

South Carolina Weatherization Health and Safety Plan

1.0 – GENERAL INFORMATION

Additional information that does not fit neatly in one of the other sections of this document.

The maximum amount of DOE WAP funds to be spent on health and safety per dwelling unit is \$1,050.

2.0 – BUDGETING

Grantees are encouraged to budget H&S costs as a separate category and, thereby, exclude such costs from the Average Cost Per Unit (ACPU) cost limitation. This separate category also allows these costs to be isolated from energy efficiency costs in evaluations. H&S costs that are budgeted and reported under the Program Operations category rather than the H&S category, related H&S costs must be included in the calculation of the ACPU and cost-justified through the Grantee’s Department of Energy the program (DOE)-approved energy audit tool.

Select which option used below.

Separate H&S Budget

Contained in Program Operations

3.0 – H&S EXPENDITURE LIMITS

Pursuant to [10 CFR 440.16\(h\)](#), Grantees must establish H&S expenditure limits for their Program and provide justification for limits by explaining the basis and related historical H&S expenditures. DOE acknowledges that it may be necessary for Grantees to deviate from historical expenditures when certain circumstances arise (e.g., funding source changes).

[10 CFR 440.16\(h\)\(2\)](#) dictates that these limits must be expressed as a percentage of the ACPU. To calculate this percentage, use the following formula:

$$\text{Total Average H\&S Cost per Unit} = \frac{\text{H\&S Budget Amount}}{\text{Program Operations Budget Amount}}$$

For example, if the ACPU is \$5,000 and a Grantee’s Program expends an average of \$750 per dwelling on energy-related H&S measures, the Total Average H&S Cost per Unit would equal 15 percent. DOE acknowledges that this percentage may vary significantly between Grantees due to different geographical areas and depending upon the availability of other funding sources, resource availability, etc. Low percentages should include a statement of what other funding supports H&S costs, while larger percentages will require greater justification and relevant historical support.

15 percent is not a maximum limit on H&S expenditures. DOE will conduct a secondary level of review on H&S Plans with a Grantee request of more than 15 percent of Program Operations used for H&S purposes. **DOE strongly encourages using the table below in developing justification for the requested H&S budget amount.** In accordance with [10 CFR 440.18\(d\)\(15\)](#), these funds are to be expended by the Program in direct weatherization activities, “of which is necessary before, or because of, installation of weatherization materials.” This same section of the regulation excludes the H&S costs from the ACPU limitation if H&S costs are budgeted separately.

DOE recommends reviewing recent budget requests and compare those to actual H&S 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 annual plan.

H&S expenditure limits and justification explaining the basis for setting the limits.

The budget request for Health and Safety for Program Year 2023 is \$165,137. This represents 10% of program operations (\$1,651,364). This is a slight increase from the amount requested in Program Year 2022. Most of the Health and Safety funds spent in South Carolina are LWAP funds. In PY 21 and 22, South Carolina spent more than twice as much LWAP money on Health and Safety measures as DOE money. The maximum amount of DOE funds that can be spent on Health and Safety measures remains \$1,050 per dwelling unit.

Utilizing the spreadsheet embedded below, provide a full list of H&S measures using historical data from your program, including average cost, and frequency rate. If installing more than a single instance of one measure in a unit (e.g., multiple CO alarms), Grantees may aggregate costs so that frequency does not exceed 100%, or enter a justification into the measure column, which explains why that measure has a frequency rate of over 100%. The spreadsheet will auto calculate your expected Total Average H&S Cost per Unit.

Instructions: Double-click icon directly below to open, view and edit Measure Matrix Spreadsheet. Complete the spreadsheet by entering the required information. To save, close the spreadsheet and it will save to this document.



Measure Matrix
Final.xlsx

4.0 – INCIDENTAL REPAIR MEASURES

Any measures that could potentially be identified as H&S, but the Grantee chooses to instead identify and treat those measures as incidental repair measures (IRMs), must be implemented consistently throughout the Grantee’s weatherization program. The measure must fit the regulatory definition of an IRM and be cost justified along with the associated energy conservation measure and/or package of measures. [10 CFR 440.3](#) defines Incidental Repairs as, “those repairs necessary for the effective performance preservation of weatherization materials.”

H&S measures identified and treated as IRMs within your Program.

Any measure referenced in conjunction as an Energy Conservation Measure will be considered an Incidental Repair Measure, otherwise they will be considered a Health and Safety 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.

