achieved at the time of contract execution. The list must be updated annually and when new hires are made. New employees must obtain certifications within 60 days of hire. Each Network Partner must work with the Training entity (the Trainer) DHCD has procured to identify needed class type(s) for each employee.

### 13.1.1. REQUIRED STAFF QUALIFICATIONS AND CERTIFICATIONS

The specific qualifications and certifications required depend on the role an employee has in the weatherization process:

Training or Certification	Installer	Crew Lead	Energy Auditor	QC Inspector
Asbestos Awareness Training (DOE only)	x	x		
OSHA 10-hour Construction Safety course	x	x	x	x
EPA Lead Repair Renovation and Painting Certification	x	x	x	x
BPI HEP Retrofit Installer Technician (RIT) training or equivalent skills	x	x		
BPI HEP Crew Leader (CL) training or equivalent skills		x		
BPI HEP Energy Auditor (EA) certification			x	
BPI HEP Quality Control Inspector (QCI) certification			(x) prerequisite for QCI certification	x

#### **Asbestos Awareness Training**

This training requirement is for crew members completing work in DOE programs only. Proof of meeting this requirement is provided via a certificate of completion issued by OSHA. The certificate of completion is required annually.

#### **OSHA 10-hour Construction Safety Course**

Proof of meeting this requirement is provided via a student course completion card issued by OSHA. The student course completion card does not expire and only has to be provided once. However, it is recommended to retake the course every 3-5 years.

#### **EPA Lead Repair Renovation and Painting Certification**

Proof of meeting this requirement is provided via a certification issued by EPA. The certification expires 5 years after certification date and the employee will have to recertify.

#### **BPI HEP Retrofit Installer Technician (RIT) training or equivalent skills**

Proof of meeting this requirement is provided via a certificate of completion of the BPI HEP RIT training class OR documentation proving equivalent skills, knowledge, and abilities of the employee. Such equivalent skills must be in accordance with [NREL Job Task Analysis for the RIT](#) and documented through

resumes, client and employer references, and other relevant trainings completed. This requirement does not have to be renewed as long as the retrofit installer continues to perform work in the position.

#### **BPI HEP Crew Leader (CL) training or equivalent skills**

Proof of meeting this requirement is provided via a certificate of completion of the BPI HEP CL training class OR documentation proving equivalent skills, knowledge, and abilities of the employee. Such equivalent skills must be in accordance with [NREL Job Task Analysis for the CL](#) and documented through resumes, client and employer references, and other relevant training completed. This requirement does not have to be renewed as long as the crew leader continues to perform work in the position.

#### **BPI HEP Energy Auditor (EA) Certification**

Proof of meeting this requirement is provided via the BPI HEP EA certification. Obtaining the certification requires training and passing the EA test. The certification expires after 3 years and the employee will have to recertify.

#### **BPI HEP Quality Control Inspector (QCI) Certification**

Proof of meeting this requirement is provided via the BPI HEP QCI certification. Obtaining the certification requires training, an active energy auditor certification, and passing the QCI test. The certification expires after 3 years and the employee will have to recertify.

Regular Comprehensive Training will be required every three years for the position-based Home Energy Professional job categories listed above.

### **13.1.2. PROCESS FOR SUBMITTING STAFF CERTIFICATIONS**

Staff certifications have to be submitted to DHCD in either of the following events:

- A new employee is added to the Network Partner's field staff
- An existing employee acquires a new certification or renews an expiring certification

When a new employee is added to the staff, the required certifications are collected and reviewed through the [Hancock user account process](#). An existing employee must email a copy of the update certification to [dhcd.lieep@maryland.gov](mailto:dhcd.lieep@maryland.gov).

DHCD tracks the expiration dates of contractor certifications and may revoke user access when a required certification expires. The network partner is responsible for keeping track of expiration dates and renewing required certifications before they expire.

## **13.2. DHCD TRAINING COURSES**

DHCD offers program wide training classes on an as-needed basis. Trainings may cover:

- Program guidelines that need refreshing for more than one network partner

- An introduction to new program guidelines
- Comprehensive program operations for new network partners
- Topics such as:
  - Using Hancock
  - Energy modeling
  - Program & Financial Management
  - Leveraging
  - Mobile home auditing and retrofits
  - Energy education
  - Client interaction
  - Etc.

Some training courses may be deemed mandatory, in which case DHCD will require attendance of at least one staff member (relevant to the training) per network partner and will offer reimbursement if the training is not provided by DHCD or its training organization.

### **13.3. TECHNICAL ASSISTANCE**

If a Quality Assurance Inspector finds a pattern of missing or poor quality of work in the sampling of desk reviews and job inspections, certain staff of that Network Partner will receive training & technical assistance. Agencies may also request T&TA assistance from DHCD staff.

The goal of training and technical assistance sessions is to maintain and/or increase the efficiency, quality and effectiveness of weatherization assistance at all levels, and to reduce the risk for waste, fraud, and/or mismanagement in jobs. Topics include the review of the following guidelines:

- Hancock reporting
- Change orders
- Documentation requirements
- Ways to maximize energy savings in audits, minimize production costs, and improve project management.
- Ways to improve crew/contractor work quality

Network partners may request T&TA in events such as:

- A new employee was brought on board and needs specific training on program requirements. Specifically, new energy auditors and QC inspectors entering the programs shall be accompanied to their first five audits by a QA inspector.

### 13.3.1. PERFORMANCE EXPECTATIONS

Adequate performance is defined as the network partner and its staff meeting the expectations set forth in the grant agreement / contract, and the documents incorporated within, such as price lists, requirements of the RFA / RFP, as applicable. In addition, the services performed on site must meet all requirements defined in the sections Energy Audit, Work Scope, Service Delivery, and QCI of this POM as well as work specifications referenced within those sections.

DHCD takes note when the performance expectations are missed and will initiate T&TA support when repeating patterns of poor quality of work are identified.

### 13.3.2. TECHNICAL ASSISTANCE PROCESS

If an inspector identifies the need for T&TA, the following steps are taken:

- Inspector discusses the concerns with the program manager.
- Inspector documents the concerns in an email to the Network Partner's main contact, including:
  - Specific examples.
  - Define which employees should be included in the training.
  - Define the topics to be covered in the T&TA session.
  - Schedule a training session for an appropriate time and place.

If the network partner identifies the need for T&TA, the following steps must be taken:

- Contact one of the State Inspectors by email, copying the DHCD program manager, and describing:
  - Which employee requires T&TA
  - Define the topics to be covered in the T&TA session.
  - Request a training session by suggesting an appropriate time and place.

T&TA is provided in a format that is most beneficial to resolving the specific performance concerns. It should be performed by using actual projects the agency is working on, but may be supplemented with the review of theoretical cases. The following training formats may be appropriate depending on the issue on hand:

- Resolve data management or documentation issues at the network partner's offices.
- Meet with agency staff during inspections or while the crew is working on site to address technical workmanship.
- It can also be beneficial for both auditor and crew to attend QA Inspections to provide immediate-on-site T&TA with corrective action.

The T&TA must follow existing written guidance. If a network partner receives training that is contrary to

existing guidance, the DHCD program manager should be consulted.

At the conclusion of the training session the inspector should assess whether the concerns were resolved fully or whether additional training or increased monitoring is needed. In most cases increased monitoring through desk reviews and QA inspections is appropriate to ensure full resolution of performance issues. Increased monitoring is mandatory for a period of at least 60 days if the initial concerns were health and safety related. The network partner's main contact and DHCD's program manager must be notified in writing what the result and follow-up actions from the T&TA are.

The inspector who provided the T&TA will monitor the network partner's performance for improvements and notify both the program manager and network partner when the issues are deemed remedied.

#### **13.4. TRAINING AND TECHNICAL ASSISTANCE REIMBURSEMENT PROCESS**

Training and Technical Assistance (T&TA) funds are primarily used to train State and local weatherization staff on program operations, management, and technical topics. T&TA funds are intended to maintain or increase the efficiency, quality, and effectiveness of the energy efficiency programs. Such activities should be designed to maximize energy savings, minimize production costs, improve the quality of work, and foster management expertise while reducing the potential for waste, fraud, abuse, and mismanagement.

