

APPLICATION FOR FEDERAL ASSISTANCE SF-424

Version 02

9. Type of Applicant:

A State Government

10. Name of Federal Agency:

U. S. Department of Energy

11. Catalog of Federal Domestic Assistance Number:

81.042

CFDA Title:

Weatherization Assistance Program

12. Funding Opportunity Number:

DE-WAP-0002022

Title:

2022 Weatherization Assistance Program

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Statewide

15. Descriptive Title of Applicant's Project:

The Maryland Weatherization Assistance Program

BUDGET INFORMATION - Non-Construction Programs

1. Program/Project Identification No. EE0009907		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address Maryland, State of 7800 Harkins Road New Carrollton, MD 207060000	4. Program/Project Start Date 07/01/2022		
	5. Completion Date 06/30/2023		

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. DOE 2022 WAP Formula Funds	81.042	\$ 0.00		\$ 3,688,484.00		\$ 3,688,484.00
2.						
3.						
4.						
5. TOTAL		\$ 0.00	\$ 0.00	\$ 3,688,484.00	\$ 0.00	\$ 3,688,484.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) GRANTEE ADMINISTRA TION	(2) SUBGRANTE E ADMINISTRA	(3) GRANTEE T&TA	(4) SUBGRANTE E T&TA	
a. Personnel	\$ 139,220.00	\$ 0.00	\$ 99,780.00	\$ 0.00	\$ 239,000.00
b. Fringe Benefits	\$ 62,347.00	\$ 0.00	\$ 42,177.00	\$ 0.00	\$ 104,524.00
c. Travel	\$ 0.00	\$ 0.00	\$ 47,100.00	\$ 0.00	\$ 47,100.00
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
e. Supplies	\$ 5,000.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 5,000.00
f. Contract	\$ 36,043.00	\$ 276,637.00	\$ 117,265.00	\$ 300,000.00	\$ 3,241,716.00
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other Direct Costs	\$ 19,500.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 19,500.00
i. Total Direct Charges	\$ 262,110.00	\$ 276,637.00	\$ 306,322.00	\$ 300,000.00	\$ 3,656,840.00
j. Indirect Costs	\$ 14,525.00	\$ 0.00	\$ 17,119.00	\$ 0.00	\$ 31,644.00
k. Totals	\$ 276,635.00	\$ 276,637.00	\$ 323,441.00	\$ 300,000.00	\$ 3,688,484.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

BUDGET INFORMATION - Non-Construction Programs

1. Program/Project Identification No. EE0009907		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address Maryland, State of 7800 Harkins Road New Carrollton, MD 207060000	4. Program/Project Start Date 07/01/2022		
	5. Completion Date 06/30/2023		

SECTION A - BUDGET SUMMARY						
Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						
2.						
3.						
4.						
5. TOTAL		\$ 0.00	\$ 0.00	\$ 3,688,484.00	\$ 0.00	\$ 3,688,484.00

SECTION B - BUDGET CATEGORIES					
6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) PROGRAM OPERATIONS	(2) HEALTH AND SAFETY	(3) Weatherization Readiness	(4)	
a. Personnel	\$ 0.00	\$ 0.00	\$ 0.00		\$ 239,000.00
b. Fringe Benefits	\$ 0.00	\$ 0.00	\$ 0.00		\$ 104,524.00
c. Travel	\$ 0.00	\$ 0.00	\$ 0.00		\$ 47,100.00
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00		\$ 0.00
e. Supplies	\$ 0.00	\$ 0.00	\$ 0.00		\$ 5,000.00
f. Contract	\$ 1,929,000.00	\$ 383,067.00	\$ 199,704.00		\$ 3,241,716.00
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00		\$ 0.00
h. Other Direct Costs	\$ 0.00	\$ 0.00	\$ 0.00		\$ 19,500.00
i. Total Direct Charges	\$ 1,929,000.00	\$ 383,067.00	\$ 199,704.00		\$ 3,656,840.00
j. Indirect Costs	\$ 0.00	\$ 0.00	\$ 0.00		\$ 31,644.00
k. Totals	\$ 1,929,000.00	\$ 383,067.00	\$ 199,704.00		\$ 3,688,484.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00		\$ 0.00

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WEATHERIZATION ASSISTANCE PROGRAM (WAP)
WEATHERIZATION ANNUAL FILE WORKSHEET**

(Grant Number: EE0009907, State: MD, Program Year: 2022)

IV.1 Subgrantees

Subgrantee (City)	Planned Funds/Units
Allegany County Resources Development Commission (Cumberland)	\$101,300.00 11
Baltimore City Department of Housing & Community Development (Baltimore)	\$435,620.00 45
Community Action Council of Howard County (Columbia)	\$1,597,015.00 166
Frederick Community Action Agency (Frederick)	\$121,376.00 13
Garrett County Community Action Committee, Inc. (Oakland)	\$40,149.00 4
Housing Authority of St. Mary's County, MD (Lexington Park)	\$482,872.00 50
Maryland Rural Development Corporation (Goldsboro)	\$25,387.00 3
SHORE UP! Inc. (Salisbury)	\$284,689.00 30
Total:	\$3,088,408.00 322

IV.2 WAP Production Schedule

Planned units by quarter or category are no longer required, no information required for persons.

Weatherization Plans	Units
Total Units (excluding reweatherized)	322
	322
Reweatherized Units	0
	0

Average Unit Costs, Units subject to DOE Project Rules

VEHICLE & EQUIPMENT AVERAGE COST PER DWELLING UNIT (DOE RULES)

A Total Vehicles & Equipment (\$5,000 or more) Budget	\$0.00
B Total Units Weatherized	322
C Total Units Reweatherized	0
D Total Dwelling Units to be Weatherized and Reweatherized (B + C)	322
E Average Vehicles & Equipment Acquisition Cost per Unit (A divided by D)	\$0.00

AVERAGE COST PER DWELLING UNIT (DOE RULES)

F Total Funds for Program Operations	\$1,929,000.00
G Total Dwelling Units to be Weatherized and Reweatherized (from line D)	322
H Average Program Operations Costs per Unit (F divided by G)	\$5,990.68
I Average Vehicles & Equipment Acquisition Cost per Unit (from line E)	\$0.00
J Total Average Cost per Dwelling (H plus I)	\$5,990.68

IV.3 Energy Savings

Method used to calculate savings: <input checked="" type="checkbox"/> WAP algorithm <input type="checkbox"/> Other (describe below)		
Units	Savings Calculator (MBtus)	Energy Savings

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This Year Estimate	322	29.3	9435
Prior Year Estimate	414	29.3	12130
Prior Year Actual	190	29.3	5567

Method used to calculate savings description:

IV.4 DOE-Funded Leveraging Activities

DHCD expects to partner with other state agencies to braid DOE funding and expand the program services to a greater number of eligible families. The following is a summary of the initiatives to facilitate the weatherization of additional low income homes:

The Department of Human Resources (DHR), Maryland Energy Assistance Program (MEAP), as administered by the Office of Home Energy Programs (OHEP) will make Low Income Home Energy Assistance Program (LIHEAP) funds available to operate furnace repair and replacement and for eligible weatherization activities in conjunction with DHCD's DOE WAP funding.

IV.5 Policy Advisory Council Members

Check if an existing state council or commission serves in this category and add name below

Baltimore City Department of Housing & Community Development	Type of organization: Unit of Local Government Contact Name: Jeffrey Holland Phone: 4433964103 Email: Jeffrey.Holland@baltimorecity.gov
Community Action Council of Howard County	Type of organization: Non-profit (not a financial institution) Contact Name: Bitia Dayhoff Phone: 4103136318 Email: bdayhoff@cac-hc.org
Complete Home Solutions	Type of organization: Contact Name: Rob Burgee Phone: 4108671202 Email: rob@chs-1.com
Frederick Community Action Agency	Type of organization: Unit of Local Government Contact Name: Phone: 3016003974 Email: gdixon@cityoffrederick.com
Garrett County Community Action Committee	Type of organization: Non-profit (not a financial institution) Contact Name: Duane Yoder Phone: 3013349431 Email: dyoder@garrettcac.org
Housing Authority of St. Mary's County, MD	Type of organization: Unit of Local Government Contact Name: Dennis Nicholson Phone: 3018666590 Email: dnicholson@stmaryshousing.org
Maryland Community Action Partnership	Type of organization: Non-profit (not a financial institution) Contact Name: Angela Martin Phone: 4434825168 Email: amartin@maryland-cap.org
Maryland Energy Administration	Type of organization: Unit of State Government Contact Name: Dean Fisher Phone: 4105374068 Email: Dean.Fisher@maryland.gov
Office of Peoples Counsel	Type of organization: Unit of State Government Contact Name: Phone: 4107678156 Email: cindyr@opc.state.md.us
	Type of organization:

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Shore Up Inc.	Contact Name: Freddie Mitchell Phone: 4107491142325 Email: fmitchell@shoreup.org
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IV.6 State Plan Hearings (Note: attach notes and transcripts to the SF-424)

Date Held Newspapers that publicized the hearings and the dates the notice ran

02/16/2022 WAP PAC Meeting held.

03/30/2022 Notice of public hearing on the State Plan was published on the Maryland DHCD website.

04/11/2022 The public hearing for the 2022 DOE State Plan will be held.

IV.7 Miscellaneous

Recipient Business Officer is the representative authorized to act on behalf of the Grantee to negotiate the award. All DOE official correspondence related to the award will be addressed to the Recipient Business Officer which is designated as Michael Lafferty, Senior Energy Program Manager; Michael.Lafferty@maryland.gov; 301-429-7668.

Recipient Principal Investigator is the technical representative authorized to act on behalf of the Grantee as project manager for the award. The Recipient Principal Investigator is the prime point of contact for the DOE Project Officer during the project period of performance and will receive a copy of all DOE official correspondence related to the award. which is designated as Kiahna Burney, WAP Program Manager, Energy Programs; Kiahna.Burney@maryland.gov; 301-429-7793.

Maryland's most current Single Audit: https://www.marylandtaxes.gov/reports/static-files/expenditures/singleaudit/Single_Audit_Report-FY2020.pdf

All Policy Advisory Council (PAC) member organizations are advocates of at-risk populations.

Maryland is in the process of a Request for Proposal for an energy database software. A third party consultant has been hired using non-DOE funds to facilitate and manage the project. DOE WAP will benefit from this service and potentially pay a proportionate share in the expense.

During the period of performance, DHCD will be working to improve the condition of Grantee/Subgrantee vehicles and equipment.

Any weatherization staff not charging 100% to the DOE grant will be paid by non-DOE funds, such as, but not limited to DHCD's utility program funds.

Weatherization Readiness Fund Plan

The Department of Housing & Community Development plans to use the Weatherization Readiness Fund 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.

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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 at a home to address these deferral conditions is \$20,000. The funds will be distributed to the subgrantees based on the same formula for determining allocations for annual DOE program funds as outlined in the POM.

Agencies will conduct 100% inspections on Readiness units and the state will monitor these units as we do the regular weatherization units at 10 percent minimum field monitoring.

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. Client 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 crew 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.)
5. Client files for each job shall contain the intake, measure, cost, and inspection information for Readiness

With the exception of DOE WAP-BIL grant funds, DHCD will utilize funds from other sources to augment these funds.