The following measures will be performed as Incidental Repair Measures (IRM) when they can be attached to a relevant Energy Conservation measure (ECM). Otherwise, they will be considered a Health and Safety measure. In accordance with WPN 19-5, IRMs are measures necessary for the effective performance or preservation of installed ECMs. If the measures cannot be attached as an IRM to an ECM, the measures may be charged to Health and Safety as a stand-alone measure.

- Moisture Repairs
- Electrical Repairs

Repairing a small roof leak will be charged to Health and Safety when no attic insulation is installed, but will be charged to Incidental Repair Measures when attic insulation is installed.

Vapor barriers will always be installed as Health and Safety measures.

The maximum amount of spending with DOE funds for incidental repairs per dwelling is \$500. LWAP funds can be used to supplement DOE funds.

The total cost of all IRMs, not to exceed \$500 in DOE funding is added to the cost of the package of weatherization measures to calculate the whole unit (SIR).

There is no cap on LWAP funds that can be used for IRMs, but the cumulative SIR with the IRMs cost must be 1.0 to spend DOE funds on the dwelling.

5.0 – OCCUPANT PRE-EXISTING OR POTENTIAL HEALTH CONDITIONS AND HAZARD IDENTIFICATION AND NOTIFICATION FORM(S)

Grantees must develop a written policy that includes, at a minimum, the following documentation relating to H&S Plan implementation and maintain signed copies in each client file. Each notification must include the name and address of the occupant(s) (and landlord if applicable), the date and signature of the occupant(s) (and landlord if applicable) indicating that they understand and have been informed of their rights and options, and finally the signature of the Subgrantee personnel collecting the information.

Required topics are:

➤ **Occupant Pre-existing or Potential Health Condition Screening**

- Provides documentation that allows occupant(s) to self-report known or suspected health concerns as part of initial application for weatherization, during the energy audit, or other part of the weatherization process as specified.

Must minimally contain the following:

- Any known risks associated with the measures and materials being installed
- Subgrantee point of contact information for occupant(s)
- Date of screening

➤ **Hazard Identification Notification**

- Provides documentation that the occupant and landlord (if applicable), have been informed of any potential hazards identified during the energy audit or intake process. Must minimally contain the following:
 - Date(s) of the energy audit/assessment and when the occupant(s) (and landlord, if applicable) was informed of a potential H&S issue
 - A clear description of the problem, including any testing results
 - A statement indicating if, or when weatherization could continue

➤ **Radon Informed Consent Form**

- Provides documentation that the occupant(s) (and landlord if applicable) have been informed of any potential hazards associated with radon in weatherized dwellings. The form must minimally contain the following:
 - An explanation on the potential small risk of increasing radon levels when building tightness is improved. This is based on the results of the [Buildings Assessment of Radon Reduction Interventions with Energy retrofits Expansion Study \(The BEX Study\)](#)
 - 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.

Procedure for soliciting occupants' health and safety concerns related to components of their homes

During the intake process, subgrantees interview applicants regarding known health and safety issues in their homes including moisture problems, mold and mildew, and lead-based paint. The subgrantee also gives the applicant an opportunity to address any health and safety issues that are not directly addressed by the interview questions. This information is captured on Form 100.

Procedure for determining whether occupants suffer from health conditions which may be negatively impacted by the act of weatherizing their dwelling

During the energy audit, subgrantees conduct a thorough examination of the dwelling for potential energy efficiency measures and health and safety issues. Once the audit is complete, subgrantees explain the measures that will be installed. In addition, the client receives three EPA documents at this point in the process:

- A Brief Guide to Mold, Moisture, and Your Home
- A Citizen’s Guide to Radon
- The Lead-Safe Certified Guide to Renovate Right

The client is asked to complete three forms indicating they received the EPA documents and the subgrantee addresses any concerns or questions the client has with the EPA documents or weatherization measures.

Procedure for addressing potential health concerns including pre-existing health conditions when they are identified

If any health concerns are identified, the subgrantee may need to defer the home until the concerns can be addressed. If a deferral is required, the subgrantee will complete the Deferral of Service Notification (Form 107). This form outlines the specific issues that must be addressed before weatherization work can begin.

Location where forms have been uploaded/submitted

Separate attachment to SF424

Separate attachment to H&S Plan

6.0 – HEALTH AND SAFETY CATEGORIES

For each of the following H&S categories identified by DOE in the following tables, follow the directions below.