Some of HBEP's energy efficiency programs offer reimbursement for training and technical assistance expenses. Funds may be used on activities such as participation, travel, and lodging to attend training activities and events directly related to program services. Such activities include certification trainings and tests, and other mandatory training sessions. Travel beyond 60 miles from the student's home may be eligible for reimbursement for overnight lodging with prior agency approval.

Reimbursement requests are only for expenses incurred within a program cycle for classes developed, paid for, and administered by DHCD's contracted Training and Technical Assistance Provider or other events DHCD may establish from time to time. Training from other sources will not be reimbursed by the department unless a specific request is approved by DHCD prior to attendance of an alternate training. All requests must specifically outline why the outside service is required. Prepayment for expenses to be incurred, particularly in a following cycle, is prohibited. Requests for reimbursement after the performance period will not be reimbursed. Training funds are available for only those that work directly for the Department's energy efficiency program, or as a subcontractor for an LWA contracted with the Department where specific training is required and funds are available. LWA's may allow or require subcontractors to attend T&TA events but must secure a retention agreement in exchange for the training if the subcontractor does not have a direct contract with DHCD for energy programs. The retention agreement must require that contractors will work in the program for a specified amount of time and must align with the cost of T&TA provided.

Network Partners who have access to T&TA funds from multiple funding sources must request reimbursement from the funding source the training activity is most directly linked to. If applicable, the

cost can be allocated at an appropriate ratio between multiple funding sources.

**DOE** Subgrantees are required to have qualified weatherization staff (and contractors, as may be applicable) fully trained in the performance of individual functions.

Subgrantees must ensure that weatherization staff and contractors maintain required levels of training and certifications. Subgrantees must evaluate their weatherization workforce to determine the types of training needed. Each subgrantees' policy should be written to encourage its staff and that of its contractors to attend training to strengthen worker competencies and skills.

The State allocates funding directly to the subgrantees for local staff, and sometimes contractor personnel, to attend program-related training.

Subgrantees may charge the cost of training to the T&TA category and the employee's time for participation in the training to the labor category (Program Operations).

Costs associated with training contractors that work within the WAP may also be charged to T&TA. To facilitate contractor training, subgrantees are allowed to pay a per-diem for contractor personnel to attend training when it is designated as mandatory and has prior State approval. Fully executed retention agreements must be on file prior to approval.

**Travel**

Travel directly related to the weatherization of dwelling units may be charged to the Program Operations B category in Hancock. Other travel, (for example, to attend training), is to be budgeted and charged to either the T&TA or administrative categories.

Out-of-state travel for subgrantee personnel, when charged to DOE, requires prior approval by the DHCD.

Travel costs for Policy Advisory Council (PAC) members to attend PAC meetings will be reimbursed in accordance with State travel procedures.

**EmP** DHCD sets an EmPOWER T&TA budget for each network partner at the beginning of each year. Reimbursement is prioritized for mandatory training events and certifications, reimbursement for non-mandatory conferences and other voluntary activities is limited and may be approved on a case-by-case basis.

T&TA reimbursements are paid against each network partner's purchase order with the State of Maryland. There must be sufficient funds available on your purchase order to cover the expected costs. Amounts requested that are not available on the purchase order will not be reimbursed.

The T&TA budget is subject to change at the discretion of the program manager. Network



partners will be notified of availability of funds at the time when pre-approval is requested.

**MEAP** T&TA reimbursement is not available.

### 13.4.1. PRE-APPROVAL FOR T&TA EXPENSES

Training activities must be pre-approved in writing by the program manager of the funding source to provide reimbursement prior to reserving or incurring any cost associated with the T&TA activity.

Pre-approval requests must be submitted at least one week prior to the start of the T&TA activity by using [this online form](#). Pre-approval requires submitting documentation describing the activity, cost, participants, etc. When seeking pre-approval for T&TA activities, the following information must be provided:

- T&TA Reimbursement Request Form including:
  - Name/location of training
  - Training entity (individual trainer, training center, conference, etc.), if individual trainer, include trainers Résumé
  - Date(s) of training
  - Attendees and their roles
- Training agenda
- Quote or proposal for registration, class(es), trainer, etc. on training organizations letterhead, website, etc. If travel is required:
  - Quote for airfare
  - Estimated cost for ground transportation (parking, shuttle, taxi, tolls, etc.)
  - Mileage reimbursement:  
<https://www.courts.state.md.us/sites/default/files/import/administration/pdfs/01032022memo.pdf>
  - Quote for overnight accommodations
  - Requests for mileage, lodging and/or per diem will be reimbursed at the current rate paid by the State and in accordance with State Travel Policies and Procedures as specified in the travel regulations that can be found online at <http://www.dbm.maryland.gov/Pages/TravelManagementServices.aspx> . Rates change periodically for mileage and hotel as federal rates change. Check the State website for updated rates.

### 13.4.2. REIMBURSEMENT REQUEST FOR COMPLETED T&TA ACTIVITY

The Network Partner must submit a reimbursement request to the same program manager that granted

pre-approval. Reimbursement documentation includes all the documentation [indicated above for pre-approval](#) in its final version, such as itemized receipts of actual services rendered, and costs incurred. Additionally, include the following:

- Copy of certificate of completion, OR
- Copy of certification achieved

State funds will not reimburse for alcoholic beverages nor tips on meals. Items that are not required for the T&TA activity will not be reimbursed.

Request the reimbursement using the [T&TA reimbursement request form](#).

**DOE** Reimbursement requests for all indirect costs must be submitted at least quarterly but can be submitted as frequently as monthly.

**EmP** Reimbursement requests must be submitted within two weeks of completing the training activity.

### 13.4.3. REIMBURSEMENT REQUEST FOR DOE WAP ADMINISTRATION & PROGRAM OPS B ACTIVITY

Financial reporting is completed outside of the HES database. Financial documentation for indirect cost reimbursement are required to be submitted at least quarterly but can be submitted as frequently as monthly. These quarterly statements are due on the 30th day following the end of each quarter:

- Quarter 1 July-September: due date October 30th
- Quarter 2 October-December: due date January 30th
- Quarter 3 January-March: due date April 30th
- Quarter 4 April-June: due date July 30th

Requests for reimbursement of indirect costs must be submitted using [this online form](#). In the event that there are no expenditures for the quarter, the online form must still be completed. The DOE Compliance Officer reviews grant utilization to ensure funding is utilized in all awarded budget categories and that the back-up documentation provided with invoices is appropriate to the reimbursement request made.

Allowable costs are the direct and indirect expenses that support the weatherization program and can be properly invoiced. Examples of Allowable Costs and Non-Allowable costs in the DOE Weatherization Assistance Program are listed [here](#).

LWAs must submit requests for Indirect costs reimbursement in the following format:

- DOE Admin/Program Ops B Reimbursement Request Form including:
  - Indirect budget category for reimbursement

- Admin and/or Program Ops B reimbursement total
- Total Reimbursement Requested
- Description of budget outlay
- Each budget outlay total
- Invoice Summary Sheet
  - Description and totals for reimbursement by budget category (Ops B, T&TA, Admin)
- Monthly Income Statement and/or General Ledger
- Supporting documentation by budget category that is equal to or greater than the totals being requested for reimbursement.

The outline below are examples of supporting documentation criteria used to review and approve Indirect cost reimbursement requests:

LWA Staff Salaries (Admin or Program Ops B)

- Contract/rate of employee's pay
- Timesheets and time allocation charts identifying DOE hours employee worked on DOE project
- Total hours worked on DOE projects

Audits/QCI (Admin or Program Ops B)

- Documentation showing time spent at the location where audit was performed
- Contract/Rate indicating hourly pay
- Paid receipts from vendor – tolls, parking etc.
- Mileage report to indicate to and from miles per appropriate government rate

Other Indirect Costs (Admin or Program Ops B)

- Invoices that indicate the amount being charged to DOE WAP
- Receipts/Copies of disbursements

Upon the Compliance Officer's review and approval of the requests for reimbursement of Indirect costs, amounts approved for payment may be different than the amounts requested. Should the Compliance Officer disallow costs for reasons such as lack of sufficient support documentation, the LWA will be notified in writing.