Due to the late notice from the Department of Energy, we will continue to enhance our plan for the Weatherization Readiness Funds. We will communicate with the DOE Project Officers regarding any future enhancements being considered for these funds.

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This worksheet should be completed as specified in Section III of the Weatherization Assistance Program Application Package.

V.1 Eligibility

V.1.1 Approach to Determining Client Eligibility

Provide a description of the definition of income used to determine eligibility

DHCD has developed a process to ensure that assisted units meet the eligibility requirements of 10 CFR 440.22(a), with respect to income eligibility. Subgrantees are required to collect third-party documentation from each assisted household to confirm income and must keep documentation on file to support eligibility determinations. DHCD will use the "Definition of Income" defined in the most current version of DOE Weatherization Program Notice "Federal Poverty Guidelines and Definition of Income". Pursuant to 10 CFR 440.22 (2), some households are deemed categorically eligible if they contain a member who has received cash assistance payments (i.e., TANF, SNAP, SSI) 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.

Income eligibility is verified using one of three methods, depending upon the type of building or whether the household is claiming categorical eligibility: 1) households that reside in buildings that have received assistance from certain HUD programs are considered eligible for Program assistance without additional documentation (pursuant to DOE Notice WPN 17- 4); 2) households residing in any other building that claim categorical eligibility by participation in another assistance program that has eligibility requirements that are as restrictive as those of the Program must provide documentation from the administrator of the other program establishing participation; or, 3) all other households must provide third-party documentation of income (i.e., pay stubs, statements from income providers) to support income claimed.

Describe what household eligibility basis will be used in the Program

DHCD has adopted the income eligibility guidelines used in the LIHEAP Program as the standard for the Program for households with nine or fewer persons. This limit – 60% of State median income – is higher in Maryland than the 200% of federal poverty option for households with fewer than ten persons and provides opportunity for participation by more households in the State.

For families of 10 or more persons, the 200% of poverty level is higher than 60% of State median income, and DHCD sets the eligibility threshold for those households at the higher (200% of federal poverty) level. This threshold has been selected in accordance with Federal LIHEAP rules and with 10 CFR 440.22 (3).

DHCD's process is consistent with DOE Regulations, which allows States to use LIHEAP eligibility criterion as the basis of eligibility under WAP, provided that the LIHEAP basis is at least 200 percent of the poverty level. This approach to determining client eligibility is specific to Maryland's WAP only.

Client eligibility for LIHEAP is determined by the Department of Human Services (DHS), Office of Home Energy Programs (OHEP), which administers LIHEAP.

DHCD is a subrecipient of LIHEAP funds received from DHS OHEP for the Maryland Energy Assistance Program (MEAP). Through DHCD's partnership with DHS, OHEP provides direct access to the OHEP database for a monthly list of low income households that have been certified as eligible by the OHEP intake staff. DHCD retrieves the list and assigns cases to the subgrantees. An executed copy of the certified eligible application of each client is maintained at DHS and is accessible upon request by DHCD.

In addition to the applications provided by DHCD, subgrantees must effectively conduct outreach and client intake to solicit applications from eligible households of potential weatherization projects. Subgrantees are required to document the household income as part of the client file. All applications certified eligible expire 12 months from the date of certification and must reapply.

Describe the process for ensuring qualified aliens are eligible for weatherization benefits

DHCD uses the OHEP application certification process to determine eligibility for services and citizenship status is requested on the application. An individual with Qualified Alien status is counted as a household member when determining WAP eligibility. Income from a NonQualified Alien household member must be documented and included as household income. The NonQualified Alien is not counted as a household member. All information must be documented in the client file by the subgrantee. LIHEAP/MEAP eligible households are referred to DOE WAP.

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V.1.2 Approach to Determining Building Eligibility

Procedures to determine that units weatherized have eligibility documentation

DHCD requires that both household income eligibility and building eligibility are established before any work is done on a building. Subgrantees must document and verify clients who are homeowners and obtain landlord permission for clients who are tenants prior to beginning work.

Building eligibility is confirmed prior to the start of an energy audit. Building owners must provide documentation to confirm ownership of the building to be assisted. Procedures for confirming eligibility in buildings with rental units and in certain other types of buildings are described below and in more detail in the Program Operations Manual (POM).

Historic Preservation

Subgrantees are required to complete, prior to any weatherization activity, a State Historic Preservation (SHPO) review for units that are in excess of 45 years old at the time the work takes place, units that are historic properties, or units that are in a designated historic area.

DHCD has entered into a programmatic agreement with Maryland Energy Services to facilitate historic reviews of projects assisted with Program funds. The agreement covers the 2022 Program Year.

Describe Reweathering compliance

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 fifteen years ago are not eligible for re-weatherization utilizing federal funds. This includes WAP, LIHEAP, HUD, and USDA.

The statewide energy software system provides verification of units that have been previously weatherized. Previously weatherized units are maintained in DHCD's Hancock program management database. 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 and processed according to those guidelines per the POM.

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.

Describe what structures are eligible for weatherization

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Eligible structures

The dwelling must have a physical address in Maryland. Eligible structures may include a stationary mobile home, house, building consisting of apartments, group of rooms, or a single room occupied as separate living quarters (including historic properties), and qualified shelters or other group facilities. Prior approval from DHCD is required for group homes, shelters, and single room occupancy situations.

A qualified dwelling is eligible for weatherization services if it:

1. Is occupied by an eligible household; and
2. Has not been previously weatherized with federal funds less than 15 years ago; and
3. The dwelling does not require deferral (this does not necessarily prevent the building from receiving WAP services in the future if all deferral conditions are satisfied within a reasonable time).

Government institutions, halfway houses, nursing homes, recreational vehicles (RVs), cars, trucks, boats, nonstationary campers and trailers, and tents are not eligible dwellings and are not eligible for weatherization services. 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 occur provided the owner pays the contractor directly with nonfederal funds.

DHCD does not have an approved multifamily energy audit. Projects having buildings containing in excess of 4 units per building will be reviewed on a case by case basis and submitted to the DOE Project Officer for approval.

National Historic Preservation Act DHCD has an approved SHPO Programmatic Agreement in place and on file with DOE for measure approval and review requirements for properties that are in excess of 45 years old. A program comment was issued by the ACHP on March 11, 2013 pursuant to 36 CFR 800.14 (e), published in the Federal Register on March 14, 2013, and extends the duration of the existing 44 Programmatic Agreements – and any future agreements that may be executed under the prototype Programmatic Agreement – until December 31, 2020. An amendment to the agreement has been executed to extend the expiration date an additional 10 years, through December 31, 2030.

Most weatherization measures do not require further review. If the proposed work is not an excluded activity listed in Exhibit I of the PA, the subgrantee or Energy Auditor must provide the following project information to the DHCD historical review contractor.

- Digital photographs showing general views of all sides of the exterior of the building.
- Digital 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, for example; replace damaged main entry solid wood door with acceptable insulated fiberglass door.

No work may begin until the project has been reviewed and approved in writing by the DHCD historical review contractor.

Once approved or denied, the DHCD historical review contractor will notify the subgrantee and DHCD with the results of the review by email and the project is released in Hancock.

Describe how Rental Units/Multifamily Buildings will be addressed

DHCD's policy regarding rental units is outlined in DHCD's Program Operations Manual (POM), and generally states:

1. Subgrantees must obtain landlord permission for clients who are tenants prior to beginning work.
2. Benefits of the services accrue primarily to the low income tenants,
3. Tenants receiving services provided by weatherization work are protected, for a minimum of one year, against rent increases due to the weatherization work that was completed.
4. No undue property enhancements occur as a result of the weatherization process. DHCD seeks landlord contributions for weatherization improvements when feasible.

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Landlords must sign the Building Owner Agreement (see DHCD Program Operations Manual) for work to occur within said building. This form also states the criteria for accruing benefits to the tenants, including the provision for not raising rents for a negotiated period of time, but not less than one (1) year. However, rents are allowed to be raised for cause not related to the received weatherization. Undue property enhancements are prohibited with DOE funds. Improvements are limited to cost effective energy saving activities and associated incidental repairs, where the SIR of the combination of improvements does not fall below 1.0.

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. DHCD will submit the project to the DOE Project Officer if the individual unit project appears to be warranted.

Eligibility for multi-unit projects is determined using the 50%/66% rule per CFR 440.22(2). Not less than 66 percent (50 percent for duplexes and four-unit buildings, and certain eligible types of large multifamily buildings) of the dwelling units in the building must be income eligible. Additionally, HUD has developed an income certification process for individual properties that relies on certified annual income records and building information maintained by the property owner pursuant to Federal requirements. Subgrantees will comply with WPN 17-4 Multifamily Housing Procedure for certifying income eligible HUD Assisted Buildings.

Describe the deferral Process

Per WPN 22-7 and DHCD's Health and Safety Plan and Program Operations Manual, units may be deferred on a case by case basis. Subgrantees are required to consult with a DHCD Quality Assurance Inspector before deferral and completely list the cause(s) for deferral on the DHCD Deferral form, upload it to Hancock and notify the client per the guidelines in the POM.

Subgrantees should strive to work with applicants to resolve conditions where a deferral has been issued. Subgrantees are expected to pursue reasonable options and referrals on behalf of the dwelling owner and to exercise appropriate judgment in dealing with challenging situations. Subgrantees should not defer service due to the presence of a hazard without pursuing reasonable options to identify other resources to address the identified hazard(s).

Whenever appropriate, educational information on how to address the hazard should be shared with the occupant. An example of educational materials is the EPA booklet "Renovate Right." The subgrantee will select the deferred option in the Hancock Energy Software database so that the information is maintained electronically in the client file.

Deferral Examples may include, but are not limited to:

1. There is a question about the reported household size.
2. There is a question about the reported income.
3. The client has known health conditions that prohibit the installation of insulation and/or other weatherization materials.
4. The client is uncooperative, abusive, or threatening to the crew, subcontractors, auditors, inspectors, or others who must work on or visit the house.
5. Illegal activities are being conducted in the dwelling unit.
6. There are health and safety issues beyond the scope of the WAP that prevent the installation of weatherization measures.
7. The customer refuses work items that have a higher Savings to Investment Ratio (SIR) value than remaining measures. Subgrantees shall then defer all services to the customer.
8. A building cannot be adequately weatherized with available funds. Adequate, means all necessary and appropriate measures to make the weatherization successful without causing harm to occupants, workers, the building or other installed measures.

V.1.3 Definition of Children

Definition of children (below age): 17

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V.1.4 Approach to Tribal Organizations

Recommend tribal organization(s) be treated as local applicant?

If YES, Recommendation. If NO, Statement that assistance to low-income tribe members and other low-income persons is equal.

Assistance to low income tribe members will be the same as for all low income persons in Maryland.

V.2 Selection of Areas to Be Served

DHCD competitively selects local governments or 501c3 nonprofits for WAP services with preference given to local government applicants in accordance with CFR 440.15. From those agencies or 501c3 nonprofits selected by the competitive process, DHCD will select certain supplementary agencies or 501c3 nonprofits to provide support in a jurisdiction in the event that performance is substandard.