- Any section that is “Required” below must be explicitly detailed in the H&S Plan regardless of funding source used. If the Grantee checks the box for “Concurrence with DOE Guidance” the contents of the box may be left as it exists or reference the section/location within Grantee Policy and Procedure manual that contains language or insert Grantee specific language. If the “Alternative Guidance” box is checked, the Grantee must provide that alternative guidance in the box.
 - If a Grantee is proposing an alternative action/allowability for a “Required” item, the alternative requires comprehensive explanation of how it meets the intent of the DOE program notice.
 - If a “Required” item/category will not be addressed with any funding source and will always result in deferral, the H&S Plan must state that.
- Any section that is “Allowable” below must be detailed only if DOE WAP funds are used to implement the measures. If the Grantee uses DOE funds for any “Allowable” activities from the Table of Issues then they must be described here in detail, including defining “minor”, “major”, “limited”, “case-by-case”, and “at-risk” if the term is applied. If you only check the box “Allowed with Alternative Funds” then no additional information is required.
- Any section that is “Prohibited” below may not be addressed with DOE WAP H&S funds and does not need to be specifically addressed in the H&S Plan. The Grantee simply needs to check the “Concur with DOE guidance” box and indicate if the condition will result in deferral/referral.
- The Grantee H&S Plan may address additional H&S hazards specific to their program that are not included in the Table of Issues. If a Grantee chooses to include additional measures as DOE WAP funded H&S costs, the H&S Plan must include details pertaining to the measures allowed, testing required, and client education for these specific hazards.
- All required “Testing/Inspection” related items must be documented in the client file to verify completion and results.

6.1 – Air-Conditioning, Heating Systems, and Combustion Appliances

Required Actions

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input checked="" type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	

- Replace, repair, or install primary heating systems when existing primary heating systems are unsafe, inoperable, or nonexistent. No home may be left without a safe primary heating system after weatherization where climate conditions require heating (i.e., all climate zones except zone 1 as defined by ASHRAE). If unable to meet this requirement, deferral is required.
- No DOE-funded weatherization work is permitted if the completed dwelling unit will be heated with an unvented combustion space heater as the primary heat source. The primary heat source must be replaced with a vented unit prior to or by weatherization. The replacement unit must be sized to heat the entire dwelling unit.
- Unsafe secondary units, including space heaters, must be repaired, or removed and disposed of, or deferral is required. Secondary unvented space heaters are considered unsafe if they:
 - are not listed and labeled as meeting ANSI Z21.11.2;
 - have an input rating of more than 40,000 BTU/hour;
 - are in a bedroom and have an input rating of more than 10,000 BTU/hour;
 - are in a bathroom and have an input rating of more than 6,000 BTU/hour;
 - are operating in an unsafe manner (e.g., high carbon monoxide (CO) readings, too close to combustible materials, lack sufficient combustion air volume);
 - or are not permitted by the Authority Having Jurisdiction (AHJ).
- DOE WAP Grantees must comply with the Manufactured Home Construction and Safety Standards which mandates that:
 - All fuel-burning appliances in manufactured homes except ranges, ovens, illuminating appliances, clothes dryers, solid fuel-burning fireplaces, and solid fuel-burning stoves; must be installed to provide for the complete separation of the combustion system from the interior atmosphere of the manufactured home (i.e., to draw their combustion air from outside), and be vented to outside the dwelling.
 - All appliances installed by or left in place after weatherization in manufactured homes must meet these standards, including secondary heating sources. If an occupant will not allow the removal of an unsafe combustion appliance from the home, deferral is required.
 - Repair or replace combustion gas venting to ensure proper combustion gas venting to outside the dwelling for all combustion appliances, including but not limited to gas dryers and refrigerators, furnaces, vented space heaters, and water heaters.
- If weatherization installs an appliance that is vented into a masonry chimney, the chimney must be lined in compliance with the International Fuel Gas Code (IFGC) or local AHJ if more stringent.
- Install adequate combustion air for all combustion appliances left after weatherization.
- If permits are required for heating/cooling system work, they must be secured and are a program operation cost if the installation is an ECM or may be included in the H&S cost if installed as a H&S measure.
- If unsafe conditions relating to existing combustion appliances require remediation to safely perform weatherization and cannot be remedied by repair or tuning, replacement is an allowable H&S measure unless prevented by other guidance herein.
- Documentation justifying the replacement with a cost comparison between replacement and repair must be maintained in the client file.

Allowable Actions

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
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- Subgrantees are to use alternative funds (LWAP Health and Safety) to pay for air conditioner, heat pump, or HVAC repairs or replacement.
- Prior to replacing an air conditioner, heat pump, or HVAC system, a Manual J calculation must be performed.

Prohibited Actions

Concur with DOE Guidance

Using DOE WAP H&S funds for replacement or installation of secondary heat sources is prohibited.