## 14. DOE PROCUREMENT

This section outlines federal and state procurement requirements and provides guidelines and examples to aid in understanding the process. The established policy for competitive procurement and how it is implemented in Maryland are also covered in this section. The objective of the procurement process is to obtain needed services, goods, and materials at the lowest possible price, in a fair and open manner, without compromising quality or production.

## 14.1. PROCUREMENT PROCEDURES

All subgrantees must establish written procurement procedures that implement the requirements of this section and all applicable federal and state requirements, and result in procurement transactions that provide, to the maximum extent practical, open and free competition.

Procurement of professional services must also follow specific procedures. Professional services include those services rendered by persons who possess specialized skills and are not officers or employees of the organization. These services include, but are not limited to, consulting for accounting, auditing, computer, legal, and the procurement of energy audit services. Appropriate documentation must be maintained for review by a DHCD representative.

In the event that DHCD determines that a subgrantee's procurement procedures are not in compliance with this section, the subgrantee may be required to implement additional, specific procedures deemed reasonable and necessary for compliance. WAP reimbursements may also be disallowed.

### Subcontractor Agreements

Subgrantees that use subcontractors to complete work on eligible dwelling units must follow the procurement procedures outlined in this section and must execute an agreement with each subcontractor for the specific work to be completed. Subgrantees are responsible for ensuring that the provisions of the Subcontractor Agreement are enforced. Subgrantees may not enter into side agreements with subcontractors for work on a project where WAP funds are invested.

### Contractual Bidding Requirements

Subgrantees and any subcontracting agencies must check the Excluded Parties Listing (EPLS) for their subawards in the [System for Awards Management \(SAM\)](#). The EPLS includes information regarding entities debarred, suspended, proposed for debarment, excluded, or disqualified under the on-procurement common rule, or otherwise declared ineligible from receiving federal contracts, certain subcontracts, and certain federal assistance and benefits

### Statewide Bid Process

DHCD has selected for-profit State Weatherization Contractors (SWC) through a Request For Proposal (RFP) via the State of Maryland procurement process to administer the EmPOWER LIEEP. SWCs were selected based on experience, capacity, capability, and pricing.

As the result of an open, fair, and competitive bid process, subgrantees may utilize DHCD's SWCs to perform weatherization services under the DOE WAP. The statewide bid process provides the subgrantee with a bid process that satisfies the competitive bid process requirements, and the technical analysis is considered complete for vendors awarded from the statewide bid process.

To the extent that the subgrantee wishes to separately contract with DHCD's SWC contractors, that is the determination of the subgrantee, considering DOE approval and procurement regulations and policies that apply to that individual subgrantee. The Subgrantee should consult with its own legal counsel

regarding compliance with the subgrantee's own procurement regulations and policies.

To the extent that subgrantees contract separately with an SWC contractor, DHCD will not be a party to that agreement.

#### Conflicts of Interest

No employee, officer, or agent of the subgrantee shall participate in the selection, the award, or the administration of a contract if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in the firm selected for the award. The subgrantee's officers, employees, or agents will not accept gratuities, loans, favors, or anything of monetary value from contractors, potential contractors, or parties to sub-agreements.

#### Written Procurement Procedures

All procurement transactions must be conducted in a manner providing full and open competition. There must be written selection procedures. The solicitation must also include a clear and accurate description of the service or material being procured.

Subgrantees must have written procurement procedures as part of their operations manual that include:

- Procedures that avoid the purchase of unnecessary duplicative items.
- Analysis of lease and purchase alternatives.
- Preferences for products and services that conserve natural resources and protect the environment.
- Purchase of federal/state excess and surplus property.
- Procedures to ensure that awards are only to responsible contractors (see Debarred Contractors below).
- Records that detail the significant history of procurement.
- Written protest procedures, including a designated protest committee made up of staff not involved in procurement/purchasing.

Subgrantees are encouraged to enter into State and local intergovernmental agreements for purchasing common goods and services. There must be a cost price analysis in connection with every procurement. Subgrantees must make proposed procurement technical specifications available to DHCD upon request.

The federal regulations require a number of provisions that must be included in all contracts awarded with DOE WAP funds. Appendix II of 2 CFR part 200 lists all the required provisions.

#### Methods of Procurement

- Micro purchase procedures for items which do not exceed the micro purchase threshold of \$3,000 in the aggregate.
- Small purchase procedures for services and goods that do not exceed the Simplified Acquisition threshold of \$150,000 in the aggregate.

- Seal bids (formal advertising)
- Competitive proposals
- Non-competitive proposals (sole source) may only be used when the item is available from one source, emergency situations, the awarding agency authorizes, or competition is determined inadequate. Pre-award review by DHCD staff is generally required.

### **Micro/Small Purchase**

When procuring micro or small purchases where the formal competitive procurement process is not practical or appropriate, the following guidelines apply:

- Micro-purchase (equal to or less than \$3,000)
  - Aggregate dollar amount per purchase <\$3,000
  - Distribute equitable among qualified suppliers
  - May be awarded without competitive quotes.
  - Purchaser is required to use good judgment for all procurement of \$3,000 or less. No procurement documentation is required.
- Small purchase (up to \$150,000)
  - Relatively simple and informal
  - Competition is required from an adequate number of qualified sources. A minimum of three price quotations, verbal or written, must be obtained. Documentation includes, but is not limited to, a listing of sources contacted, date contacted, amount quoted, and who contacted the sources.

These procurement procedures for small purchases are for use only when the formal procurement process is not required and cannot be used in place of the formal procurement process.

When a Request for Proposals (RFP) is used, the minimum acceptable documentation must include:

- A copy of the RFP that was issued.
- A statement of how firms to be solicited were identified.
- A list of firms solicited.
- A copy of any newspaper advertisements used.
- Each proposal that was received.
- The written criteria for evaluation of the proposals.
- Documentation of evaluation of the proposals.

### **Sealed Bid Proposals (more than \$150,000)**

This method of procurement should begin early in the procurement cycle to allow vendors time to prepare their bids to meet the specifications of the solicitation. Solicitation information

should include:

- What is being purchased
- Terms and conditions the vendors must meet.
- Where and when sealed bids will be opened.

Awards are made to the lowest priced responsible vendor:

- Capable of compliance with all bid specifications.
- Capability of performing the work.
- Has administrative capacity.

Award becomes a firm, fixed price contract. Vendor's payments are either lump sum - paid for successful performance or unit price - paid for each deliverable unit completed in the contract. There must be a minimum of two responsive suppliers competing for a contract.

### **Competitive Proposals** (more than \$150,000)

There are three types of competitive proposals to include Request for Proposal (RFP), Request for Qualifications (RFQ), and Request for Information (RFI). Competitive proposal procurements require the following components:

- Publicized method same as sealed competitive process (invitation for bids).
- All evaluation factors publicized and their importance
- All vendor submittals received and evaluated.
- Proposals must be solicited from a number of qualified sources.
- Subgrantees must have a method for conducting technical evaluation of all proposals and for selecting awardees.

Awards must be made to the most responsive firm whose proposal is most advantageous to the program. Price and other factors must be considered to determine the most advantageous offer. There must be a minimum of two responsive suppliers competing for the contract.

### **Non-Competitive Procurements** (special circumstances which are applicable to all purchase levels)

Non-competitive procurement occurs when bids are solicited from only one source or, after solicitation from a number of sources, only one bid is received, or competition is otherwise determined to be inadequate.

Subgrantees must devise and document its own analysis process to ensure fair prices are being charged. Non competitive contracts become negotiated contracts. Subgrantees must determine what level of organization leadership is required to approve this method.

Procurement by non-competitive proposals may be used only when the award of a contract is not feasible following small purchase procedures, sealed bids, or competitive proposals and one

of the following circumstances applies:

- The items or services required are only available from a single source.
- An emergency exists such that the urgency will not permit a delay beyond the time needed to employ one of the other authorized procurement methods.