DHCD's network of subgrantees provides weatherization services statewide. If it has been determined that a Subgrantee cannot fulfill their contractual obligations, steps may be implemented to redistribute allocated funds to other Subgrantees. These funds will be redistributed to the nearest Subgrantee, if feasible, to provide services in the same general geographical area. When sufficient applicants are available, DHCD designates a primary agency and a secondary agency in each county.

DHCD will identify capable subgrantees to provide or be positioned to provide supplementary support in anticipation of potential changes in subgrantee infrastructure and/or performance. Reallocating funds or supplying referrals to these 'backup' subgrantees will allow DHCD to quickly mitigate any potential impacts or interruptions in service to areas where subgrantees experience problems delivering the desired level of production or quality of weatherization services.

V.3 Priorities

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 subgrantees 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.
 - o Group 1 - 0-10% - One (1) priority point
 - o Group 2 - 11-15% - Two (2) priority points
 - o Group 3 - 16-20% - Three (3) priority points
 - o Group 4 - 21%+ and clients with no income - Four (4) priority points

Additionally, at-risk clients with valid medical documentation as described in the Health and Safety Plan, will receive the highest priority. Subgrantees may also schedule work with reduced regard to priorities where projects are able to coordinate work with other funding sources.

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V.4 Climatic Conditions

The state of Maryland has two distinct climates. Average temperatures in western Maryland are 65 °F in July and 28 °F in January. Average temperatures in eastern Maryland are 75 °F in July and 35 °F in January.

The average heating degree hours are thirty year averages utilized by our Hancock Energy Software for our program. In counties without reporting stations and some without complete data for thirty years, data from nearby stations was used.

V.5 Type of Weatherization Work to Be Done

V.5.1 Technical Guides and Materials

The language in the Weatherization Grant Agreement states the following: "WHEREAS, the Program is also governed by the State Regulations set forth in COMAR 05.04.14 (the "State Regulations"), the Program Operations Manual (the "Manual") and the Weatherization Field Guide/SWS ("Field Guide"). The Energy Conservation and Production Act (the "Act"), Federal Regulations including the Special Terms and Conditions (the "DOE Terms"), State Regulations, Field Guide and the Manual are hereinafter referred to collectively as the Program Guidelines and are incorporated herein;" Upon execution of the agreement, subgrantees acknowledge the expectations and SWS specifications for work quality and performance outlined in WPN 154, Section 2.

The Maryland Field Guide was distributed electronically to each agency on August 30, 2018. The Program Operations Manual was distributed electronically to each agency on February 22, 2022. The most current State Plan, Field Guide and Program Operations Manual (POM) can be found at DHCD's website <http://dhcd.maryland.gov/Pages/EnergyEfficiency/default.aspx>

Local Weatherization Agency (LWA) staff will perform a comprehensive energy audit of each home to identify the problems in the building that promote air movement, heat loss and heating system inefficiency. The auditor will use the blower door, furnace efficiency testing equipment and other devices to determine the levels of efficiency and any health and safety issues with existing combustion appliances. The auditor will also assess health and safety issues requiring

abatement prior to service delivery. Local agency staff will use the DOE approved energy audit tool to model the house and determine the most cost-effective measures. The audit tool will model the house and based on a number of custom factors specific to each home, will determine the best measures for treating the problems identified in the energy audit, including the selection of materials best suited for correcting the deficiencies. Detailed technical guidance for audit

procedures can be found in the POM.

Decisions as to which Energy Conservation Measures (ECMs) are to be installed are determined by the DOE approved energy audit results and WPN 19-4 Attachment 7 "Appendix A" and in accordance with the Field Guide and SWS.

Field guide types approval dates

Single-Family: 9/7/2021
Manufactured Housing: 9/7/2021
Multi-Family:

V.5.2 Energy Audit Procedures

Audit Procedures and Dates Most Recently Approved by DOE

Audit Procedure: Single-Family
Audit Name: Other (specify)
HEAT energy modeling tool, approved 4/1/2014. Multiunit developments of buildings with 4 and fewer units not centrally heated/cooled and single family dwelling units are included with this tool.
Approval Date: 12/26/2019

Audit Procedure: Manufactured Housing
Audit Name: Other (specify)
DHCD use of the MHEA audit was last approved by DOE on June 19, 2018.

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Approval Date: 6/19/2018

Audit Procedure: Multi-Family

Audit Name: Other (specify)

DHCD is not approved for auditing multifamily buildings in excess of 4 units or where units are centrally heated/cooled. DHCD will submit multifamily projects to DOE for approval on a case by case basis.

Approval Date:

Comments

V.5.3 Final Inspection

100% of WAP units receive a quality control inspection by the subgrantee to ensure that all work meets the specifications per WPN 19-4 auditing protocol, WPN 22-4 Quality Work Plan requirements, DOE guidelines, CFR.440, the POM, and the DHCD Maryland Field Guide. The Maryland Field Guide includes applicable SWS by which the QCI is required to assess each project.

Units are not reported to DOE as complete until the project passes a subgrantee final inspection.

Quality Control Inspectors must possess an active Home Energy Professional Quality Control Inspector certification verifying the individual has the required DOE credentials to conduct an inspection.

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, DOE, 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.

The following are mandatory for QC Inspectors:

- Each person performing a Quality Control inspection on a WAP job must be certified as a Home Energy Professional Quality Control Inspector. The Subgrantee is responsible for ensuring that all Quality Control Inspectors are adequately trained and credentialed. Proof of QCI certification is required from every Subgrantee. Copies of certifications must be sent to DHCD before QCI activities are authorized.
- 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 without the written consent of DHCD. Exceptions will be granted on a case by case basis.

It is the responsibility of the Quality Control Inspector to ascertain the completeness and quality of work of each dwelling unit before certifying in the Hancock system that the unit is complete and submitting an invoice.

Every client file must contain a signed Quality Control Inspection Form that certifies that the unit has had a final QC inspection and meets the required standards.

Quality Control Inspections must contain these elements at a minimum:

- Perform a blower door test to verify results of air infiltration reduction achieved;
- Perform combustion efficiency and combustion appliance zone (CAZ) testing of the central heating system (fossil fuels) and all combustion based appliances.
- Perform a walkthrough inspection of the property to verify the comprehensiveness of audit, installation of materials as recorded on the Work Order per the Maryland DHCD Field Guide, POM and DOE regulations. Verification that all measures meet SWS objectives is mandatory.
- Document customer comments and obtain customer signature on the appropriate forms which verify the work performed; and E. Certify completeness and quality of all items listed in the work scope in HEAT.

Quality Assurance Inspections

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WAP Quality Assurance (QA) Inspectors are required to review not less than 5% of units completed by each subgrantee, and provide T&TA on a continuing basis equally. Ten percent of units completed will be inspected for those agencies who have been granted an exception to the Independent Quality Inspector policy. If production for the agency is slipping, or the QA Inspector finds a pattern of missing or inferior work in their random sampling, a higher percentage of all dwelling units of that agency may be inspected, with increased T&TA until the jobs are considered resolved and the agency is back on track to meet production goals. Continued poor quality work may result in suspension of reimbursement for jobs, suspension, and ultimately termination of contract if issues cannot be resolved.

All DHCD QA Inspectors are HEP certified Quality Control Inspectors. New hires already have their QCI certification or will test for certification within 60-days of hiring.

DHCD QA staff will primarily inspect only those units that have been certified as complete in the Hancock system by the Quality Control (QC) Inspector. However, random in-progress inspections will also be performed.

If a unit is rated "Poor" the contact person at the agency will be notified via email by the QA Inspector and an automated email from HEAT advising of the QA Inspector results. The agency must access HEAT and create a work order of all outstanding items (see POM, Appendix D, Hancock Manual for specific process). The software will email the subgrantee informing that a call back work order has been created. Once the outstanding items are completed and certified by the QC Inspector, the call back work order is completed and the software will email the QA Inspector that the unit is ready for reinspection.

DHCD understands that "Poor" rated units will occur periodically. However, after a comprehensive inspection that has been certified by the subgrantees QC Inspector, measures rated "Poor" by WAP QA Inspectors should be relatively minor and infrequent. When QA Inspectors see a pattern of "Poor" rated units, inspection rates will increase from 10% to up to 100% until DHCD QA staff can verify that the trend has been interrupted by T&TA and subsequently improved performance.

Ongoing T&TA by DHCD QA Inspectors from audit to closeout stage is available if an agency wants to verify that their audit standards are acceptable, if challenges arise in the field, or if workmanship seems to be slipping. The DHCD HEAT technology officer is available for inhouse or remote training to resolve any program management software issues.

Visits to correct units that were rated, "Poor" must be scheduled within five days. Failure to adhere to this policy could result in the withholding of referrals, stopping payment on current invoices and, in extreme cases, suspension or removal from the WAP. If multiple "Poor" rated units are identified, DHCD will insist that all outstanding "Poor" units be resolved and request a corrective work plan from the agency to ensure future satisfactory work. Units rated "Poor" based on Health and Safety issues must be resolved within 24-72 hours depending on the seriousness of the issue as determined by DHCD Quality Assurance Inspector.

To briefly clarify standard QA inspection protocols, please note the following:

- A unit will be rated poor if materials reported as installed cannot be found
- A unit will be rated poor if measures were not installed to industry standards or to HEAT audit
- No unit will be rated poor for missed opportunities regarding air infiltration reduction unless the inspector uses a blower door and can verify that substantial air leakage still exists;
- A unit may be rated poor if major WAP 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 be rated poor if health and safety measures are still required to protect the family.

Enforcing HEP QCI Standards

As the Maryland weatherization program integrates the HEP QCI into the standard training regimen required by DOE, it is imperative that DHCD's Quality Assurance team enforce the standards and practices identified in the QCI training. All current DHCD inspectors will be HEP QCI certified inspectors and newly hired DHCD inspectors must receive training and certification in order to perform independent Quality Assurance inspections. In the course of routine QA inspections they will review work against the SWS standard along with the Maryland Field Guide and the policies in the Maryland Weatherization Program Operations Manual (POM).

When a QA inspection reveals that the LWA QC inspection has failed to meet the standards prescribed by the SWS, HEP QCI training, Maryland Field Guide, and the POM, DHCD will follow a progressive chain of correction to address the failure. Failure to meet the prescribed standards will be categorized as either "Health & Safety" or "General". The action taken will vary depending on the category of the failure.

QC Fail - Health & Safety:

1. Any identification of a QC failure that results in a Health and Safety issue will trigger delivery of T&TA for the LWA Inspector who performed the QC inspection. DHCD's QA Inspector will contact the LWA and schedule an onsite T&TA tailored to the issue identified. The issue will be corrected on site and the correction will be verified by the QA Inspector. The incident will be documented in Hancock.

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2. A second identification of a QC failure that compromises Health and Safety will result in additional T&TA to include the principles of the LWA and the other field staff who interacted with the job. The issue will be corrected onsite and the correction will be verified by the QA Inspector. The incident will be documented in Hancock.

3. If DHCD identifies a third QC failure that compromises Health and Safety within 6 months of the first failure, DHCD will suspend the QC Inspector from performing QC inspections. The issue will be corrected onsite and the correction will be verified by the QA Inspector. The incident will be documented in Hancock. The Subgrantee will be required to provide additional training for the suspended inspector as specified by the QA Inspector.

