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.

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. DOE strongly encourages using the table below in developing justification for the requested H&S budget amount. Each H&S measure the Grantee anticipates addressing with H&S funds should be listed along with an associated cost for each measure, and by using historical data the estimated frequency that each measure is installed over the total production for the year.

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. DOE strongly encourages use of this H&S template and matrix to help expedite this process

H&S Measure Matrix - Optional			
Double Click To Open For Editing			
Cells this shade auto calculate			
Enter Measure ↓	**Enter** Cost ↓	**Enter** Frequency % ↓	Auto Calculates
Co and smoke detector ten year Battery	$95.00	0.7%	$0.70
Install Bathroom Exhaust Fan	$1,567.67	0.7%	$11.60
Install Bathroom Exhaust Fan/light	$1,651.67	0.5%	$8.26
Replace Bathroom Exhaust Fan	$920.00	0.5%	$4.70
Replace Bathroom Exhaust Fan/light	$1,165.00	0.5%	$5.83
Install Kitchen Range Exhaust Fan	$1,505.00	0.5%	$7.53
Replace Kitchen Range Exhaust Fan	$1,150.00	0.5%	$5.75
Round Duct 6" insulated Exhaust Fan/D	$165.50	0.5%	$0.83
Exhaust Termination Kit roof or Eave	$290.50	0.5%	$1.45
Dryer vent to outside	$315.00	0.5%	$1.58
pressure relief Valve discharge	$200.22	0.5%	$1.00
Dryer vent kit 4" x 8 ft duct (with roof c	$732.50	0.5%	$3.66
Dryer vent kit 4" x 8 ft duct (with wall d	$712.50	0.5%	$3.56
Drill Hole to Masonry	$334.00	0.5%	$1.67
Smart Switch	$250.00	0.5%	$1.25
GFI Switch	$65.00	0.5%	$0.32
Fire Extinguisher	$100.00	0.5%	$0.50
Make up air (CAZ) outside	$231.00	0.5%	$1.16
Make up air (CAZ) inside	$231.00	0.5%	$1.16
Total Average H&S Cost Per Unit			$62.50
Enter Estimated Production (Annual File: IV.2 WAP Production Schedule) ➔			160
Enter Estimated Program Operations Budget ➔			295838
H&S Budget (Total Average H&S Cost Per Unit * Estimated Production)			$9,999.99
Requested H&S Percentage Per Unit (H&S Budget/Program Operations)			3.4%

DOEE will utilize either the American Recovery Plan Act, Low Income Home Energy Assistance Program, State Local Funding, and/or Utility Funds to address health and safety measures prior to utilizing US DOE funds to address Health and Safety Measures prior to utilizing US DOE Health & Safety Funds.

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")

Those repairs necessary for the effective performance or preservation of weatherization materials will be addressed. Such repairs include framing or repairing windows and doors that could not otherwise be caulked or weather-stripped, and provide protective materials such as paint, to seal materials installed under this program.

US DOE program policies strictly prohibit roof replacement, structural repairs, or other non-energy related rehabilitation work. Units requiring this type of repair will be addressed using local, ARP, or LIHEAP funds. The Incidental Repairs List (Attachment A) identifies measure(s) and associated cost. DOEE will include the justification in the client that thoroughly explains the need and relationship to a specific energy conservation measure (ECM). All incidental repair measures must be modeled and included in the SIR.

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?

Per DOEE's Operation Manual units are deferred on a case-by-case basis reasons for deferral are identified at the time of the energy audit, or before weatherization work commences. If an item(s) listed on the DOEE Deferral Form (Attachment B) is noticed before work begins, the client is not allowed to receive any measure from the weatherization assistance program until the issue is addressed. Because the program does not allow partial weatherization, the Subgrantee is required to conduct an extensive walk through of each home to avoid work taking place in homes with deferral conditions.

Deferred clients receive a signed copy via postal mail of the DOEE Deferral Form which includes: an explanation of the nature of the hazard to include photographic documentation; the client's name and address; contact information for an appeal of the deferral decision; date of the audit/assessment; the date when the client was informed of the potential health and safety issues; and the signature of the energy auditor who conducted the audit, client, and program manager.

A copy of the deferral decision is placed in DOEE's client file and uploaded to the Quickbase system under the client's case file. Once the client has addressed the deferral issues, they are eligible to reapply for the Weatherization Assistance Program and a second site visit is conducted to verify compliance.

In a case in which DOEE is aware of pending redevelopment, the dwelling(s) will not be weatherized. To determine the timeframe, we will determine the payback for each measure. For example, if a measure has a SIR of 1 or more and the lifetime of the measure is 8 years, we will not address the property it is slated for redevelopment within that timeframe.