In all cases, non-competitive negotiation which will involve WAP funds must have prior approval from DHCD.

A cost analysis must be provided which verifies:

- Proposed cost data
- Projection of the data
- Evaluation of costs and profits to support the reasonableness of the proposed award.

Award of bids following a non-competitive procurement may only be used with prior approval from DHCD.

## **14.2. VEHICLE PURCHASE**

All subgrantee vehicle purchases are subject to competitive bidding and require prior approval by DHCD and DOE regardless of whether they were purchased with federal funds or with Program Income. Failure to follow these procedures may result in disallowances of these costs.

Subgrantees, including Community Action Agencies, other public or non-profit entities, and tribal organizations shall follow the “Property Standards” section found in 2 CFR 200.310-316. Any potential discrepancies between guidance contained in this document and 2 CFR 200 shall be resolved in favor of 2 CFR 200.

Requests for vehicle purchase must be submitted to the DHCD Program Manager and must include:

- A copy of the procurement request (a description of what is to be purchased) identifying the Subgrantee.
- A statement of where the vehicle(s) and/or equipment will be used and how it will be used – specify full or part-time use in WAP.
- Identification of funding source(s) and budget category that will be used for purchase (e.g., DOE Weatherization - Program Operations funds) and a statement of whether the vehicle(s) is a replacement or for ramping-up for program expansion. If this is a replacement, address the trade-in value in your explanation. Please indicate the amount of any non-DOE WAP cost sharing, especially if part-time usage is proposed.
  - Note that T&TA funds shall not be used to purchase vehicles or equipment for Subgrantees to perform weatherization services. The cost of these vehicles or equipment to support the Program must be charged to the Program Operations categories.



- Provide a brief description of the procurement approach:
  - The procurement request must include affirmation that the Subgrantee followed their respective procurement procedures/requirements, and state and federal procurement guidelines in 2 CFR 200.317-326 – ensuring Financial Assistance Rules were met.
- If applicable, copies of the bid specification (vehicle/equipment description with required features) and a bid analysis indicating at a minimum, each bidder, their bid price, and a determination whether each proposal met the bid specification.
- The analysis of lease versus purchase alternative, if applicable, such as when the grant is limited in duration.
- Statement that the lowest responsive bid was selected or provide a sufficient justification of the “best value selection” if lowest bid is not recommended for DOE approval.
- Documentation or analysis that the proposed purchase request avoids purchase of unnecessary or duplicative items.

Note: All vehicle specifications must be generic enough to encourage competitive participation. They cannot be manufacturer or brand name specific nor can they include options or combinations of options available from only one manufacturer or dealer. In keeping with the WAP mission of conserving energy, subgrantees are strongly encouraged to purchase alternative-fueled vehicles.

Procurement requests can be expedited when Subgrantees include an option to use the State’s pre-negotiated vehicle procurement agreements in their respective policies/procedures.

#### Leasing

DHCD does not need to approve a vehicle lease that does not include a "purchase option." However, if a lease-purchase option is proposed regardless of purchase price, DOE needs to approve the purchase of the vehicle. Subgrantees may not pre-pay leases that exceed the end of the award project period.

#### Vehicle Replacement

Vehicles are essential for transporting staff and materials or conducting energy audits and inspections. A safe, reliable vehicle is a necessity; however, as a result of maintaining a fleet, each subgrantee is eventually faced with repair or replacement decisions. There comes a point when the cost to repair may be prohibitive and replacement is warranted.

It is recommended that each subgrantee project the useable life of each vehicle in their fleet and establish a replacement rotation so as not to burden any one budget period, especially with an unusually large number of vehicles to replace. For example, if the subgrantee determines a six-year life for each vehicle in a fleet of three vehicles, it may purchase one vehicle every two budget periods. Also, the cost of the vehicle may be charged over two budget periods.

Vehicle purchases must occur during the first six months of a budget period, and subgrantees must take possession of the vehicle as soon as practicable. Present the justification for approval as early in the

annual budget period as possible. Delivery and possession of the vehicle after the middle of the annual budget period may result in disallowed costs without approval for a budget extension or approval to roll funds forward to the next budget period.

### **14.3. EQUIPMENT PURCHASE**

Equipment is defined as tangible personal property having a useful life of more than one year and a per-unit acquisition cost of \$5,000 or more. DHCD and DOE approval are required for all equipment purchases.

Authorization for equipment purchases qualifies those items for reimbursement pursuant to the WAP agreement. Both vehicle and capital equipment costs are amortized over the number of dwelling units completed during the contract period.

For example, the cost of a blower door (\$4,500) could be amortized over the 150 homes completed during a budget period, resulting in a \$30 increase in the ACPU for the homes completed in that time frame.

When reviewing a capital equipment request, DHCD will consider the necessity of the equipment, the ability of the subgrantee's personnel to use the equipment properly, and the reasonableness of the request.

Those capital equipment purchase requests submitted during the last two months of the annual budget period utilizing unexpended program funds will be reviewed in accordance with the above criteria and with the following additional criteria:

- Unexpended balances cannot be due to underinvestment in weatherization services in units assisted during the budget period.
- Expected costs for the equipment purchase must be absorbed within contract, cost-per-unit constraints.
- Written prior approval from DHCD must be on file and all relevant procurement met.

#### Recordkeeping

Procedures for managing equipment, whether acquired in whole or in part under federal award, until disposition takes place must meet these minimum requirements per 2 CFR 200.313(d):

- Vehicle and equipment records must be maintained that include a description of the vehicle/equipment, a serial number or other identification number, the source of funding for the vehicle/equipment (including the Federal Award Identification Number (FAIN)), who holds title, the acquisition date, and cost of the vehicle/equipment, percentage of federal participation in the project costs for the federal award under which the vehicle/equipment was acquired, the location, use and condition of the vehicle/equipment, and any ultimate disposition data including the date of disposal and sale price of the vehicle/equipment.

- A physical inventory of the vehicle/equipment must be taken, and the results reconciled with the vehicle/equipment records at least once every two years.
- A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the vehicle/equipment. Any loss, damage, or theft must be investigated.
- Adequate maintenance procedures must be developed to keep the vehicle/equipment in good condition.
- If the non-federal entity is authorized or required to sell the vehicle/equipment, proper sales procedures must be established to ensure the highest possible return.

#### Disposition of vehicles and equipment

When a subgrantee no longer wants to retain vehicles or equipment purchased with federal funds or Program Income, the subgrantee must first determine and document the fair market value of the vehicle/equipment. When the fair market value of an individual unit of property falls below \$5000, the federal government's interest in the property is extinguished and the subgrantee may do what it wants with the vehicle or equipment, without the need for federal approval. A piece of equipment is considered to be an individual unit if it has individual utility or can be sold as an individual unit.

If the fair market value of the vehicle/equipment acquired with federal funds or Program Income is \$5000 or greater, the subgrantee may use the vehicle/equipment on another federally-sponsored program without requesting disposition approval. Prior approval from DHCD and DOE is required if the subgrantee wants to dispose of the vehicle/equipment rather than transfer it to another program. DOE will determine the amount, if any, that the subgrantee must compensate the federal government.

Subgrantees must document their determination of fair market value. Acceptable sources for this determination include established re-sale guides, price quotes from used vehicle/equipment dealers, and written trade-in offers. Refer to WPN 24-6 Attachment 1 - [Vehicle/Equipment Disposal Tree](#) for additional information on disposition.

## **14.4. SUPPLIES**

Supply expenses include tangible personal property other than those that meet the definition of equipment. When purchasing or disposing of supplies (including office equipment and computers) with a value of \$1,000 or more per item, the subgrantee must maintain a Supply/Inventory List, adding new items and disposition dates of items no longer in use as they occur.

Theft of WAP-purchased tools and equipment along with any accidents with WAP-purchased vehicles must be reported to the proper authorities. A copy of the applicable report must be given to the DHCD Compliance Officer along with all necessary insurance information.