QC Fail - General:

1. The first QC failure that results in poor work under the "general" measure category will be addressed with a QA "poor" and an email sent through Hancock ordering correction with an additional explanation of the deficiency. The explanation will reference specific sections of the Maryland Field Guide and the POM. The incident will be documented in Hancock.

2. A second occurrence will trigger a T&TA tailored to the specific issue. T&TA will be delivered onsite and will reference specific sections of the Maryland Field Guide and POM. Correction of the deficient work will be verified onsite by the DHCD QA Inspector. The incident will be documented in Hancock.

3. A third occurrence will result in additional T&TA to include the principles of the LWA and the other field staff who interacted with the job. The issue will be corrected onsite and the correction will be verified by the QA Inspector. The incident will be documented in Hancock.

4. A fourth occurrence of a poor QA will lead to suspension of the QC Inspector. The issue will be corrected onsite and verified by the QA Inspector. The incident will be documented in Hancock. The Subgrantee will be required to provide additional training for the suspended QC Inspector as specified by the QA Inspector.

V.6 Weatherization Analysis of Effectiveness

DHCD analyzes the effectiveness of weatherization measures performed by the Network Partners in these ways: The effectiveness of the local agency is assessed on their ability to meet production goals, pass QA inspection without reoccurring "Poor" ratings, produce accurate quarterly financial reports, effectively use the HEAT and Hancock tools, and by a compilation of data obtained by annual State monitoring visits to review local agency administrative, programmatic and quality control inspection activities.

These are assessed using these formats and compiling results in an ongoing effort to determine program effectiveness..

Quarterly reporting deliverables and discussion between DHCD Fiscal and Sr. Management and individual partners including:

- Expenses by each fund source,
- Average cost per unit (ACPU),
- Administration and Program expenses,
- Health and Safety average,
- Number and dollar amount of projects in the pipeline,
- Projections for monthly production for the next quarter,
- Financial reports including the General Ledger.

Weekly reviews at HBEP staff meetings on LWA current status on these items:

- Quality Assurance results and T&TA visits

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- Partner capacity and ability to meet production goals,
- Consistency in the use and continuous update the HEAT and Hancock tools,
- The percentage of contracted funds expended,
- High levels of Subgrantee staff turnover

Annual State monitoring visits as referenced in the monitoring section:

- DHCD will conduct comprehensive monitoring of each local agency at least once a year using the most up to date DOE Monitoring Guidelines and Checklist. The comprehensive monitoring visit will include review of:
 - Client files
 - Fiscal record management and annual audit review
 - Energy Audits/Work Orders,
 - Program coherence (including compliance with 10CFR440, 2CFR200, relevant OMB circulars and Weatherization Program Notices),
 - Subgrantees records including Procurement, Regulation, Insurance, Inventory and Report files, Inspection of at least 5 percent of the completed units or up to 10% when including units in the process of being weatherized.
- The Subgrantee will be briefed on the observations and findings generated by the monitoring visit while onsite, and DHCD will provide a written assessment of the monitoring process to the Subgrantee within 30 days, along with recommended next steps or corrective action if needed. Part of the findings or recommendations from the monitoring visit may include provision of technical assistance, additional recommendations for training and additional guidance and oversight related to fiscal record-keeping and processes. Any Subgrantees who receive a monitoring report with findings or recommendations for additional training will be contacted for a follow-up monitoring visit. Subsequent monitoring visits or technical assistance visits will be provided on a regular basis until any outstanding issues have been resolved.

V.7 Health and Safety

The Health and Safety Plan is attached to SF-424

V.8 Program Management

V.8.1 Overview and Organization

The Weatherization Assistance Program in the State of Maryland is administered by Maryland's Department of Housing and Community Development (DHCD), a cabinet level agency of state government and Maryland's affordable Housing Finance Agency. DHCD's mission is to work with partners to finance housing opportunities and revitalize great places for Maryland citizens to live, work and prosper. Part of this mission involves working to ensure that Maryland citizens have housing that is safe and affordable, in neighborhoods that are vibrant and desirable.

DHCD utilizes funding from a variety of State and Federal sources to accomplish this mission, with energy efficiency programs playing a key role in the preservation of affordability and safety in housing. The Weatherization Assistance Program (WAP) is housed within DHCD's Housing and Building Energy Programs (HBEP), which also administers the

EmPOWER Low Income Energy Efficiency Program (LIEEP), a low income energy efficiency program similar to WAP that is funded through a ratepayer surcharge for customers in territories of participating utility companies. The HBEP unit also administers a market rate energy efficiency lending program funded through the U.S. Department of Energy's Better Buildings program. The HBEP unit receives additional funding to support low income weatherization activities through the Strategic Energy Investment Fund (SEIF) provided by the Maryland Energy Administration and through the Maryland Energy Assistance Program/Low Income Home Energy Assistance Program (MEAP/LIHEAP) provided by the Maryland Department of Human Services.

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The Housing and Building Energy Programs is a unit within DHCD's Division of Development Finance, and operates with a Director and Deputy Directors, program managers, a compliance officer, administrative staff, an intake team and a quality assurance inspection team that serves all programs. Specific staff titles and their responsibilities are as follows:

Program Manager – Manages daily operations, coordinates monitoring activities, negotiates and resolves program and fiscal audits, establishes program policies and supervises WAP staff. Oversees field operations of the local network, coordinates special training and technical assistance opportunities, implements new technologies and special projects.

Quality Assurance Officer – Conducts quality assurance evaluations, assists in overseeing field operations, coordinating training and technical assistance opportunities, leverage activities and assists in policy development.

Compliance Officer – Assists in the oversight of the program, analyzing data, managing and accounting for expenditures of subgrantee program fund allocations and ensuring compliance of fiscal program regulations. Operates the contract reimbursement system, performs data entry, and performs contract processing, procurement and other administrative duties.

V.8.2 Administrative Expenditure Limits

The total amount available to the subgrantees for administrative funds is at least 7.5% of the state's grant; however, any subgrantee that receives a grant of less than \$350,000 can be provided up to another 5% of their allocation for administrative expenses provided the subgrantee meets any one of the following criteria:

- Skills Development Needed -The subgrantee has one or more employees who have less than one full year of weatherization experience.
- Participation in Special Projects -The subgrantee is currently participating in any special project at the request of, or with the approval of, the State or Federal Weatherization Office (DHCD or DOE).
- Other Demonstrated Hardship - The subgrantee has demonstrated extraordinary hardship, the nature of which is so severe that it jeopardizes the ability of the subgrantee to operate an effective weatherization program at the 7.5 percent administrative level.

V.8.3 Monitoring Activities

DHCD will conduct comprehensive monitoring of each local agency at least annually in accordance with DOE's most current version of WAP Monitoring Procedures and using the most up to date Monitoring Tools and Checklist. The comprehensive monitoring can take place in-person, virtually (in certain circumstances), or any combination thereof. The comprehensive monitoring visit will include review of:

- Client files
- Fiscal record management and audit review
- Energy Audits/Work Orders
- Program coherence (including compliance with 10CFR440, 2CFR200, relevant OMB circulars and Weatherization Program Notices)
- Subgrantees records including Procurement, Regulation, Insurance, Inventory and Report files
- Inspection of at least 5 percent of the completed units or up to 10% of units when including units in the process of being weatherized.

The Subgrantee will be briefed on the observations and findings generated by the monitoring visit while onsite, and DHCD will provide a written assessment of the monitoring process to the Subgrantee within 30 days, along with recommended next steps or corrective action if needed. Part of the findings or recommendations from the monitoring visit may include provision of technical assistance, additional recommendations for training and additional guidance and oversight related to fiscal recordkeeping and processes.

Any subgrantees who receive a monitoring report with findings or recommendations for additional training will be contacted for follow up. Subsequent follow up and/or technical assistance will be provided on a regular basis until any outstanding issues have been resolved. Sensitive or significant noncompliance findings will

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be reported to DOE immediately. A detailed review of local agency records and inspections will be maintained by DHCD and be available at the request of DOE.

The results of this annual monitoring should be considered during annual planning and will be available at DHCD for DOE staff to review during their Grantee program monitoring visits. Subgrantee failure to adhere to this policy and/or resolve monitoring findings could result in the withholding of referrals, backcharges, stopping payment on current invoices and, in extreme cases, suspension or removal from the WAP.

V.8.4 Training and Technical Assistance Approach and Activities

Training & Technical Assistance (T&TA) Plan

The Maryland Weatherization Network is comprised of LWAs and contractors with varying degrees of historical experience performing weatherization and related home renovation and human services. Maryland DHCD staff conducts ongoing assessments and tracks subgrantee effectiveness through desk monitoring, final inspections and field monitoring results. These activities are key in the evaluation of subgrantee performance and contracted resources engaged in service delivery.

DHCD considers all performance related reporting in developing a comprehensive training strategy. Individual subgrantee training needs and results are continuously tracked and training and monitoring is systematically adjusted to meet demands for all phases of administrative and production effectiveness and improvement goals.

The Department of Energy (DOE) allocates Training and Technical Assistance (T&TA) funding to support State 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, DOE through a network of Weatherization Professionals, identified and developed a set of core competencies for the various staff positions that implement the Weatherization Program including the types of training required to increase levels of core competencies for these job categories. Increasing competency levels and workforce expertise helps assure that every home weatherized receives appropriate, properly installed cost-effective measures.

All training will be in compliance with DOE WPN 22-4, Weatherization Field Guide SWS Aligned Edition and the current year State Plan/Master File and be provided quarterly throughout the year on an as needed basis.

To increase Maryland's WAP network expertise, numerous program training opportunities have been conducted with the goal to maximize energy savings, minimize production costs, improve quality of work, and foster management expertise, while reducing the potential for waste, fraud abuse and mismanagement. T&TA funds are primarily used to train State and local Weatherization staff on program operations, management, and technical topics. Staff members receive training at national and regional conferences, regional and state training centers, state and Subgrantee provided workshops, and in the field.

Subgrantees are required to have qualified weatherization staff (and contractors, as may be applicable) fully trained in the performance of individual functions.

Through monitoring review and assessments, the state coordinates with Subgrantees to determine types of training needed to strengthen Wx services. Based on the need of the Wx network, the state will continue to periodically provide training and workshops.

Subgrantees must ensure that Wx staff and contractors maintain required levels of training and certifications. New staff shall obtain certification within 60 days of hire. DHCD requires that subgrantees evaluate their Wx workforce to determine the types of training needed. Each subgrantee's policy shall be 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. 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

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approval. Subgrantees may charge the cost of training to the T&TA category and the employee's time for participation in the event under the labor category (Program Ops). Costs associated with training contractors that work within the Weatherization Program may also be charged to T&TA. Before being reimbursed, each program participant must show successful completion of the course with the earned certificate. These certificates are kept on file at DHCD to ensure that they are active and compliant with training deadlines.