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

- Verify that primary heating systems are present, operable, and performing correctly.
- Conduct combustion appliance testing and visual inspection of all combustion appliances and their related venting.
- Depressurization and spillage testing is required for all Category 1 appliances pre- and post-weatherization and before leaving the home on any day when work has been done that could affect draft (e.g., air or duct sealing, adding exhaust ventilation).
 - CO testing is required for all combustion appliances, regardless of venting type.
 - Verify proper clearances for all combustion venting types
 - Visually inspect the entirety of solid fuel-fired appliance installations (e.g., wood stoves, coal stoves, pellet stoves, fireplaces) including the venting system to ensure it adheres to the applicable code or local authority having jurisdiction. Appliances must be inspected pre- and post-weatherization.
 - Conduct pre- and post- weatherization worst case CAZ depressurization testing in spaces that have a fireplace or woodstove. Since there is no consensus method for verifying safe operation of fireplaces and woodstoves, Grantees can propose testing policies and limits. If the Grantee does not propose a policy and fireplaces or woodstoves are left operational, the vent must meet national or local codes, or the home cannot be weatherized.
- Safety inspections related to space heaters, fireplaces, and woodstoves must include, but not be limited to, verification of adequate floor protection, and code-compliant clearances to walls and other combustible materials.

Grantee Combustion Testing Action Levels

Refer to the Retrofitting South Carolina Weatherization Field Guide, 2.0201.01 Combustion Appliance Zone (CAZ) Testing.

Grantee Woodstove & Fireplace inspection/testing policy including actions/limits

Concur with DOE Guidance

Alternative Guidance

Fireplace or woodstove venting that is left operational after weatherization must meet current local or national standards or the home must be deferred.

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

- Appropriate use and maintenance of units.
- Provide all paperwork and manuals for any equipment installed by weatherization.
- 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 combustion safety and hazards information including how to recognize depressurization, dangers of CO poisoning, and fire risks associated with combustion appliance use.

6.2 – Asbestos (Confirmed and/or Presumed Asbestos Containing Material)

Required Actions

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

- When suspected friable Asbestos Containing Materials (ACM) are present, including vermiculite, assume they contain asbestos and take precautionary measures to prevent disturbing it during the audit and work unless testing determines otherwise.
- Grantees must have written policy included in their H&S plan for:
 - Identifying and managing suspected ACM that provides for reasonable and necessary precautions to prevent asbestos contamination in the home.
 - Addressing blower door testing where suspected friable ACM is present (as defined by EPA), including vermiculite.

Grantee ACM policy

- Assume asbestos is present in suspect covering materials.
- When suspected friable ACM is present, defer the dwelling until testing determines otherwise.
- No blower door testing is allowed if there is suspected friable ACM present.
- The removal of ACM is not an allowable cost.
- When deferral is necessary due to asbestos, occupant must provide documentation that a certified professional performed the remediation before work continues.

Grantee Blower Door Testing Policy When Suspected ACM Exists

When friable Asbestos Containing Material (ACM) is suspected, in the home, the blower door test will not be conducted. The house will be deferred until the customer can provide documentation that a certified professional certifies the suspected material is either free of asbestos or has been properly remediated

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

- Temporary removal and reinstallation of ACM siding to perform an ECM (e.g., wall insulation).
- Removal of asbestos siding is allowed to perform energy conservation measures. All precautions must be taken not to damage siding. Asbestos siding should never be cut or drilled. Known asbestos containing building components shall not be handled during weatherization work in a way which would cause the transmission of asbestos dust into the air.

Prohibited Actions

Concur with DOE Guidance

Using DOE WAP H&S funds for general abatement/removal/or replacement of asbestos siding, thermal system insulation (TSI) or Transite, or vermiculite is prohibited.

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

- Visually inspect all surfaces (i.e., walls, floors, ceilings, roofs) for suspected ACM prior to drilling or cutting.
- Assume asbestos is present in suspect materials unless testing reveals otherwise.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

- Sample collection and testing of suspected ACM conducted by an Asbestos Hazard Emergency Response Act of 1986 (AHERA) certified tester.
- Baseline indoor environmental asbestos sampling

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

- Formally notify the occupant, and landlord if applicable, in writing:
 - of suspected ACMs that are present and what precautions will be taken to ensure the occupants' and workers' safety during weatherization;
 - of results if testing was performed;
 - not to disturb suspected ACM;
 - When deferral is necessary due to asbestos, occupant, or landlord if applicable, must provide documentation that a certified professional performed the remediation before work continues.