## 14.5. FINANCIAL MANAGEMENT SYSTEM

Subgrantees must have the capacity to financially manage all grant funds. This includes the ability to fully track the receipt and disbursement of all grant funds, and the ability to implement and maintain standard, accurate, financial management practices that can consistently safeguard weatherization funds and meet the definition of Generally Accepted Accounting Practices (GAAP).

In accordance with federal regulations, a Financial Management System must provide for:

- Identification, in its accounts, of all federal awards received and expended and the federal programs under which they were received.
- Accurate, current, and complete disclosure of financial results of each federal award or program.
- Records that identify the source and application of funds.
- Effective control and accountability for all funds, property, and other assets.
- Comparison of expenditures with budget amounts
- Written procedures to implement the payment requirements
- Written procedures for determining the allowability of costs in accordance with the cost principles.

Each of the criteria listed above must be incorporated into the Subgrantee's financial manual.

### Internal Controls

Subgrantees must:

- A. Establish and maintain a system of internal control that provides for reasonable assurance that the entity is managing the award in compliance with federal statutes, regulations and the terms and conditions of the award.
  - Internal controls should comply with the Committee of Sponsoring Organizations of the Treadway Commission (COSO)
- B. Comply with federal statutes, regulations and terms and conditions of the award
- C. Evaluate and monitor compliance
- D. Take prompt action for noncompliance
- E. Take reasonable measures to safeguard PPII

## 14.6. CLOSE OUT

### Financial Reporting

Unaudited financial statements and audit reports must be submitted to DHCD in accordance with the

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grant agreement between DHCD and the subgrantee. The unaudited financial statements and audit reports will be used as the basis for the contract closeout.

#### Audit Reports

Financial audit reports shall be submitted within thirty calendar days following the completion of the financial audit, but no later than nine months after the end of the fiscal year being audited. Subgrantees must immediately notify DHCD of the acceptance of the annual financial audit by the Federal Audit Clearinghouse.

#### Preliminary Closeout

Upon receipt of the unaudited financial statements for a budget period, DHCD shall review the statements and all relevant records in accordance with all terms and conditions of this manual. DHCD will review and may disallow expenditures claimed for administration for any budget period, to the extent such expenditures represent a higher percentage of allowable expenditures than that represented by the last approved budget amount.

Based upon this review:

- DHCD shall make a preliminary determination as to additional payments due or monies owed DHCD as a result of unexpended cash receipts, disallowed costs, adjustments for units completed, and materials inventory.
- The subgrantee shall be notified in writing as to the result of this review and the preliminary determination.
- If as a result of such review there is an additional amount payable, DHCD will initiate payments concurrent with the issuance of the written notice.
- If monies are owed to DHCD, this amount may be set off by deducting any monies owed to DHCD from any payments due pursuant to other budget periods or any other agreements between the subgrantee and DHCD; or DHCD may issue a written request asking for the return of monies owed to DHCD.
- In the event that no current agreement is in effect between the subgrantee and DHCD, the monies will be due and payable to DHCD upon receipt of a written request by DHCD for return of the monies owed DHCD.

Failure of the subgrantee to submit the unaudited financial statements for any budget period, in accordance with the terms of the grant agreement, will result in a determination of allowable costs based upon the most current information and records on file with DHCD.

## 15. DOE AGENCY MONITORING

### 15.1. PROGRAM OVERSIGHT AND MONITORING

#### 15.1.1. COMPREHENSIVE ANNUAL SUBGRANTEE EVALUATIONS

As required by DOE, an annual evaluation of each subgrantee is conducted at least once within a 12 month period. This evaluation consists of two areas: program/fiscal and technical. The combined results of the evaluation may affect future funding of subgrantees. Each subgrantee is rated in the following areas:

- Program management
- Outreach
- Building assessment
- Operations
- Quality assurance
- Reporting and recordkeeping
- Production
- Leveraging
- Financial stability
- Procurement
- Regulatory compliance

For findings of non-compliance or other areas where DHCD finds that subgrantee performance should improve, subgrantees are required to submit a corrective action plan. DHCD may take additional actions, including recommendations for T&TA, to address deficiencies noted in the annual evaluation. Subgrantee annual evaluations are also used to identify areas of program deficiencies requiring T&TA across the entire state.

Subgrantee annual evaluations include a summary of subgrantee reviews conducted during the course of the program year. Any material deficiencies of a program and/or fiscal nature will be handled immediately when possible, with an appropriate course of action. Any non-material findings will be handled through the work plan.

Through the monitoring process, DHCD strives to maintain the highest levels of performance that has the following goals:

- To ensure proper and timely use of funds and realization of expected benefits
- To provide transparency and accountability
- To provide quality control

- To provide technical assistance and training

DHCD is required to conduct comprehensive monitoring of each Subgrantee at least once within a 12 month period, provide a written report to the Subgrantee and maintain a file related to monitoring which is accessible by DOE during its monitoring visits.

DHCD's monitoring visits are completed over a 3-day timeframe. For Subgrantees considered to be at higher risk of non-compliance, the frequency of on-site visits may be increased. The comprehensive monitoring must include the following areas (for additional details please reference WPN 16-4):

- Programmatic and Management Monitoring
- Financial Monitoring
- Subgrantee Monitoring

### **15.1.2. TECHNICAL FIELD REVIEW**

The technical field visit is an integral part of monitoring the WAP, along with desk reviews and other T&TA visits that DHCD staff perform. Technical field visits to subgrantees are conducted by DHCD Quality Assurance Inspectors to ensure compliance with applicable rules and quality of completed work. Visits include both file reviews, usually done at the Subgrantee's office, and on-site inspection of assisted buildings.

The technical field visit objectives include the following:

- Verify the program is properly managed and adequately staffed.
- Verify outreach to potential applicants is conducted in all areas of the subgrantee service territory, and that owner-occupied and renter-occupied buildings are both given the opportunity to apply for assistance.
- Verify applicants are being selected in accordance with subgrantee written policy and with federal and state rules.
- Verify the energy audits are performed correctly, the recommended work scopes correspond to audit findings and the opportunity to save energy is maximized.
- Verify the subgrantee is correctly identifying H&S issues and taking proper actions to correct them, that the subgrantee defers work on buildings with serious health or safety issues and applicants and owners are properly notified of H&S concerns.
- Verify measures and materials specified in the work scope were installed and that proper documentation is on file to support all work performed.
- Verify work is being performed in a high-quality manner in accordance with Standard Work Specifications, local codes, and all other federal and state requirements.
- Verify all dwelling units are QC inspected before submission to DHCD for payment, and that the subgrantee has evidence that all work was done as claimed.
- Identification of any problem areas requiring additional T&TA.

Inspection of a sample of completed and/or in-process dwelling units:

- Inspection of exterior

- Inspection of interior
- Inspection of any repairs performed, to verify that they were incidental, and designed to protect or supplement WAP measures.
- Interview a member of the assisted household, to ask about their experience with the work and whether they have noticed any changes in comfort or energy costs.
- Provision of technical assistance in one or more of the following areas:
  - Energy auditing, building analysis, inspections, and work scope development
  - Technical issues, such as heating system work
  - Compliance with federal and state program rules
  - Health and Safety practices
  - Contract and production management
  - Reporting
- Assessment of leveraging efforts, including inspection of work completed with leveraged funds to assure quality control.

At each program field visit, the Subgrantee must have its calibrated blower-door set, H&S equipment (i.e. calibrated combustion analyzer, gas leak detector), cordless drill and ladder and a staff person knowledgeable about audits available.

### 15.1.3. PROGRAM/FISCAL FIELD REVIEW

DHCD’s fiscal field representative conducts on-site visits to each Subgrantee, during which they review the Subgrantee’s books, records, and relevant source documents to ensure compliance with federal and state guidelines and with generally accepted accounting principles, and to verify costs claimed on cumulative financial reports submitted by the Subgrantee. These reviews are conducted on expenditures of WAP funds, owner contributions and Program Income. The Subgrantee must make all of its books and records readily available for review by the DHCD fiscal field representative. Records of leveraged funds may also be reviewed when Subgrantees use WAP resources in conjunction with these funds.

DHCD fiscal field representatives also sometimes provide T&TA, with a view toward improving subgrantee fiscal responsibility and accountability and contributing to the ongoing review of a Subgrantee’s internal control procedure.