The current Maryland WAP workforce is comprised of Grantee, Subgrantee and Contractor level Building Performance Institute (BPI) Certified Home Energy Professionals (HEP):

- Grantee Certified Quality Control Inspectors (QCI)
- Subgrantee Certified Auditors
- Subgrantee Certified QC Inspectors
- Contractor Certified Auditors
- Contractor Certified QC Inspectors
- Contractor Crew Leader
- Contractor Installers

Program Year 2022 Comprehensive Training

Projected T&TA budgets have been structured to allow continued reassessment and supplemental training as determined necessary. DHCD will reimburse all Quality Control Inspector and Energy Audit personnel for the HEP Quality Control Inspector and HEP Energy Auditor training and testing. DHCD will pay for classes up to three attempts at testing for each inspector and will encourage participation by subcontractors in good standing with subgrantees that have been carefully screened and have agreed to execute retention agreements.

All Comprehensive training will be provided by an IREC accredited training center that will provide NREL, JTA aligned, training in close proximity to Maryland and deliver both single family and multifamily curriculums. Ongoing evaluation of resources will be conducted to evaluate and determine opportunities for best outcomes and cost effectiveness, prior to procurement of services. DHCD has completed its competitive bid process and has contracted with a service provider

to train, test, and provide technical assistance to the network.

Program Year 2022 Comprehensive Training plan seeks to train as follows:

Training Plan			
JTAs	Currently Certified and/or has met JTA Requirements	JTA Training Planned for PY2022	Total
Retrofit Installer (RIT)	167	38	205
Crew Leader (CL)	34	19	53
Energy Auditor (EA)	52	14	66
Quality Control Inspector (QCI)	23	12	35
Totals	276	83	359

The following designates standard position based training for specific program personnel:

DHCD Quality Assurance Inspectors must all be certified as HEP Energy Auditor and Quality Control Inspectors. Additionally, all must have at least OSHA 10 and Certified Renovator credentialed status.

Weatherization Network Training and Capacity

Task specific training requirements:

Installers shall have:

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- Certification of completion of the BPI HEP Retrofit Installer Technician (RIT) or skills, knowledge and abilities as outlined in NREL Job Tasks Analysis for the RIT
- Certification of EPA Lead Repair Renovation and Painting (LRRP) training, and;
- Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.

Crew Leaders shall have:

- Certification of completion of the BPI HEP Crew Leader (CL) or skills, knowledge and abilities as outlined in NREL Job Tasks Analysis for the CL
- Certification of completion of the BPI HEP RIT or skills, knowledge and abilities as outlined in NREL Job Tasks Analysis for the RIT
- Certification of EPA Lead Repair Renovation and Painting (LRRP) training, and;
- Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.

Energy Auditors shall have:

- Certification of completion of the BPI HEP Energy Auditor (EA) This requirement applies to any energy auditor whose existing BPI Building Analyst or Envelope Specialist certification is expiring or has expired, and to new energy auditors who have not held any BPI certifications. The only exception to this requirement applies to energy auditors that currently have an active BPI Building Analyst or BPI Envelope Specialist certification, in which case those certifications are acceptable until they expire.
- Certification of EPA Lead Repair Renovation and Painting (LRRP) training, and;
- Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.

Quality Control Inspectors shall have:

- Certification of completion of the BPI HEP QCI
- Certification of EPA Lead Repair Renovation and Painting (LRRP) training, and;
- Occupational Safety and Health Administration issued 10-hour Construction Safety certification card.

Regular Comprehensive Training will be provided every three years for the position based positions listed above. To maintain QCI certification, retesting on a 3 year cycle is required. The written exam can be skipped and only the field test retaken if the holder of the certificate has acquired sufficient Continuing Education Units (CEUs) according to BPI's policy. Current policy requires at least 30 qualifying CEUs to maintain certification without retaking the written exam. Certified professionals renewing certification for the third (3rd) consecutive basis (9 years) or anytime thereafter can bypass both the written and field exams. View BPI's QCI Certification Scheme Handbook for more details about maintaining certification.

Program Year 2022 Specific Training:

DHCD has initiated the process to competitively contract with a service provider to train, test, and provide technical assistance to the network.

Field TTA:

In addition to classroom training, DHCD spends a significant amount of time on Training and Technical Assistance in the field. Quality Assurance Inspectors meet regularly onsite with subgrantees to provide hands on training and support for weatherization measures installation and standards, and comprehensive energy audit advice. References such as the Maryland DHCD Field Guide, the Standard Weatherization Specifications, BPI protocols and the POM are all used in a working format.

Hancock Energy Software / HEAT:

Successfully using the Hancock/HEAT system is a key component to being a successful subgrantee within the program. DHCD staff are available to troubleshoot process issues, and provide onsite trainings year round to ensure accurate and efficient use of Hancock. T&TA funds may be used for most any training activity which will clearly improve the quality of the subgrantee's Wx work. Such training would include, but not be limited to:

Program Admin/Training:

U.S. Department of Energy
WEATHERIZATION ASSISTANCE PROGRAM (WAP)
STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0009907, State: MD, Program Year: 2022)

Training is important in all aspects of WAP, including the nontechnical and administrative functions. Some examples include:

- Program management and Weatherization program supervision
- Financial management including budgets, claims, Wx financial rules
- Client services including program application/eligibility policies & procedures
- Client energy education and delivery of Wx information
- Procedural training on program forms, including WAP (Hancock, HEAT) software

Weatherization Services Training: Training related to specific Wx functions is key to effective service delivery. Areas of expertise include training in:

- Energy Audit & Final Inspection: techniques, tools, testing used in all of the technical aspects of Wx; evaluation skills, building science; audit software/forms training.
- Wx Installation: tools, techniques, & materials used in installation of Wx measures; carpentry, spray foam techniques, ventilation; plumbing and electrical safety.
- Crew Supervision: technical training on every aspect of Wx; supervisory skills & human relations; specialized site safety training such as OSHA and lead safe work practices; proper use of protective equipment (PPEs) and MSDS.
- Mechanical Systems: tools, techniques, parts and materials used in various areas of the installation of Wx mechanical measures; worst case draft testing (CAZ), combustion appliances, plumbing and electrical; other specific mechanical work; state certification. Manufactured Home Training for Auditors, Inspectors and Installers: tools, techniques, and materials used in auditing, inspecting, and installations including special aspects to weatherizing manufactured homes.
- Comprehensive training on SWS aligned MD Field Guides: overall training on protocols and technical information needed for Wx work.
- H&S Training: Wx work must be conducted in such a way as to avoid current and future harm to the client and other residents, and Wx workers. H&S training is vital, including some of the following areas:
 - Indoor Air Quality: all training on the recognition and mitigation of IAQ issues, including mold, moisture, volatile compounds, and so forth.
 - Combustion Appliance Safety
 - OSHA: worker safety training for new subgrantee staff and contractor staff
 - Lead Safety: EPA lead safety regulations and EPA Certified Renovator course; Maryland regulations; Lead safe work practices
- Lead Safety Training Requirement: Unless there is existing evidence that a home has been certified lead free, or the work is below lead threshold limits, lead safe work practices in accordance with the SWS and EPA protocols must be applied to all pre-1978 target housing. The EPA LRRP rule requires that such work must be conducted under supervision of a Certified Renovator. (Note that EPA rules apply to all work, not just weatherization.)

TRAINING RESPONSIBILITIES:

A meaningful training curriculum works when all of the stakeholders participate fully in both the training, and in suggesting ways in which the curriculum may be designed and improved.

Subgrantee Responsibilities: The subgrantee is responsible for tracking compliance to training requirements for all individuals at the local level, and for reporting on training participation in the State monitoring process. Subgrantees should also provide information and suggestions regarding the training curriculum as local needs are identified.

Training Plan and Budget: Prior to the development of the State Plan, the State works with Subgrantees to determine training needs and plan for that Program Year's State sponsored training activities. Subgrantees may submit additional requests to the State for training activities not outlined in the State Plan. Subgrantees may also obtain training for their staff and/or contractors through their T&TA funding. Subgrantee sponsored training requires a training request and State approval.

**U.S. Department of Energy
WEATHERIZATION ASSISTANCE PROGRAM (WAP)
STATE PLAN/MASTER FILE WORKSHEET**

(Grant Number: EE0009907, State: MD, Program Year: 2022)

Training Compliance Monitoring: It is the subgrantee's responsibility to maintain records confirming that all certification, licensing, and training are current. Subgrantees must maintain an inventory of all training attended by individuals working on the weatherization program, whether it is with the subgrantee itself or its contractors. Subgrantees must also track all contractors' licenses for all contractors working in areas that require licensing. The State will monitor the participation by subgrantees and subgrantee contractors to ensure compliance with certification, licensing, and training requirements. Wx measures installed by untrained personnel, whether employed by the Subgrantee or by its contractors, may result in questioned and/or disallowed costs for the entirety of Wx work completed on a unit.

Retention Agreement: Pursuant to DOE's Weatherization Program Notice 12-1, dated January 31, 2012, T&TA funds may also be used to train contractors at the subgrantee level participating in the Program. In making the determination to pay for contractors' training, subgrantees must secure a retention agreement in exchange for the training. The retention agreement shall require that contractors will work in the Program for a specific amount of time and must align with the cost of the T&TA provided.

Contractor Responsibilities: Given the continuous evolution of residential Wx practices, it is important for all individuals to maintain a strong knowledge of current best practices in the industry. Maryland's contractors agree in contractual assurances that their Wx employees will participate fully in training appropriate to their work, as required by the subgrantee and the State. Contractors are also required to maintain current and proper licenses, and certifications, as required by law for their particular work. Client education is one of the most important parts of the audit process because it has been proven to significantly increase the potential for energy savings in the homes that are weatherized.

Percent of overall trainings

Comprehensive Trainings:	65.0
Specific Trainings:	35.0

Breakdown of T&TA training budget

Percent of budget allocated to Auditor/QCI trainings:	40.0
Percent of budget allocated to Crew/Installer trainings:	50.0
Percent of budget allocated to Management/Financial trainings:	10.0

V.9 Energy Crisis and Disaster Plan

The purpose of Maryland's Department of Energy (DOE) disaster planning and relief is to provide emergency services to low income individuals and families affected by a disaster as determined by a Presidential or Gubernatorial order declaring either a Federal or State Emergency. DOE WAP has a very limited role in any disaster response. Funds are limited to eligible weatherization activities and the purchase and delivery of weatherization materials. To the extent that services are in support of eligible weatherization (or permissible re-weatherization) work for eligible households, such expenditure is allowable.

MD WAP will weatherize homes in accordance with program rules and regulations. Acceptable uses of DOE WAP funding during Disasters include:

- Replacement of prior weatherization materials in compliance with 10 C.F.R § 440.18(f) (2) (ii), which permits replacement if the materials are not paid for by the insurance.
- Incidental repairs to make the installation of weatherization materials effective in compliance with WPN 12-09 Incidental Repair Measure Guidance (debris removal is included in disaster replacement).
- Cost to eliminate health and safety hazards necessary to the installation of weatherization materials.
- Energy-related health and safety as identified in the MD Health and Safety Plan outlined in the Master File. Health and Safety expenditure could be increased by DHCD for crisis damaged units as applicable.

Additional guidance is provided in the DOE WPN 12-7 which can be found at <http://energy.gov/eere/wip/downloads/wpn127revisedguidanceweatherizationdisasterplanningandrelief>

Weatherization Grantee Health and Safety Plan

POLICY SUBMITTED WITH PLAN

1.0 – GENERAL INFORMATION

Grantees are encouraged to enter additional information here that does not fit neatly in one of the other sections of this document.