6.3 – Biologicals and Unsanitary Conditions

Required Actions

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>		Alternative Funds <input checked="" type="checkbox"/>

Deferral where conditions (odors, bacteria, raw sewage, rotting wood, etc.) in the home pose a health risk to occupants and/or weatherization workers or may be worsened by weatherization activities (e.g., air sealing) and will not be resolved by weatherization.

Allowed Actions

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
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- Limited remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowed.
- Addressing bacteria and viruses is not an allowable cost.
- Deferral may be necessary in cases where conditions in the home pose a health risk to occupants and/or those installing weatherization measures.
- See Mold and Moisture section for more information.

Required Testing/Inspection

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>		Alternative Funds <input checked="" type="checkbox"/>

Sensory inspection of interior, exterior, attics, and subspaces of the dwelling.

Prohibited Testing/Inspection

Concur with DOE Guidance

DOE WAP H&S funds may not be used for testing of materials for biological contaminants.

Required Occupant Education

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
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- Inform client in writing of observed conditions.
- Provide information on how to maintain a sanitary home.
- When deferral is necessary, complete Deferral Form 107 with description of conditions that must be met for weatherization to commence.

6.4 – Building Structure and Roofing (e.g., roofing, wall, foundation)

Allowable Actions

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
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Incidental and minor repairs are allowable. Otherwise, dwelling will be deferred until repairs can be accomplished through other funding sources.

Funds will be used for incidental repairs of building structure and roofing. For example, if no attic insulation is installed and the repair cannot be categorized as an Incidental Repair Measure (IRM) per DOE guidance, the repair may be completed under Health and Safety.

Dwellings with conditions that require more than these incidental repairs will be deferred.

Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for major repairs as defined by Grantee’s H&S Plan. Using DOE WAP H&S funds for building rehabilitation is prohibited.		
Define “major” repairs		
Major repairs are any structural measures exceeding the DOE IRM limit of \$500.		
Required Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
Visual inspection of building structure and roofing for damages that compromise building durability and to verify that portions of the home where weatherization will occur are safe for entry and performance of assessments, work, and inspections.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
N/A		
Prohibited Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for any testing/evaluation of structural materials by a third-party is prohibited.		
Required Occupant Education		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	
Notify occupant in writing of structurally compromised areas.		

6.5 – Code Compliance		
Allowable Actions		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
Correction of preexisting build code compliance issues is not an allowable cost except when triggered by weatherization measures being installed in a specific room or area of the home. When correction of preexisting code compliance issue(s) is related to an installed weatherization measure(s), cite specific code requirements with reference to the weatherization measure(s) that are related to the code compliance issue, shall be in the client file. LWAP funds shall be utilized to address this health and safety category.		
Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
<ul style="list-style-type: none"> Using DOE WAP H&S funds for correction of preexisting code compliance issues not directly related to the installation of specific weatherization measures in the home is prohibited. Using DOE WAP funds for work on condemned properties and properties where H&S conditions exist that cannot be corrected under this guidance is prohibited. 		
Required Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input type="checkbox"/>	Alternative Funds <input type="checkbox"/>	
Visual inspection.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
N/A		
Required Occupant Education		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	

Inform occupant in writing of observed code compliance issues when it results in a deferral.

6.6 – Electrical

Required Actions

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
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DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>
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Provide sufficient over-current protection and damming prior to insulating building components containing knob and tube wiring, as required by the AHJ.

Allowable Actions

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
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Electrical repairs will be addressed as IRMs if related ECMs are installed (for example repairing wiring in an attic after insulation is blown). Otherwise, Health and Safety funds may be used to address minor electrical issues.

Minor repairs include installing junction boxes in attics and in crawlspaces, repairing wall receptacles, repairing switches and defective lighting fixtures, securing loose wiring, replacing a malfunctioning breaker, and replacing unsafe electrical panels as determined by a licensed electrician.

Prohibited Actions

Concur with DOE Guidance

Using DOE WAP H&S funds for *major* electrical repairs as defined by the Grantee’s H&S plan is prohibited.

Define “major” repairs

A major repair is something other than those listed above in the minor repairs section. A major repair would include rewiring an entire dwelling.

Required Testing/Inspection

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
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DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>
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- Visual inspection for presence and condition of knob-and-tube wiring.
- Evaluate knob-and-tube wiring for safety prior to work.
- Check for alterations that may create an electrical hazard.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
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Voltage drop and voltage detection testing are allowed.

Required Occupant Education

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
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- Provide occupant with written documentation of any electrical hazards identified that will not be addressed by weatherization.
- Provide information to occupant on over-current protection, overloading circuits, and basic electrical safety/risks if conditions warrant.