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 ☑

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

"Red tagged," or inoperable primary heating system may be replaced or repaired where climate conditions warrant. Only primary central air conditioning system replacement or repair is allowed in homes where current occupants meet DOEE's definition of "at-risk" and climate conditions warrant. DOEE requires Subgrantee's and contractors to follow state code and work must be performed by a licensed HVAC contractor. DOEE uses proper sizing protocols per NEAT outputs based on post-weatherization housing characteristics, including installed mechanical ventilation, when installing or replacing a heating or cooling appliance. Unsafe primary units will be repaired, replaced and removed, or rendered inoperable, or deferral is required. Replacement or installation of secondary units is not allowed.

An at-risk occupant is a household member with a medical condition documented by a physician that requires air conditioning. The documentation must be no older than 180 days. Air conditioning treatments are limited to replacement, repair, modification, and tune-up when existing heating system is being addressed. No new installations are permitted.

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

Unvented space heaters are removed as a H&S measure before weatherization measures can be installed, except those used as secondary heat sources that conform to ANSI Z21.11.2.
Subgrantees must explain to owners and tenants, and record on Health and safety Form, those significant amounts of combustion by-products, including water vapor, CO, NO2, and particulates are produced by these systems.
Subgrantees must complete Health and safety Form and require the applicant to sign the form before proceeding with work. WAP funds cannot be used to purchase or install any type of unvented or vent-less combustion appliance.

Indicate Documentation Required for At-Risk Occupants

Certified document from medical provider noted medical conditions that deem that at risk due to temperature in their residence.

Testing Protocols

All vented combustion appliances are tested for CO in undiluted flue gas and the results documented.
Gas leak detection tests are conducted along accessible gas lines throughout the interior and exterior of the building, and the findings recorded on NEAT Audit data collection Form . All accessible gas lines and piping are tested for gas leaks. For significant leaks, combustion appliances are disabled, the area evacuated and
Ventilated, and the fuel supplier notified for shut-off until repairs are completed. Minor leaks may be addressed at the time of inspection or specified for repair. Testing is performed at audit, after any work on the gas piping is complete, and at post inspection.
An SSE test is required on every heating system, where appropriate. Pre- and post-weatherization recorded
The worst-case CAZ configuration for each appliance zone is established and recorded in the client project file. The worst-case negative pressure is measured in all vented CAZs. Any zone or area of the building that contains a vented combustion appliance, including space heaters and water heaters, is considered a CAZ.
BPI combustion safety test procedures are followed, and action levels and appropriate actions taken based on the test results. Combustion safety testing is done at audit, after any work is done to the building envelope or appliance(s), and at post inspection.

Client Education

Educate owners and tenants, using client education Form , about the importance of smoke and CO detectors working properly, the importance of heating system monitoring and maintenance for efficiency benefits, the dangers of poorly maintained heating systems, such as high CO levels, and fire hazards associated with using unvented space heaters
When deferral is necessary, provide information to the client, in writing, describing conditions that must be met in order for weatherization to commence. A copy of this notification will be placed in the client file. •
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.

Training

WAP H&S policy training on allowable activities. Licensing and/or certification for HVAC installers as required by authority having jurisdiction (AHJ). 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?

A blower door should be used in all homes to diagnose measure and identify air leakage for effective weatherization. Take all reasonable and necessary precautions to prevent asbestos contamination in the home. Grantees must have a policy for identifying and managing suspected asbestos containing materials (ACM). "Friable" means the material can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand. Per DOEE operation manual section 4.2.1 In situations where mold, moisture, asbestos, lead, pest control, structural damage, flooring and wall damage, roof leaks exist, or client refuses any measures no weatherization work will be performed. • The existence of asbestos siding that is in good condition does not prevent installing dense-pack insulation from the exterior. • Siding may be removed and reinstalled in order to perform the ECM, and the associated costs may be charged as part of the ECM. • General abatement of asbestos siding or replacement with new siding is not an allowable H&S cost.

A blower door maybe used when no confirmed ACM is present within the pressure boundary or only non-friable ACM is present within the pressure boundary. A blower door shall not be performed when friable ACM is present inside the pressure boundary and at risk of becoming airborne.

7.2a – Asbestos - in siding, walls, ceilings, etc.

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 siding, walls, or ceilings that will be disturbed through the course of weatherization work?

Take all reasonable and necessary precautions to prevent asbestos contamination in the home. "Friable" means the material can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand. • The existence of asbestos siding that is in good condition does not prevent installing dense-pack insulation from the exterior. • Siding may be removed and reinstalled in order to perform the ECM, and the associated costs may be charged as part of the ECM. • General abatement of asbestos siding or replacement with new siding is not an allowable H&S cost.