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. Maryland's Weatherization Program Operations Manual (POM) addresses Health and Safety in accordance with 10 CFR 440.16(h), 440.18(d)(15), 440.21(5), and the Department of Energy's (DOE) most recent Health and Safety Guidance in Weatherization Program Notices (WPN) 22-7.

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 maintaining the physical well-being of both the occupants and/or weatherization workers where:

- Costs are reasonable, as determined by DOE, and are in accordance with the approved State Plan; 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 occupant?

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.

2.0 – BUDGETING

Grantees are encouraged to budget Health & Safety (H&S) costs as a separate category and, thereby, exclude such costs from the average cost per unit cost (ACPU) limitation. This separate category also allows these costs to be isolated from energy efficiency costs in program evaluations. Grantees are reminded that, if H&S costs are budgeted and reported under the program operations category rather than the H&S category, the related H&S costs must be included in the calculation of the ACPU and cost-justified through the approved energy audit.

Select which option is used below.

Separate Health and Safety Budget

Contained in Program Operations

3.0 – HEALTH AND SAFETY EXPENDITURE LIMITS

Pursuant to [10 CFR 440.16\(h\)](#), Grantees must set H&S expenditure limits for their Program, providing justification by explaining the basis for setting these limits and providing related historical experience.

Low percentages should include a statement of what other funding is being used to support H&S costs, while larger percentages will require greater justification and relevant historical support. It is possible that these limits may vary depending upon conditions found in different geographical areas. These limits must be expressed as a percentage of the ACPU. For example, if the ACPU is \$5,000, then an average expenditure of \$750 per dwelling would equal 15 percent expenditures for H&S.

15 percent is not a limit on H&S expenditures but exceeding this amount will require ample justification. These funds are to be expended by the Program in direct weatherization activities. While required as a percentage of the ACPU, if budgeted separately, the H&S costs are not calculated into the per-house limitation.

It is also recommend reviewing recent budget requests, versus expenditures to see if previous budget estimates have been accurate. The resulting "Total Average H&S Cost per Unit" multiplied by the Grantee's production estimate in the Annual File should correlate to the H&S budget amount listed in the Grantee's state plan.

Should a Grantee request to have more than 15 percent of Program Operations used for health and safety purposes, DOE will conduct a secondary level of review.

DHCD sets health and safety expenditure limits using historical data pulled from the Hancock Energy Software to identify all H&S measures installed and the number of completed jobs per measure to establish an average cost per measure. Additional detail to justify the increase in H&S expenditures is provided as an attachment.

DHCD will set an average H&S expenditure limit of 20% of the per unit average for Program Operations. This percentage will vary based on actual expenditures and will be averaged across all units. Subgrantees will be required to maintain their budget limitation, exceeding budget limits shall result in disallowed costs. DHCD will require subgrantees to track H&S costs and related measures in order to support future budget requests.

4.0 – INCIDENTAL REPAIR MEASURES

If Grantees choose to identify any H&S measures as incidental repair measures (IRMs), they must be implemented as such under the Grantee's weatherization program in all cases – meaning, they can never be applied to the H&S budget category. In order to be considered IRMs, the measure must fit the following definition and be cost justified along with the associated efficiency measure;

Incidental Repairs means those repairs necessary for the effective performance or preservation of weatherization materials. Such repairs include, but are not limited to, framing or repairing windows and doors which could not otherwise be caulked or weather-stripped and providing protective materials, such as paint, used to seal materials installed under this program. ([10 CFR 440 "Definitions"](#))

Incidental Repair Measures (IRM) includes materials and installation which are performed because they are deemed necessary for the preservation and effectiveness of one or more energy saving measures. The energy saving measure that requires the installation of an incidental repair must be documented in Hancock. IRM costs are not added to any individual or partial group of energy saving measure costs. The total cost of all IRMs is added to the cost of the package of weatherization measures to calculate the whole unit (SIR).

Such repairs include the following categories and can never be applied to the health and safety budget category under this program:

- Drainage (gutters, down spouts, extensions, flashing, sump pumps, landscape, etc. - See section 7.16)
- Electrical, other than Knob-and-Tube Wiring (See section 7.9)
- Electrical, Knob-and-Tube Wiring

- Building Structure and Roofing

5.0 – DEFERRAL/REFERRAL POLICY

Deferral of services may be necessary if H&S issues cannot be adequately addressed according to WPN 17-07 guidance. The decision to defer work in a dwelling 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 and/or alternative sources of help are found. If, in the judgment of the auditor, any conditions exist which may endanger the health and/or safety of the workers or occupants, the unit should be deferred until the conditions are corrected. Deferral may also be necessary where occupants are uncooperative, abusive, or threatening. Grantees must be specific in their approach and provide the process for clients to be notified in writing of the deferral and what conditions must be met for weatherization to continue. Grantees must also provide a process for the client to appeal the deferral decision to a higher level in the organization.

Grantee has developed a comprehensive written deferral/referral policy that covers both H&S, and other deferral reasons?

Yes No

Where can this deferral/referral policy be accessed?

The decision to defer work in a dwelling 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 and /or alternative sources of assistance are found. In the judgment of the auditor, any conditions that exist, which may endanger the health and/or safety of the workers or occupants, should be deferred until the conditions are corrected.

Deferral may also be necessary where occupants are uncooperative, abusive, or threatening. Local Weatherization Agencies (LWAs) who determine that a home is beyond the scope of DHCD’s Weatherization Program must notify a DHCD Quality Assurance Inspector before the unit is deferred. Pending DHCD approval, LWAs must document the decision to defer in the Hancock Energy Software by providing a description of the repairs needed, uploading photographic evidence to support the repairs needed, and completing the Deferral Form to include cost estimates. The Deferral Form must be signed by the Auditor and client. Clients shall be notified in writing within 7 calendar days of the site visit wherein a determination was made to defer the work.

The notification shall include:

- client’s name and address
- date of the audit/assessment
- date the client was informed of a potential health and safety issue
- clear description of the problem
- statement indicating conditions under which weatherization could continue
- responsibility of all parties involved
- appeal process
- signature of Local Weatherization Agency Representative
- client’s signature indicating that they understand and have been informed of their rights and options.

LWAs 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.

All measures identified in the H&S Plan are allowable H&S costs in accordance with WPN 22-7. However, a measure is charged as an ECM where it meets an SIR of 1.0. DHCD will monitor the use of H&S educational literature during Quality Assurance Inspections and subgrantee programmatic monitoring.

Deferral conditions may include:

Costs – Health and Safety items are cost-prohibitive

Condemned - The house has been condemned or is scheduled for demolition; electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities; and repair/replacement is beyond the scope of the WAP.

Extensive Work Scope - the building is in need of extensive rehabilitation, and no such rehabilitation has been provided for.

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, 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 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 LWA employee, prior approval must be obtained from DHCD before any work is started. If the client is a board member or senior staff member of the LWA prior approval will not be granted.

Before a house is deferred, a DHCD Quality Assurance Inspector must be notified. Pending their approval, a Deferral Form that is signed by the Auditor and client must be uploaded in Hancock. When a home has been deferred, the client must be notified in writing of the deferral and what corrective actions are necessary for weatherization to continue.

Additionally, the client should be informed of the process of appeal to a higher level in the organization. In unusual situations not covered above or where other problems of a unique nature exist, the DHCD Quality Assurance Inspector will 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 discrepancies prior to weatherization.

Procedures for Deferral

The Energy Auditor must obtain prior approval from a DHCD Quality Assurance Inspector to defer a unit. The Energy Auditor or LWA representative must complete the Deferral Form. The Auditor and client must sign the form. A copy of the signed form must be provided to the client. If the property is a rental, the Auditor and client must sign the form and a copy of the signed form must be provided to the client and the property owner.

Additionally, a copy must be maintained in the client file and uploaded into Hancock. If the client refuses to sign the form, the Energy Auditor must contact the LWA. The LWA must attempt to contact the client to clearly explain the reason for the deferral and what corrective actions are necessary for weatherization to proceed. If the client still refuses to sign the form, the LWA representative must provide information of the process for them to appeal to a higher level in the organization. If the client still refuses to sign, the LWA representative will write “client refused to sign” on the client signature line and leave the client with a copy of the form.

Client files must include a copy of deferral documentation. Deferral documentation must include supporting documentation of the reason for deferral outlined on the Weatherization Deferral Form. This documentation must be uploaded in to the Hancock Energy Software system.

Additionally, the client record must be updated in the Hancock System. The LWA must note the reason for the deferral in the ‘Denied Client’ Measure in order for the case to be closed. Note that not all deferral methods have been listed as separate measures in Hancock, so it may be necessary to choose one that is similar and provide additional information in the comments section online. The deferral form must be uploaded before the job will be closed.

6.0 – HAZARD IDENTIFICATION AND NOTIFICATION FORM(S)

Documentation forms must be developed that include at a minimum: the client's name and address, dates of the audit/assessment and when the client was informed of a potential H&S issue, a clear description of the problem, a statement indicating if, or when weatherization could continue, and the client(s) signature(s) indicating that they understand and have been informed of their rights and options.

Documentation Form(s) have been developed and comply with guidance?

Yes No

7.0 – HEALTH AND SAFETY CATEGORIES

For each of the following H&S categories identified by DOE:

- *Explain whether you concur with existing guidance from WPN 17-07 and how that guidance will be implemented in your Program, if you are proposing an alternative action/allowability, or if the identified category will not be addressed and will always result in deferral. Alternatives must be comprehensively explained and meet the intent of DOE guidance.*
- *Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 17-07, Grantees must concur, or choose to defer all units where the specific category is encountered.*
- *“Allowable” items under WPN 17-07 leave room for Grantees to determine if the category, or testing, will be addressed and in what circumstances.*
- *Declare whether DOE funds or alternate funding source(s) will be used to address the particular category.*
- *Describe the explicit methods to remedy the specific category.*
- *Describe what testing protocols (if any) will be used.*
- *Define minimum thresholds that determine minor and major repairs*
- *Identify minimum documentation requirements for at-risk occupants*
- *Discuss what explicit steps will be taken to educate the client, if any, on the specific category if this is not explained elsewhere in the Plan. Some categories, like mold and moisture, require client education.*
- *Discuss how training and certification requirements will be provided for the specific category. Some categories, like Lead Based Paint, require training.*
- *Describe how occupant health and safety concerns and conditions will be solicited and documented*

Grantees may include additional H&S categories for their particular Programs. Additional categories must include, at a minimum, all of the same data fields as the DOE-provided categories. Two additional tables have been created to utilize.

7.1 – Air Conditioning and Heating Systems

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Air Conditioning Unallowable Measure Heating Unallowable Measure

Funding

DOE LIHEAP State Utility Other

Primary space conditioning system repair, replacement or installation is allowed when it qualifies as an ECM and meets and SIR of 1.0. If an SIR of 1.0 is not attainable then other funds may be leveraged.

How do you address unsafe or non-functioning primary heating/cooling systems?