6.7 – Fuel Leaks

Required Actions

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
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DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>
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<ul style="list-style-type: none"> When a gas leak is found on the utility side of service, the utility service must be contacted, work must be temporarily halted, and the leak must be repaired before work may proceed. Fuel leaks that are the responsibility of the occupant (vs. the utility) must be repaired before installing weatherization measures in the home. 		
Allowable Actions		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> Replacement or repair of leaking bulk fuel tanks and/or lines if connected systems will remain after weatherization. Replacement of flexible appliance gas connectors that are not compliant with current fuel gas codes. 		
Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
<ul style="list-style-type: none"> Using DOE WAP H&S funds to repair leaks that are the responsibility of the utility to correct is prohibited. Using DOE WAP H&S funds for environmental cleanup resulting from bulk fuel leaks is prohibited. 		
Required Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> Test all exposed gas lines, fittings, valves, and connections for fuel leaks from utility connection to the appliance throughout the home. Test all gas appliances for fuel leaks at all connections, valves, fittings, and burners. Conduct sensory inspection of all bulk fuels lines and storage tanks to determine if leaks exist. 		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
Testing of exposed gas lines for fuel leaks from utility coupling into, and throughout, the home.		
Prohibited Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for environmental testing of soil or water is prohibited.		
Required Occupant Education		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	
Inform occupants in writing of fuel leak testing results, including specific location if fuel leaks are detected.		

6.8 – Gas Ovens/Stovetops/Ranges		
Allowable Actions		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
When testing indicates a problem, standard maintenance on gas cooktops and ovens is allowed.		
Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE H&S for replacement of gas ovens/ranges/stovetops is prohibited. Replacement with LWAP H&S (including switching the fuel source) is allowed.		
Required Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> Test gas ovens for CO. Grantee H&S plan must define action levels and resulting actions. Visually inspect cooking burners and ovens for operability and flame quality. 		
Define action levels for oven CO testing and resulting actions		

<ul style="list-style-type: none"> If the CO exceeds the threshold limit of 225 Parts per Million (PPM), the appliance will be cleaned. If the CO exceeds the threshold limit of 225 PPM after cleaning, the appliance will be serviced. If the CO exceeds the threshold limit of 225 PPM after servicing, the dwelling may be deferred. 	
Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
Testing for CO is allowed.	
Required Occupant Education	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
Inform occupants of the importance of using exhaust ventilation when cooking and the importance of keeping burners and broilers clean to limit the production of CO.	

6.9 – Hazardous Materials		
Required Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> Hazardous Waste Materials generated by weatherization work (e.g., refrigerant, asbestos, lead, mercury, CFL lighting bulb/ballasts, etc.) must be disposed of according to all local and federal laws, regulations, and guidelines, as applicable. Costs specifically related to disposal may be charged as a H&S expense. Subgrantees must document disposal requirements in contract language with the responsible party. Limited removal of pollutants that pose a risk to workers is required (e.g., flammable liquids, hazardous chemicals, and other air pollutants) as defined the Grantee’s H&S Plan. If removal cannot be performed or is not allowed by the occupant, the unit must be deferred. 		
Define “limited” removal of pollutants		
Limited removal of pollutants is any action below the DOE IRM limit of \$500.		
Allowable Actions		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
Any pollutant that poses a direct risk to weatherization workers or occupants may be removed provided the cost to remove the pollutants is \$500 or less.		
Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for Lead, Asbestos, and Radon abatement is prohibited.		
Required Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
Sensory inspection.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
N/A		
Prohibited Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for any testing for hazardous materials is prohibited other than that specifically permitted in the asbestos, lead, and radon sections of this document.		
Required Occupant Education		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	

- Inform occupant in writing of hazards associated with hazardous waste materials being generated/handled in the home.
- Inform occupant in writing of observed hazardous condition and associated risks.
- Provide occupant written materials on safety issues and proper disposal of household pollutants.

6.10 - Injury Prevention of Occupants

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Repairs of stairs (indoor and outdoor) and installation of handrails may be conducted when necessary to effectively weatherize the home and when such actions do not meet the definition of a 'Major' repair.

Prohibited Actions

Concur with DOE Guidance

Using DOE WAP H&S funds for *major* repairs, as defined by the Grantee's H&S Plan, is prohibited.

Define "major" repairs

A major repair is any measure:

- Other than repairing stairs or installing or repairing handrails
- Or**
- Exceeds the DOE IRM limit of \$500

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

Visually inspect for dangers that would prevent weatherization.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

N/A

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

If identified hazardous conditions will not be corrected during weatherization, inform occupant in writing of observed hazards and associated risks utilizing Form 111 Weatherization Hazard identification Form required by WPN 22-7.