Written reports are issued to Subgrantees within 30 days of the monitoring visit. The reports include the following categories; finding, concern, recommendation, commendation and best practice.

<b>Finding</b>	A Finding can be a non-compliance with federal regulation or guidance, or a repeated or previously identified non-addressed correction or concern. Examples include misuse of funds, inadequate inventory control, inaccurate income eligibility determination, illegal procurement or insufficient insurance.
<b>Concern</b>	Concern is either a violation of guidance that is not a regulation, minor correction for the future or problems that may jeopardize the program.



	Examples include file omissions, failing to follow the state plan, policies and procedures or improper training of staff.
<b>Recommendation</b>	Recommendations are suggestions to assist with compliance, improve merits of the program or identification of opportunities for training and technical assistance (T&TA) or guidance. Improvement/Commendation is used if corrections have been made since the last monitoring visit.
<b>Best Practice</b>	Best Practice is used to compliment good work and potentially share with other network partners.

If there are findings, the relevant federal regulation, weatherization program notice (WPN) guidance or the grantee’s guidance document is cited. The Subgrantee then has 30 days to provide a written Corrective Action Plan (CAP) to DHCD. Corrective actions may also be requested for any concerns identified.

A corrective action plan is a step-by-step plan of action developed to resolve an identified deficiency. A deficiency is considered a lapse or omission in the handling of grant funds or in the management of grant projects.

DHCD assigns corrective action plans to subgrantees to ensure a thorough plan is in place to correct identified deficiencies and make sure the deficiency or deficiencies do not happen again. A corrective plan, abbreviated and referenced as a CAP, is an action plan for resolving an identified monitoring finding or concern. A CAP can be required during or as a result of any of the following:

- An onsite monitoring visit conducted, usually, by the DHCD monitor/inspector
- Regular desktop report monitoring by the DHCD monitor/inspector
- your project officer.
- Examples of reports are the quarterly performance reports, the quarterly financial reports, and application documents.
- Ad hoc monitoring. Miscellaneous notifications or observations that may occur.
- Receiving client complaints indicating a serious issue.

Examples of what type of program deficiency would trigger a Corrective Action Plan:

- onsite monitoring deficiencies such as poor workmanship; repeated findings; Standardized Work Specifications (SWS) noncompliance; inadequate or missing diagnostic testing; numerous client and consumer complaints; improper eligibility; out-of-date or missing policies and procedures; inconsistent communications to subcontractors; absent contractor or worker certification tracking; and failure to implement ASHRAE 62.2.
- quarterly desktop monitoring such as slow spending; too much cash on hand; low production – which will cause money being returned to DOE; failure to submit quarterly reports; late reporting; failure to resolve open and in-process action items; noncompliance with any relevant federal regulation.

A corrective action plan is part of the subgrantee required action for the monitoring deficiency. The notification for the corrective action plan will arrive by a monitoring report with an identified action item or details, and/or an e-mail with the specific action items detailed.

### **Developing an effective and comprehensive Corrective Action Plan**

1. Identify the underlying cause of the issue or problem.
  - a. What is happening? What should happen? For example, if your program receives a deficiency notice of low production, your task is to determine: why is production low?
  - b. Is it one subcontractor with low production, or are there several? Is there a shortage of weatherization workers, or is production low due to a slow auditing or inspection process? Or does your program lack the necessary number of quality control inspectors? It's helpful to take a broad look from all perspectives to identify the one true cause that may not only affect production, but may affect other aspects of your program, and should be included in your solution.
2. Identify who is responsible for leading the development and implementation of the CAP. It's critical to identify the person who will lead the effort to develop and implement the corrective action plan. A team lead will help make sure the key personnel are involved who can address the various areas of work, such as the financial area, the technical area, or the management and programmatic areas. Also, it provides the weatherization manager a point of contact from whom to receive progress reports on the development of the CAP, or from whom to ask questions or share concerns.
3. Once the underlying cause and the corrective action team is identified, then the next element is to create simple, measurable solutions to address the root cause of the discrepancy.
  - a. The plan shall provide the step-by-step details of the process to follow to correct the deficiencies and avoid repeating them in the future. Identify the specific regulatory or programmatic requirement that is out of compliance. Include the staff person who will lead the effort, along with the necessary key persons who will participate in developing the solution.
4. Set achievable deadlines. The step-by-step solution to the deficiency may be simple or complex. In either case, it's crucial to identify a timeframe to implement the corrective action. If the CAP is addressing a complex issue and will require a long duration to fix, it is important to identify milestones and the target dates to achieve them. Then, as you work through the steps, provide updates to the program manager when the milestones are reached.
5. Provide progress updates. As mentioned before, regular progress updates will assist the effort to complete your CAP. Active communication with DHCD is a resource.
6. Identify a long-term monitoring procedure. Fixing the issue was important, but even more important is to make sure that over time your solutions are still working properly and that the identified deficiency does not reoccur. Depending on the severity of the deficiency, you may

want to consider reviewing on a more frequent basis – either monthly or quarterly.

7. Provide documentation to demonstrate that the identified milestones of your CAP are being met, or to document that the identified solutions have been implemented. This can be done by providing updated manuals, photographic evidence, e-mail communications, training schedules, certifications, or other materials.
8. Submission process. This is the final step. Subgrantees have 30 days from the date of receiving a CAP request to submit a plan. If the deadline is approaching and additional time is needed to complete your CAP, please contact DHCD immediately. The CAP and supporting documentation shall be submitted to DHCD via e-mail.

If the CAP is approved, you will receive a notification by e-mail. If the CAP is not approved, you will be notified of the specific elements that are missing or need clarification, refinement, or expansion of details.

Remember to please make sure you discuss your questions or concerns with DHCD staff if something is not clear. If the corrective action plan improvement is going to take a significant amount of time, you can set up monthly calls with DHCD staff to provide updates.

### **Corrective Action Plan Example**

Issue: The weatherization policies and procedures manual was not updated to reflect the standardized work specification requirements.

Cause: This was due to staff turnover and not having another staff person familiar with the manual to make the needed edits.

Solution: Train all subgrantee staff on the policies and procedures manual, and the program rules that govern it. Reinforce the important facets of the manual and why it is required to be updated regularly per the weatherization regulations.

Assign multiple staff to a weatherization technical guides team. Their job is to develop/maintain all weatherization written technical guides. Assign a team lead responsible to develop a planning and review schedule to update these guides per WAP requirements.

The team will develop a distribution process to the subgrantee network once the guides are finalized and approved. The distribution will include:

- an email to all subgrantee program managers, crew leaders, and contractors with an overview email about the final changes and what impact these changes will have on weatherization work or processes.
- a conference call will be scheduled with the subgrantee network to review the changes and hold a Q&A. All questions and answers will be recorded and distributed to the network after the call. The Q&A will also be posted on the subgrantee website for future reference. Be sure to identify any additional staff that will be responsible for developing specific solutions or implanting a

portion of the corrective actions.

Follow steps 4-8 listed above.

For Subgrantees with findings, additional monitoring visits may be scheduled. DHCD maintains a tracking form listing the dates that each LWA was last monitored and whether or not there were any findings, concerns, recommendations, commendations or best practices. It also identifies whether or not the status of the review remains open or has been closed. Files are maintained for all monitoring visits and are available for review by DOE.