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 primary heating systems replacement, repair or installation is allowed due to Maryland’s climate conditions. According to recent NOAA data, Cooling Degree Days (CDD) for Baltimore Washington International (BWI) Airport ranged from 1084 CDD in 2014 to 1742 CDD in 2010.
- Primary air conditioning system replacement, repair, or installation is allowed only in homes where current occupants meet the definition of “at-risk” and climate conditions warrant.
- A Manual J is required when installing or replacing a heating or cooling appliance.
- If unsafe primary units can’t be repaired, replaced, removed, or rendered inoperable, it must be deferred.

How do you address unsafe or non-functioning secondary heating systems, including unvented secondary space heaters?

Replacement or installation of secondary units is not allowed. Unsafe units must be repaired, removed, or rendered inoperable, or deferral is required.
Indicate Documentation Required for At-Risk Occupants
Furnaces and/or air conditioning system replacement, repair or installation will be considered in homes occupied by at risk occupants when climate conditions are warranted and when other funds are leveraged. An at-risk occupant is a household member with a medical condition documented by a physician that requires air conditioning. No new installation of air conditioning systems is permitted where an existing air conditioning system does not exist. Medical documentation must be no older than 180 days. Air conditioning may be repaired when practical and costs are less than replacement.
Testing Protocols
Ensure primary 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.
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.
Training
WAP H&S policy training on allowable activities. Licensing and/or certification for HVAC installers as required by authority having jurisdiction. CAZ depressurization test and inspection training.

7.2 - Asbestos - All
What is the blower door testing policy when suspected Asbestos Containing Material (ACM) is identified?
When it is suspected that asbestos containing material is identified, unless testing proves otherwise, assume it contains asbestos and take precautionary measures. Encapsulation of asbestos is allowed by an AHERA asbestos control professional and should be conducted prior to blower door testing.
7.2a – Asbestos - in siding, walls, ceilings, etc.
Concurrence, Alternative, or Deferral
Concurrence with Guidance <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/>
Funding
DOE <input checked="" type="checkbox"/> LIHEAP <input type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
How do you address suspected ACM’s in siding, walls, or ceilings that will be disturbed through the course of weatherization work?
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 <u>not</u> an allowable health and safety measure.
Testing Protocols
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 will be brought to the attention of the owner/occupant. The condition of the asbestos will be assessed and occupants will be advised not to disturb the material. Testing is only allowed by a certified AHERA asbestos control professional.

Client Education

Client will 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 will 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>.

Training and Certification Requirements

Every crew member will have taken the required “Asbestos Awareness” class to be able to identify suspected asbestos materials so that they are protected by inadvertent exposure to this hazard. 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.

7.2b – Asbestos - in vermiculite

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

How do you address suspected ACM’s in vermiculite that will be disturbed through the course of weatherization work?

When vermiculite is present, unless testing performed by an AHERA certified tester proves otherwise, assume it contains asbestos and take precautionary measures. 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.

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.

Testing Protocols

Asbestos may be encapsulated by an AHERA certified professional but this may be cost prohibitive. Removal is not allowed. In cases where it is not cost-effective, a home should be deferred.

Client Education

Client will 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. If suspected asbestos is present, the client will 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>. When deferral is necessary, complete the deferral form and upload it to the client file in the energy software.

Training and Certification Requirements

Every crew member will have taken the required “Asbestos Awareness” class to be able to identify suspected asbestos materials so that they are protected by inadvertent exposure to this hazard. 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.

7.2c – Asbestos - on pipes, furnaces, other small covered surfaces				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
How do you address suspected ACM's (e.g., pipes, furnaces, other small surfaces) that will be disturbed through the course of weatherization work?				
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. Encapsulation of asbestos is allowed by an AHERA asbestos control professional and should be conducted prior to blower door testing.				
Testing Protocols				
Inspect pipe and other coverings for asbestos. Assess the condition of the asbestos and inform occupants not to disturb the material. Encapsulation is allowed by an AHERA certified professional however removal is not allowed. Only costs directly associated with testing and encapsulation may be charged to the H&S category. When deferral is necessary due to asbestos, occupant must provide documentation that a certified professional performed the remediation before work continues.				
Client Education				
Client will 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. If suspected asbestos is present, the client will 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 . When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence. Complete the deferral form and upload it to the client file in the energy software.				
Training and Certification Requirements				
Every crew member will have taken the required "Asbestos Awareness" class to be able to identify suspected asbestos materials so that they are protected by inadvertent exposure to this hazard. 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.				

7.5 – Biologicals and Unsanitary Conditions (odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.)				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Unallowable Measure <input type="checkbox"/>				
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for dealing with biological and/or unsanitary conditions in homes slated for weatherization?				
Small occurrences (less than 10 total square feet) may be addressed using DOE funds under MD WAP 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 remove mold, odors, viruses, bacteria, etc. (including raw sewage or animal excrement) 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				

<p>determination if a remediation specialist, or other hazardous materials removal specialist specific to the issue, should be involved.</p> <p>Other considerations include identifying the cause of the issue (moisture, etc.). Health and Safety 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 (See section 7.16 – Mold & Moisture).</p>
Testing Protocols
<p>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 and the homeowner immediately alerted to the risk. The auditor will document the client file by uploading a write-up in the energy software as well as photographic evidence supporting the visual inspection.</p>
Client Education
<p>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, and if performed within 30 days, weatherization can continue. When deferral is necessary, complete the deferral form and upload it to the client file in the energy software.</p>
Training
<p>DHCD’s required asbestos awareness, mold identification, and weatherization tactics courses allow workers to identify these problems and utilize safe work practices.</p>

7.6 – Building Structure and Roofing				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for dealing with structural issues (e.g., roofing, wall, foundation) in homes slated for weatherization?				
<p>While conducting the initial audit, the building structure shall be inspected for structural integrity. Building rehabilitation is beyond the scope of the WAP.</p> <p>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 will be deferred. Documentation for deferral will include notes of the visual inspections, diagrams of the visual inspection, photographic evidence to support the visual inspection, and costs estimates to replace the wiring.</p>				
How do you define “minor” or allowable structure and roofing repairs, and at what point are repairs considered beyond the scope of weatherization?				
<p>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.</p>				

Dwellings whose structural integrity is in question are beyond the scope of the WAP 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.
If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?
N/A
Client Education
When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence and complete the deferral form and upload it to the client file in the energy software.
Training
How to identify structural and roofing issues.

7.7 – Code Compliance				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for dealing with code compliance issues in homes receiving weatherization measures?				
State and Local codes must be followed while installing weatherization measures. These vary by jurisdiction and it is the responsibility of each Subgrantee agency 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 WAP 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. When code issues lead to deferral, cite specific code requirements in the client file in the energy software. Documentation for deferral will include notes of the visual inspections, diagrams of the visual inspection, and photographic evidence to support the visual inspection.				
What specific situations commonly trigger code compliance work requirements for your network? How are they addressed?				
There are no specific situations that commonly trigger code compliance.				
Client Education				
Inform client of observed code compliance issues in writing when it results in a deferral. Complete the deferral form and upload it to the client file in the energy software.				
Training				
Workers must be qualified and adequately trained according to state and local codes specific to the work being conducted (electrical, plumbing, etc.).				

7.8 – Combustion Gases				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
Testing Protocols				
<p>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.</p> <p>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 will include:</p> <ul style="list-style-type: none"> 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. Checking the audit to determine if the appliance can be justified as an ECM prior to replacement as an H&S measure. Completing a Manual J when installing or replacing a heating or cooling appliance. <p>When replacing an appliance for H&S, test for cost-effectiveness first and install as ECM if possible. If replacing as H&S, document comparison of costs of replacement vs. repair by uploading it into the client file in the energy software.</p>				
How are crews instructed to handle problems discovered during testing, and what are the specific protocols for addressing hazards that require an immediate response?				
<p>Carbon Monoxide (CO) is produced anytime fossil fuels are burned to produce heat and the burn is incomplete. There are many circumstances that can cause this situation to occur and the danger of CO spilling into the ambient air of the household is always present. 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 Action Level Table below) .</p>				
CO Test Result*	And/ Or	Spillage and Draft Test Results	Retrofit Action	
0 – 25 ppm	<i>And</i>	Passes	Proceed with work	
26 – 100 ppm	<i>And</i>	Passes	Recommend that the CO problem be fixed	
26 – 100	<i>And</i>	Fails at worst	Recommend a service call for the	

ppm		case only	appliance and/or repairs to the home
			to correct the problem
100 - 400 ppm	<i>Or</i>	Fails under natural conditions	Stop Work: Work may not proceed until the system is serviced and the problem is corrected
> 400 ppm	<i>And</i>	Passes	Stop Work: Work may not proceed until the system is serviced and the problem is corrected
> 400 ppm	<i>And</i>	Fails under any condition	Emergency: Shut off fuel to the appliance and have the homeowner to call for service immediately

Client Education

Client will 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 will 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, or the Center for Disease Control's "What is Carbon Monoxide?" located at www.cdc.gov/co/pdfs/faqs.pdf, or both.

Training

How to perform appropriate testing, determine when a building is excessively depressurized, and the difference between air free and as-measured CO.
CO action levels.

7.9 – Electrical

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

What guidance do you provide Subgrantees for dealing with electrical hazards, including knob & tube wiring, in homes slated for weatherization?

How do you define "minor" or allowable electrical repairs, and at what point are repairs considered beyond the scope of weatherization?

Electrical (Other than Knob and Tube)

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 defined in 10 CFR 440, Incidental Repairs are those repairs necessary for the effective performance or preservation of weatherization materials. Incidental repair measures must be cost justified in the energy audit.

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 WAP 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 sub-contracting. Testing shall include visual inspection, as well as voltage drop and voltage detection testing. Provide client information on overloading circuits and electrical safety and risks.

Electrical (Knob and Tube)

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 defined in 10 CFR 440, Incidental Repairs are those repairs necessary for the effective performance or preservation of weatherization materials. Incidental repair measures must be cost justified in the energy audit.

However, DHCD prohibits installing insulation over knob-and-tube wiring. Prior to insulating around Knob and Tube wiring, cost effectiveness must be evaluated and barriers must be installed to keep insulation at least three inches from the Knob and Tube.

If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?

N/A

Client Education

When electrical issues are the cause of deferral, provide information to the client on over-current protection, overloading circuits, and basic electrical safety/risks. Complete the deferral form and upload it to the client file in the energy software.

Training

How to identify electrical hazards.
Local code compliance.

7.10 – Formaldehyde, Volatile Organic Compounds (VOCs), Flammable Liquids, and other Air Pollutants

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

What guidance do you provide Subgrantees for dealing with formaldehyde, VOCs, flammable liquids, and other air pollutants identified in homes slated for weatherization?

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 will include notes of the inspections and photographic evidence to support the inspections.

Testing Protocols
Visual and sensory inspection is the primary mechanism for determining the hazards of VOCs and other air pollutants.
Client Education
Inform client in writing of observed hazardous condition and associated risks. Provide client written materials on safety issues and proper disposal of household pollutants. When deferral is necessary, complete deferral form and upload into the client file in the energy software.
Training
How to recognize potential hazards and when removal is necessary.