6.11 – Lead-Based Surface Coverings (Paint, Varnishes, Roofing, etc.)

Required Actions

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

- Subgrantees must comply with EPA's Lead; Renovation, Repair and Painting Program (RRP) rules when working in pre-1978 housing unless testing confirms the work area to be lead free. This includes, but is not limited to:
 - Client file documentation including the Certified Renovator's certification; any training provided on-site; description of specific actions taken; lead testing and assessment documentation; and photos of site and containment set up. Include the location of photos referenced if not in file.
 - Certification and training requirements of the RRP rule.
 - Job site set up and cleaning verification by a Certified Renovator.
- Only those costs directly associated with lead safe work practices for surfaces directly disturbed during weatherization activities are allowable WAP H&S expenses.

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Health and Safety funds can only be expended for lead safe work on surfaces that are directly disturbed during weatherization.	
Prohibited Actions	
Concur with DOE Guidance <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> Using DOE WAP H&S funds for lead abatement is prohibited. Using DOE WAP H&S funds for purchase, resourcing, or maintenance of X-ray Fluorescence (XRF) devices is prohibited. 	
Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> Testing to determine the presence of lead in paint that will be disturbed by weatherization measures is allowed with EPA-approved testing methods. Testing methods must be economically feasible and justified. Job site set up and cleaning verification must be performed by a Lead Safe Certified Renovator. During annual monitoring, the grantee will verify that contractors and crews and using lead safe work practices. 	
Required Occupant Education	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
Follow pre-renovation education requirements per EPA RRP rules (Form 103 Lead Certified Renovator and 103 A Lead Education Pamphlet).	

6.12 – Mold and Moisture		
Allowable Actions		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> Limited water damage repairs (floors, ceilings, crawlspaces) are allowed when necessary to ensure the long-term stability of weatherization measures. Source control (i.e., correction of moisture and mold creating conditions) when necessary, 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. Source control includes, but is not limited to site drainage, gutters, down spouts, extensions, flashing, sump pumps, dehumidifiers, landscape, leaking roofs, vapor retarders, moisture barriers, etc. Window and door repairs are allowed with H&S funds to resolve a bulk water intrusion issue that is the cause of visible biological growth and in compliance with the most current program notice (WPN 19-5 at the time of this guidance). 		
Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
<ul style="list-style-type: none"> Using DOE WAP H&S funds for mold cleanup is prohibited. Using DOE WAP H&S funds for window and door replacements is prohibited (allowed with LWAP funds). 		
Required Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
Visual assessment for moisture or mold damage including exterior drainage.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
Diagnostic tools such as moisture meters or relative humidity measurements are allowable at the initial energy audit and final inspection.		
Prohibited Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for mold testing of any type is prohibited.		
Required Occupant Education		

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
<ul style="list-style-type: none"> • Provide client written notification and disclaimer on mold and moisture awareness utilizing Mold and Moisture Form 102 and 'A Brief Guide to Mold, Moisture, and Your Home' pamphlet. • Provide information on importance of cleaning and maintaining drainage systems. • Provide information on proper landscape design and how this impacts site drainage and moisture control. • When deferral is necessary, complete Deferral Form 107 with description of conditions that must be met for weatherization to commence. 	

6.13 - Occupant Pre-existing or Potential Health Conditions

Required Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> • When a person's health may be at risk and/or WAP work activities could constitute an H&S hazard, the occupant is required to take appropriate action based on severity of risk. • Deferral, if occupant risk cannot be mitigated. 		
Allowable Actions		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
N/A		
Required Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> • Screen occupants for known or suspected health concerns either as part of initial application for weatherization, during the audit, or both. • Forms 99 (Covid-19) and 100 (Client Interview) are used by subgrantees to identify health concerns. Should deferral be necessary due to pre-existing or potential health conditions, complete Deferral Form 107 detailing the reason for deferral. 		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
N/A		
Required Occupant Education		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	
<ul style="list-style-type: none"> • Inform occupant in writing of any known risks and provide pre-weatherization screening form. • Provide occupant with Subgrantee point of contact information in writing. 		

6.14 – Pests

Required Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
Deferral of homes where infestation of pests cannot be reasonably removed or poses health and safety concerns for workers.		
Allowable Actions		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> • Pest removal is allowed only where infestation would prevent weatherization. • Screening of windows and points of access to incorporate pest exclusion into air sealing practices and to prevent intrusion is allowed. 		
Allowable Testing/Inspection		

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
Visual assessment of presence and degree of infestation and risk to workers.	
Required Occupant Education	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
<ul style="list-style-type: none"> Inform client in writing of observed conditions and associated risks. When deferral is necessary, complete Deferral Form 107 with description of conditions that must be met for weatherization to commence. 	