## 16. APPENDIX

### 16.1. DOE PRIORITY LISTS

#### 16.1.1. DOE SINGLE FAMILY SITE-BUILT PRIORITY LIST

Single Family Site-Built Priority List				
Measure category	Measure designation	Description	Other	Relevant SWS
H&S	Mandatory	Install all applicable Health and Safety (H&S) measures per the DOE approved H&S Plan		
Baseload Lighting	Mandatory	Light Emitting Diode (LED) lighting replacement of all existing screw-based incandescent, halogen or compact fluorescent (CFL) lighting when used for a minimum of 1 hour per day.		<a href="#">SWS 7.0103.1</a>
Air sealing	Mandatory	Seal the exterior pressure boundary surfaces at all locations including but not limited to: attic top plates, ceiling/wall/floor bypasses, penetrations and holes; sillbox to floor intersection if on an unconditioned crawlspace or basement, or the entire sill box if conditioned foundation.	Target value is determined in accordance with the Technical Policy and Procedures Manual	<a href="#">SWS 3.01</a>
Duct sealing	Mandatory	Seal all accessible ducts located outside the thermal boundary.	Target value is 1pa per register as measured with a pressure pan	<a href="#">SWS 5.0106</a>
Duct Insulation	Mandatory	Insulate all accessible uninsulated ducts located outside the thermal boundary to R8 or R12 (if exposed to the exterior)		<a href="#">SWS 5.0107.1</a>
Attic Insulation		Unconditioned attics		
	Mandatory	Insulate all accessible attics to R49 or to capacity, if less		<a href="#">SWS 4.0103</a>
	Mandatory	Insulate all uninsulated enclosed attics to capacity (e.g. floored or cathedral)		<a href="#">SWS 4.0103</a>
		Finished attics		

	Mandatory	Insulate all attic flats (collar beam & outer ceiling joists) to R49 or to capacity if less		<a href="#">SWS 4.0103</a>
	Mandatory	Insulate all uninsulated attic enclosed roof rafter slopes to maximum capacity		<a href="#">SWS 4.0102.3</a>
	Mandatory	Insulate all uninsulated knee walls to R15 or to capacity, whichever is greater		<a href="#">SWS 4.0104</a>
Wall insulation	Mandatory	Insulate any exterior wall cavity with no existing insulation to full dense packed capacity (3.5 lbs/cu ft)		<a href="#">SWS 4.0202.1</a>
	Optional	Insulate any partially insulated exterior wall cavities (e.g. 3.5" cavity with 2" of existing batt) using dense pack insulation		<a href="#">SWS 4.0202.1</a>
Floor Insulation	Mandatory	Insulate all uninsulated floors over unconditioned foundations to R30, or to full joist capacity, if less. Must include a complete ground moisture barrier over and exposed dirt floors.		<a href="#">SWS 4.03</a> and <a href="#">2.0202</a>
General Heat Waste (up to \$250 per home DOE WAP funds)	Optional	Faucet aerators (<2.2 GPM)		<a href="#">SWS 7.0201.1</a>
		Showerhead (<2.5 GPM) -		<a href="#">SWS 7.0201.1</a>
		Domestic Water Heater (DWH) tank insulation (R-10 minimum)		<a href="#">SWS 7.0301.2</a>
		DWH pipe insulation (6' of both hot and cold-water lines nearest the DWH, and any accessible hot water lines beyond that to R-3)		<a href="#">SWS 7.0301.1</a>
Baseload Appliances	Optional	: Replace up to (1) refrigerator per home, with a label rating of less than 400kWh/yr and maximum installed cost of \$850 per unit when the existing refrigerator	Was manufactured before 2001, OR Uses >1000 kWh/yr based upon energy use metering or industry accepted resource	<a href="#">SWS 7.0101.1</a>
Heating and cooling	Optional	Primary Heating and Air-Conditioning System Replacements		
		Replace existing ducted electric resistance forced air furnace and air conditioning combination with a heat pump of minimum 15/SEER & 8.2/HSPF which must include an EC air handler motor		<a href="#">SWS 5.0108</a>

		Replace existing combination of non-ducted fixed electric resistance heat (e.g., electric baseboard, and PTAC units), and non-ducted air conditioning (i.e., window or room A/C, including PTAC) with a minimum 19/SEER & 10/HSPF mini-split heat pump system		<a href="#">SWS 5.0108</a>
		Replace existing window A/C manufactured before 2014 with a minimum 12 CEER or higher unit of the same or lesser BTU capacity		<a href="#">SWS 5.0108</a>
		If the home has any other existing combination of heating/cooling systems other than as described above, then an energy model may be run that assumes items 1-8 have been completed and determine if an alternative heating/cooling system replacement is cost effective for this specific home.		

### 16.1.2. DOE MOBILE AND MANUFACTURED HOMES PRIORITY LIST

Manufactured Home Priority List				
Measure category	Measure designation	Description	Other	Relevant SWS
H&S	Mandatory	Install all applicable Health and Safety (H&S) measures per the DOE approved H&S Plan		
Baseload Lighting	Mandatory	Light Emitting Diode (LED) lighting replacement of all existing screw-based incandescent, halogen or compact fluorescent (CFL) lighting when used for a minimum of 1 hour per day.		<a href="#">SWS 7.0103.1</a>
Air sealing	Mandatory	Seal the exterior pressure boundary surfaces at all locations including but not limited to: attic top plates, ceiling/wall/floor bypasses, penetrations and holes; sillbox to floor intersection if on an unconditioned crawlspace or basement, or the entire sill box if conditioned foundation.	Target value is determined in accordance with the Technical Policy and Procedures Manual	<a href="#">SWS 3.01</a>
Duct sealing	Mandatory	– seal all accessible ducts. At a minimum, seal all end caps, crossovers, duct boot connections, holes or penetrations, and furnace connections	Target value is 1pa per register as measured with a pressure pan	<a href="#">SWS 5.0106</a>
Attic Insulation	Mandatory	Ceiling insulation (both flat and vaulted ceilings) – fill ceiling to capacity with blown insulation		<a href="#">SWS 4.0103</a>

Windows	Mandatory	Replace all single-paned metal-framed windows with Low-E double-pane windows having a Uvalue of 0.33 or less.	Single pane windows with storm windows are not eligible for replacement using DOE funds	<a href="#">SWS 3.0201.9</a>
Floor Insulation	Mandatory	Insulate all uninsulated floors over unconditioned foundations to R30, or to full joist capacity, if less. Must include a complete ground moisture barrier over and exposed dirt floors.		<a href="#">SWS 4.03</a> and <a href="#">2.0202</a>
General Heat Waste (up to \$250 per home DOE WAP funds)	Optional	Faucet aerators (<2.2 GPM)		<a href="#">SWS 7.0201.1</a>
		Showerhead (<2.5 GPM) -		<a href="#">SWS 7.0201.1</a>
		Domestic Water Heater (DWH) tank insulation (R-10 minimum)		<a href="#">SWS 7.0301.2</a>
		DWH pipe insulation (6' of both hot and cold-water lines nearest the DWH, and any accessible hot water lines beyond that to R-3)		<a href="#">SWS 7.0301.1</a>
Baseload Appliances	Optional	Replace up to (1) refrigerator per home, with a label rating of less than 400kWh/yr and maximum installed cost of \$850 per unit when the existing refrigerator	Was manufactured before 2001, OR Uses >1000 kWh/yr based upon energy use metering or industry accepted resource	<a href="#">SWS 7.0101.1</a>
Heating and cooling	Optional	Primary Heating and Air-Conditioning System Replacements		
		Replace existing window A/C manufactured before 2014 with a minimum 12 CEER or higher unit of the same or lesser BTU capacity		<a href="#">SWS 5.0108</a>
		If the home has any other existing combination of heating/cooling systems other than as described above, then an energy model may be run that assumes items 1-6 have been completed and determine if an alternative heating/cooling system replacement is cost effective for this specific home.		