7.11 – Fuel Leaks <i>(please indicate specific fuel type if policy differs by type)</i>				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
Remediation Protocols				
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. When a minor gas leak is found on the utility side of service, the utility service must be contacted before work may proceed. Fuel leaks that are the responsibility of the client (vs. the utility) must be repaired before weatherizing a unit. Notify utilities and temporarily halt work when leaks are discovered that are the responsibility of the utility to address.				
How do you define allowable fuel leak repairs, and at what point are repairs considered beyond the scope of weatherization?				
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. Fuel leak repairs that are the responsibility of the utility service are beyond the scope of weatherization. If the fuel leak is determined to be the responsibility of the utility, suspend work until the utility service addresses the leak.				
Client Education				
Inform clients in writing if fuel leaks are detected.				
Training				
Fuel leak testing.				

7.12 – Gas Ovens / Stovetops / Ranges				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for addressing unsafe gas ovens/stoves/ranges in homes slated for weatherization?				
When testing indicates a problem, agencies may perform standard maintenance on, or repair, gas cooktops and ovens. Replacement is not allowed.				

Testing Protocols
Test gas oven for CO. Inspect cooking burners and ovens for operability and flame quality (See section 7.8 – <i>Combustion Gases</i> – Action Level Table).
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.
Training
Testing techniques. CO action levels.

7.13 – Hazardous Materials Disposal [Lead, Refrigerant, Asbestos, Mercury (including CFLs/fluorescents), etc.] <i>(please indicate material where policy differs by material)</i>				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
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.				
Training				
Appropriate Personal Protective Equipment (PPE) for working with hazardous waste materials. Disposal requirements and locations. Health and environmental risks related to hazardous materials.				
Disposal Procedures and Documentation Requirements				
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 responsible party.				

7.14 – Injury Prevention of Occupants and Weatherization Workers (Measures such as repairing stairs and replacing handrails)				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees regarding allowable injury-related repairs (e.g., stairs, handrails, porch deck board)?				
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 in the program. Such situations are considered to be beyond the scope of Maryland WAP.				

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

How do you define “minor” or allowable injury prevention measures, and at what point are repairs considered beyond the scope of weatherization? Quantify “minor” or allowable injury prevention measures.

These types of repairs are considered to be beyond the scope of Maryland WAP.

Training

Identify health and safety hazards according the OSHA method “Focus Four” which includes, electrical, fall protection, caught in and between, and stuck-by hazards.

7.15 – Lead Based Paint

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

Safe Work Protocols

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.

Testing Protocols

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 WAP measure installation is allowed per RRP requirements. Testing methods must be economically feasible and justified. Job site set up and cleaning verification is required by a Certified Renovator.

Deferral is required when the extent and condition of lead-based paint in the house would potentially create further H&S hazards. Only those costs directly associated with the testing and lead safe practices for surfaces directly disturbed during weatherization activities are allowed.

Client Education

Client will be informed of the hazards of lead paint. Each affected family will 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. When deferral is necessary, complete the deferral form and upload it to the client file in the energy software.

Training and Certification Requirements

DHCD requires energy auditors, crew supervisors and all workers be trained and certified through the Maryland Department of Environment's approved curriculum for lead paint inspectors, supervisors and workers. The training will be in compliance with the SWS and EPA standards for Lead Renovators; each contractor is required to have and maintain RRP certification.

Documentation Requirements

Documentation must be uploaded to the client file in the energy software and must include any training provided on-site; description of specific actions taken; lead testing and assessment documentation; and, photos of site and containment setup. Even when a home tests negative for lead, the test form must be completed and uploaded to the client file.

7.16 – Mold and Moisture				
(Including but not limited to: drainage, gutters, down spouts, extensions, flashing, sump pumps, dehumidifiers, landscape, vapor retarders, moisture barriers, etc.)				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for dealing with moisture related issues (e.g., drainage, gutters, down spouts, moisture barriers, dehumidifiers, vapor barrier on bare earth floors) in homes slated for weatherization?				
<p>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.</p> <p>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.</p> <p>Mold-like substance assessment means a visual assessment combined with certain allowable diagnostics. It does not mean testing for mold. DOE funds may not be used to test for mold.</p> <p>Where severe mold and moisture issues cannot be addressed, deferral is required. Mold clean-up is not an allowable H&S cost. 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.</p>				
How do you define “minor” or allowable moisture-related measures, and at what point is work considered beyond the scope of weatherization?				
<p>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 will include the square footage of the area affected. Where severe mold and moisture issues cannot be addressed, deferral is required.</p>				
Client Education				
<p>Client will be provided written notification and disclaimer on mold and moisture awareness. The client will 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 www.epa.gov/mold/pdfs/moldguide.pdf.</p>				

When deferral is necessary, complete the deferral form and upload it to the client file in the energy software. Documentation for deferral will include notes of the visual inspections and photographic evidence to support the visual inspection. In cases where mold like substances have been detected, assessors will include the square footage of the area affected.

Training

Weatherization workers at all levels are required to take a mold awareness class. The Auditor evaluates the existence of mold and moisture problems which may prevent the weatherization of the home at that time. The agency will refer the unit to an appropriate local agency for remedial action before any further weatherization activities are performed.

7.17 – Pests

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

What guidance do you provide Subgrantees for dealing with pests and pest intrusion prevention in homes slated for weatherization?

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. Screening of windows and points of access and incorporating pest exclusion into air sealing practices to prevent intrusion is allowed.

Inform client of observed conditions and associated risks.

Define Pest Infestation Thresholds, Beyond Which Weatherization Is Deferred

Determine whether the pest infestation would prevent or hamper the weatherization work. 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. If removal is not a viable and cost-effective option or significant health and safety risks exist, defer the weatherization work and provide client with appropriate referral information.

Testing Protocols

Assess presence and degree of infestation and risk to workers.

Client Education

Client will be informed in writing of observed condition and associated risks. When deferral is necessary, complete deferral form and upload into the client file in the energy software. Documentation for deferral will include notes of the visual and sensory inspections, as well as photographic evidence to support the inspection. The client file will also include cost estimates for the removal of the pests from a Pest Removal specialist.

Training

How to assess presence and degree of infestation and risk to workers.

7.18 – Radon

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

What guidance do you provide Subgrantees around radon?
<p>In homes where radon may be present, work scope should include precautionary measures based on “EPA Healthy Indoor Environment Protocols” for Home Energy Upgrades, to reduce the possibility of making radon issues worse. 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.</p> <p>Whenever site conditions permit, cover exposed dirt floors within the pressure/thermal boundary with a sealed soil gas retarder. Cover sump well/pits with airtight covers. Implement ventilation as required by ASHRAE 62.2-2016. Other precautions may include, but are not limited to, sealing any observed floor and/or foundation penetrations, isolating the basement from the conditioned space, and ensuring crawl space venting is installed.</p> <p>Where there is a previously identified radon problem, work that would exacerbate this problem will not be allowed. Radon mitigation is not an allowable H&S cost. Major radon problems should be referred to the appropriate local environmental organization or agency for mitigation or abatement.</p>
Testing Protocols
Radon testing is not an allowable activity under the MD WAP.
Client Education
Client will be informed of the hazards of radon and provided the EPA’s “A Citizens Guide to Radon”. This document can be found at www.epa.gov/radon/pdfs/citizensguide.pdf . Clients must sign and informed consent form prior to receiving weatherization services. This form must be uploaded in the client file in the energy software.
Training and Certification Requirements
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
Documentation Requirements
<p>Clients must sign and informed consent form prior to receiving weatherization services. The consent form will include:</p> <ul style="list-style-type: none"> ● 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. <p>This form must be uploaded in the client file in the energy software.</p>

7.19 – Safety Devices: Smoke and Carbon Monoxide Alarms, Fire Extinguishers				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>

What is your policy for installation or replacement of the following:
Smoke Alarms: Installation of smoke alarms is allowed where detectors are not present or are inoperable. There will be one smoke alarm per floor. Replacement of operable smoke alarms is not an allowable cost. Replacement smoke alarms must be sealed with a 10-year lithium battery.
Carbon Monoxide Alarms: Installation of CO detectors is required to comply with ASHRAE 62.2. There will be one CO detector per floor. Replacement of operable CO detectors is not an allowable cost. Replacement CO alarms must be sealed with a 10-year lithium battery
Fire Extinguishers: Providing fire extinguishers is allowed only when solid fuels (such as wood) are present.
Testing Protocols
Replacement of operable smoke alarms and CO detectors is not an allowable cost. Check existing alarms for operation and manufacture date. Verify operation of installed alarms.
Client Education
Client will be provided with verbal and written information on use of devices installed.
Training
Where to install alarms. Local code compliance.

7.20 – Occupant Health and Safety Concerns and Conditions				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for soliciting the occupants' health and safety concerns related to components of their homes?				
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 detail regarding materials and installation procedures.				
What guidance do you provide Subgrantees for determining whether occupants suffer from health conditions that may be negatively affected by the act of weatherizing their home?				
The auditor will 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 will be noted on the audit form as necessary to direct installation staff to isolate work or use alternate methods. Weatherization processes and potential impacts should be explained to the owner with consideration of any health issues. If the occupant determines that the weatherization work will cause undue stress on an existing condition, the house will be deferred.				
What guidance do you provide Subgrantees for dealing with potential health concerns when they are identified?				
Health conditions will not preclude clients from receiving weatherization if reasonable accommodations can eliminate the issue. The Energy Auditor will plan to address any preexisting health conditions or concerns through isolation or work tasks, or deferral in extreme cases.				
Client Education				
Client will be informed in writing of any known risks. Agency should provide client with point of contact information in writing so client can inform of any issues. When deferral is necessary, complete the deferral form and upload it to the client file in the energy software.				
Documentation Form(s) have been developed and comply with guidance?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

A "Occupant Health and Safety Concerns and Conditions" form is under development and in the interim, occupant revealed health concerns or conditions will be noted on the audit form as necessary to direct installation staff to isolate work or use alternate methods.

7.21 – Ventilation and Indoor Air Quality				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
Identify the Most Recent Version of ASHRAE 62.2 Implemented (optional: identify Addenda used)				
DHCD has fully implemented the requirements of ASHRAE 62.2-2016.				
Testing and Final Verification Protocols				
Ventilation is only required if ASHRAE 62.2 calculations indicate added ventilation. 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.				
Client Education				
Clients cannot refuse mechanical ventilation. Subgrantees who install ventilation must educate the clients on effective use of the exhaust ventilation equipment by:				
<ul style="list-style-type: none"> ● 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. 				
Training				
ASHRAE 62.2 training, including proper sizing, evaluation of existing and new systems.				

7.22 – Window and Door Replacement, Window Guards				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide to Subgrantees regarding window and door replacement and window guards?				
Replacement, repair, or installation is not an allowable H&S cost.				
Testing Protocols				
Not Applicable				
Client Education				
Provide written information on lead risks wherever issues are identified.				

Training		
Awareness of guidance.		
7.23 – Worker Safety (OSHA, etc.)		
Concurrence, Alternative, or Deferral		
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>
Funding		
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
How do you verify safe work practices? What is your policy for in-progress monitoring?		
<p>Subgrantees 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 the workers can take to protect themselves.</p> <p>DHCD will require 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.</p> <p>DHCD monitors and inspectors will verify that subgrantees, crews and contractors follow safe work practices.</p>		
Training and Certification Requirements		
Use and importance of PPE. Safety training appropriate for job requirements. OSHA 10 hour training meets this requirement. Ongoing training as required in Hazard Communication Plan.		