6.15 – Radon		
Required Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> 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. 		
Allowable Actions		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> In homes where radon may be present, work scope may include additional precautionary measures based on EPA Healthy Indoor Environment Protocols for Home Energy Upgrades. 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 and operable. 		
Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for radon mitigation is prohibited.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
Free testing is made available to all weatherization clients through the South Carolina Department of Health and Environment Control.		
Required Occupant Education		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	
<ul style="list-style-type: none"> Clients must sign the Radon Informed Consent Form 108 before weatherization services can begin. Clients must receive the EPA's 'A Citizen's Guide to Radon'. 		

6.16 – Safety Devices: Smoke and Carbon Monoxide Alarms, Fire Extinguishers		
Required Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
Install CO alarms in every home where alarms are not present or are inoperable in compliance with ASHRAE 62.2-2016 which references NFPA 720 (note: NFPA 720 has been incorporated into NFPA 72).		
Allowable Actions		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	

- Install smoke alarms where the AHJ requires them if alarms are not present or are inoperable.
- Replace functional smoke alarms and carbon monoxide alarms if they are beyond the manufacturer’s stated lifetime (usually 10 years).
- Replace functional smoke or CO alarms batteries if designed to be replaceable.
- Provide fire extinguishers where solid fuel burning equipment is present.

Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for replacement of functional smoke or CO alarms that are not beyond the manufacturer’s stated lifetime is prohibited.		
Required Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
Verify operation and age of installed alarms.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
N/A		
Required Occupant Education		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	
Provide occupant with verbal and written information on use of newly installed devices and the potential risks of not properly maintaining these devices.		

6.17 – Ventilation and Indoor Air Quality		
Required Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
Install ventilation as required by ASHRAE 62.2 - 2016. If occupant refuses ventilation as required by ASHRAE 62.2, the home must be deferred.		
Allowable Actions		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
The latest ASHRAE 62.2 standards will be adopted as they are updated.		
Required Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> • ASHRAE 62.2 evaluation to determine required post-weatherization ventilation. • Measure fan flow of existing fans and of installed equipment to verify performance. 		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
N/A		
Required Occupant Education		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	
<ul style="list-style-type: none"> • Provide occupant with information on function, use, and maintenance (including location of service switch and cleaning instructions) of ventilation system and components. • Provide occupant with equipment manuals for installed equipment. • Include disclaimer that ASHRAE 62.2 does not account for high polluting sources or guarantee indoor air quality. 		

6.18 – Water Heaters

(See Combustion Appliances for combustion related requirements)

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

- Limited case-by-case replacement of water heaters is allowed if the water poses a safety risk to occupants. Water heater poses a safety risk if CO levels are above 200 PPM when measured at five minutes after main burner operation.
- Minor safety repairs of water heaters are allowed (T&P valve piping, backflow prevention devices, expansion tanks) provided they do not exceed the DOE IRM limit of \$500.
- Replace, repair, or install primary water heater heaters when existing primary water heater is unsafe, inoperable, or nonexistent.

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

- Visual inspection of all water heaters and related piping for safety and leaks
- See Combustion Appliances section for related combustion safety testing requirements.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Combustion Appliance Zone (CAZ) testing is allowed.

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

- Appropriate use and maintenance of units.
- Provide all paperwork and manuals for any installed equipment.
- Where combustion equipment is present, provide combustion safety and hazards information including how to recognize depressurization, dangers of CO poisoning, and fire risks associated with combustion appliance use.

6.19 – Worker Safety

Required Actions

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

Adherence to all federal, state, and local worker safety regulations (e.g., OSHA, EPA).

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

- Repairs of stairs and installation of handrails may be conducted when necessary to effectively weatherize the home and when such actions do not meet the definition of a ‘Major’ repair.
- Equipment purchases to protect the health and safety of workers including Personal Protective Equipment (PPE) and jobsite cleaning supplies.

Prohibited Actions

Concur with DOE Guidance

Using DOE WAP H&S funds for *major* repairs as defined by the Grantee’s H&S Plan is prohibited.

Define “major” repairs

A major repair is any measure:

- Other than repairing stairs or installing or repairing handrails Or
- Exceeds the DOE IRM limit of \$500

Allowable Testing

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Environmental and surveillance testing required by OSHA regulation.