### 16.1.3. DOE LOW-RISE MULTIFAMILY PRIORITY LIST

Low-Rise MF Priority List				
Measure category	Measure designation	Description	Other	Relevant SWS
H&S	Mandatory	Install all applicable Health and Safety (H&S) measures per the DOE approved H&S Plan		
Baseload Lighting	Mandatory	Light Emitting Diode (LED) lighting replacement of all existing screw-based incandescent, halogen or compact fluorescent (CFL) lighting when used for a minimum of 1 hour per day.		<a href="#">SWS 7.0103.1</a>
Air sealing	Mandatory	Seal the exterior pressure boundary surfaces at all locations including but not limited to: attic top plates, ceiling/wall/floor bypasses, penetrations and holes; sillbox to floor intersection if on an unconditioned crawlspace or basement, or the entire sill box if conditioned foundation.	Target value is determined in accordance with the Technical Policy and Procedures Manual	<a href="#">SWS 3.01</a>
Duct sealing	Mandatory	Seal all accessible ducts located outside the thermal boundary.	Target value is 1pa per register as measured with a pressure pan	<a href="#">SWS 5.0106</a>
Duct Insulation	Mandatory	Insulate all accessible uninsulated ducts located outside the thermal boundary to R8 or R12 (if exposed to the exterior)		<a href="#">SWS 5.0107.1</a>
Attic Insulation	Mandatory	Insulate all accessible attics to R49 or to capacity, if less		<a href="#">SWS 4.0103</a>
Wall insulation	Mandatory	where the total gross area of any uninsulated exterior wall is >10%, insulate the missing areas to capacity with dense pack insulation		<a href="#">SWS 4.0202.1</a>
Floor Insulation	Mandatory	Insulate all uninsulated floors over unconditioned foundations to R30, or to full joist capacity, if less. Must include a complete ground moisture barrier over and exposed dirt floors.		<a href="#">SWS 4.03</a> and <a href="#">2.0202</a>
General Heat Waste (up to \$250 per home DOE WAP funds)	Optional	Faucet aerators (<2.2 GPM)		<a href="#">SWS 7.0201.1</a>

		Showerhead (<2.5 GPM) -		<a href="#">SWS 7.0201.1</a>
		Domestic Water Heater (DWH) tank insulation (R-10 minimum)		<a href="#">SWS 7.0301.2</a>
		DWH pipe insulation (6' of both hot and cold-water lines nearest the DWH, and any accessible hot water lines beyond that to R-3)		<a href="#">SWS 7.0301.1</a>
Baseload Appliances	Optional	: Replace up to (1) refrigerator per home, with a label rating of less than 400kWh/yr and maximum installed cost of \$850 per unit when the existing refrigerator	Was manufactured before 2001, OR Uses >1000 kWh/yr based upon energy use metering or industry accepted resource	<a href="#">SWS 7.0101.1</a>
Baseload Lighting	Optional	LED lighting replacement of fluorescent tube lighting		<a href="#">SWS 7.0103.1</a>
Heating and cooling	Optional	Primary Heating and Air-Conditioning System Replacements		
		Replace existing ducted electric resistance forced air furnace and air conditioning combination with a heat pump of minimum 15/SEER & 8.2/HSPF which must include an EC air handler motor		<a href="#">SWS 5.0108</a>
		Replace existing combination of non-ducted fixed electric resistance heat (e.g., electric baseboard, and PTAC units), and non-ducted air conditioning (i.e., window or room A/C, including PTAC) with a minimum 19/SEER & 10/HSPF mini-split heat pump system		<a href="#">SWS 5.0108</a>
		Replace existing ducted heat pump system that is manufactured before 2006 with a minimum 15/SEER & 9/HSPF heat pump which must include an EC air handler motor		<a href="#">SWS 5.0108</a>
		Replace existing window A/C manufactured before 2014 with a minimum 12 CEER or higher unit of the same or lesser BTU capacity		<a href="#">SWS 5.0108</a>
		If the home has any other existing combination of heating/cooling systems other than as described above, then an energy model may be run that assumes items 1-8 have been completed and determine if an alternative heating/cooling system replacement is cost effective for this		

		specific building.		
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## 16.2. EMPOWER WHOLE HOME EFFICIENCY PRIORITY LIST

### 16.2.1. SINGLE-FAMILY SITE-BUILT

See measure tables in [this section](#) for detailed specifications of each measure.

Priority	Required	Measure
1	Mandatory	Health & Safety, per <a href="#">H&amp;S Section</a> , as required for the energy measures to proceed.
		Clean & Tune – Natural Gas Heating System
		Clean & Tune AC / Heat Pump
		Temperature adjustments for fridge, water heater, and thermostat
2	Mandatory	LEDs
3	Mandatory	Air Sealing
		Window Replacement
	Optional	Recovery Ventilator
4	Mandatory	Duct Sealing
5	Mandatory	Duct Insulation
6	Mandatory	Attic / Ceiling Insulation
7	Mandatory	Wall Insulation
8	Mandatory	Floor Insulation
		Rim Joist Insulation
		Boiler / Steam Pipe Insulation
9	Optional	Smart Thermostat
		Water Measures: Faucet aerators, showerhead, DHW tank insulation, DHW pipe insulation, thermostatic shutoff valve
10	Optional	Refrigerator
		Chest/Upright Freezer
		Occupancy Sensor
		Advanced Power Strip
		Dehumidifier
		Ceiling Fan with or without lighting
		Electric / Heat Pump Water Heater
		Gas (or Tankless) Water Heater
11	Optional	Electric HVAC replacements: Heat pump, Mini-Split Heat Pump, Window AC units.
		Central AC
		Gas Furnace Replacement

Priority	Required	Measure
		Boiler Replacement
Not Eligible	Must use energy model	Any other heating systems, Dishwasher, Clothes Washer, Clothes Dryer

### 16.2.2. MANUFACTURED HOMES

See measure tables in [this section](#) for detailed specifications of each measure.

Priority	Required	Measure
1	Mandatory	Health & Safety, per <a href="#">H&amp;S Section</a> , as required for the energy measures to proceed.
		Clean & Tune – Natural Gas Heating System
		Clean & Tune AC / Heat Pump
		Temperature adjustments for fridge, water heater, and thermostat
2	Mandatory	LEDs
3	Mandatory	Air Sealing
		Mobile Home Window Replacement
		Mobile Home Replacement Door
	Optional	Recovery Ventilator
4	Mandatory	Duct Sealing
5	Mandatory	Ceiling Insulation
		Floor Insulation
6	Mandatory	Windows
		Boiler / Steam Pipe Insulation
		Optional
7	Optional	Water Measures: Faucet aerators, showerhead, DHW tank insulation, DHW pipe insulation, thermostatic shutoff valve
		Thermostatic Shut Off Valve
8	Optional	Refrigerator
		Chest/Upright Freezer
		Occupancy Sensor
		Advanced Power Strip
		Dehumidifier
		Ceiling Fan with or without lighting
		Electric / Heat Pump Water Heater
		Gas (or Tankless) Water Heater
9	Optional	Primary HVAC Replacements

Priority	Required	Measure
		Heat Pump
		Central AC
		Gas Furnace Replacement
		Boiler Replacement
Not Eligible	Must use energy model	Any other heating systems, Dishwasher, Clothes Washer, Clothes Dryer

### 16.2.3. LOW-RISE MULTI-FAMILY

See measure tables in [this section](#) for detailed specifications of each measure.

Priority	Measure	Existing Conditions
1	Mandatory	Health & Safety, per <a href="#">H&amp;S Section</a> , as required for the energy measures to proceed.
		Clean & Tune – Natural Gas Heating System
		Clean & Tune AC / Heat Pump
		Temperature adjustments for fridge, water heater, and thermostat
2	Mandatory	LEDs
3	Mandatory	Air Sealing
		Window Replacement
	Optional	Recovery Ventilator
4	Mandatory	Duct Sealing
5	Mandatory	Duct Insulation
6	Mandatory	Ceiling Insulation
7	Mandatory	Wall Insulation
8	Mandatory	Floor Insulation
		Boiler / Steam Pipe Insulation
	Optional	Smart Thermostat
9	Optional	Water Measures: Faucet aerators, showerhead, DHW tank insulation, DHW pipe insulation, thermostatic shutoff valve
		Thermostatic Shutoff Valve
10	Optional	Refrigerator
		Chest/Upright Freezer
		Occupancy Sensor
		Advanced Power Strip
		Dehumidifier
		Ceiling Fan with or without lighting
		Electric / Heat Pump Water Heater
Gas (or Tankless) Water Heater		

Priority	Measure	Existing Conditions
11	Optional	LEDs to replace fluorescent tubes
12	Optional	Electric HVAC replacements: Heat pump, Mini-Split Heat Pump, Window AC units.
		Central AC
		Gas Furnace Replacement
		Boiler Replacement
Not Eligible	Must use energy model	Any other heating systems, Dishwasher, Clothes Washer, Clothes Dryer