Per the operation manual:

In general, asbestos removal is not an approved health and safety weatherization expense however; if at all possible, asbestos should not be disturbed. Requirements for asbestos removal include:

- All asbestos work must be completed by a licensed individuals and in accordance with the District's air quality regulations relating to asbestos;
- Removal or encapsulation is allowed and may be necessary when the measure will provide a cost effective SIR, which is normally true of large, multifamily heating systems;
- Removal and replacement of asbestos siding for purposes of wall cavity insulation is permissible if allowed by District law. Subgrantee's are required to contact Department of Consumer and Regulatory Affairs (DCRA) and the Air Quality Division of DOEE to determine the correct course action;
- When permitted by District or Federal regulations, encapsulation (usually less costly than asbestos removal) may be used;
- Subgrantee's encountering an asbestos situation should contact DOEE for direction before proceeding with blower door testing or any other work; and

All major asbestos problems should be referred to DOEE and/or the US EPA

Testing Protocols
Visually inspect exterior wall surface and subsurface, floors, walls, and ceilings for suspected Asbestos Containing Materials (ACM) prior to drilling or cutting. • Asbestos Hazard Emergency Response Act of 1986 (AHERA) sample collection and testing must be conducted by a certified tester.
Client Education
Inform the client in writing that suspected ACMs are present and what precautions will be taken to ensure the occupants' and workers' safety during weatherization. • Formally notify client in writing of results if testing was performed.
Training and Certification Requirements
Safe practices for siding removal and replacement. • How to identify suspected ACM. • Licensing/certification for removal and reinstallation of asbestos siding if required by AHJ

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, assume it contains asbestos unless testing determines otherwise. • Do not perform a blower door test if it will disturb the vermiculite. • Use proper respiratory protection while in areas containing vermiculite. • Encapsulation by an appropriately trained asbestos control professional is allowed. WPN 22-5 Table of Issues 4				
Testing Protocols				
AHERA sample collection and testing must be conducted by a certified tester. • Baseline environmental asbestos sampling is an allowable cost if authorized in the H&S Plan.				
Client Education				
Instruct clients in writing not to disturb suspected ACM. • Provide asbestos safety information to the client. • Formally notify client in writing of results if testing was performed.				
Training and Certification Requirements				
Training on how to recognize vermiculite. • AHERA or state certification to conduct testing. • AHERA or other appropriate asbestos control professional certification/training for encapsulation.				

7.2c – Asbestos - on pipes, furnaces, other small covered surfaces				
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 (e.g., pipes, furnaces, other small surfaces) that will be disturbed through the course of weatherization work?				

Assume asbestos is present in suspect covering materials. • When suspected friable ACM is present, take precautionary measures as if it is asbestos unless testing determines otherwise. • Encapsulation by an appropriately trained asbestos control professional is allowed and should be conducted prior to blower door testing if the materials are friable. • Removal maybe allowed by an appropriately trained professional on a case-by-case basis. • Charge only those costs directly associated with the testing, encapsulation, or removal to the H&S budget category.
Testing Protocols
Assess whether suspected ACMs are present. • AHERA sample collection and testing is allowed and must be conducted by a certified tester.
Client Education
Instruct clients in writing not to disturb suspected ACM. • Provide asbestos safety information to the client. • Formally notify client in writing of results if testing was performed.
Training and Certification Requirements
How to recognize suspected ACM. • AHERA or other appropriate asbestos control professional certification/training is required to abate the ACM

7.5 – Biologicals and Unsanitary Conditions (odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.)				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑		Alternative Guidance ☐		Results in Deferral ☐
		Unallowable Measure ☐		
Funding				
DOE ☐	LIHEAP ☑	State ☑	Utility ☐	Other ☑
What guidance do you provide Subgrantees for dealing with biological and/or unsanitary conditions in homes slated for weatherization?				
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 weatherization workers. • See Mold and Moisture section for more information				
Testing Protocols				
Sensory inspection				
Client Education				
Inform client in writing of observed conditions. • Provide information on how to maintain a sanitary home. • When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.				
Training				
How to recognize unsafe conditions and when to defer. • Safe work practices when encountering such conditions.				

7.6 – Building Structure and Roofing				
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 structural issues (e.g., roofing, wall, foundation) in homes slated for weatherization?
Building rehabilitation is beyond the scope of the Weatherization Assistance Program. • Homes that require more than minor repairs must be addressed through our healthy homes program. • See Mold and Moisture, Code Compliance, and Pests sections for more information.
How do you define "minor" or allowable structure and roofing repairs, and at what point are repairs considered beyond the scope of weatherization?
See Attachment A.
If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?
DOEE only conducts a site specific audit.
Client Education
Notify client in writing of structurally compromised areas. • When deferral is necessary; provide information in writing describing conditions that must be met in order for weatherization to commence.
Training
How to identify structural and roofing issues.

7.7 – Code Compliance				
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 code compliance issues in homes receiving weatherization measures?				
Correction of preexisting 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 preexisting code compliance issues is triggered and paid for with WAP funds, cite specific code requirements with reference to the weatherization measure(s) that triggered the code compliance issue in the client file. • Follow State and local codes while installing weatherization measures, including H&S measures. • Condemned properties and properties where "red tagged" H&S conditions exist that cannot be corrected must be deferred.				
What specific situations commonly trigger code compliance work requirements for your network? How are they addressed?				
subgrantees to ensure that work is performed in accordance with state and local codes. When, in the judgment of the energy auditor or crew leader, any condition exists, including a code compliance condition, which may endanger the health or safety of the client, work crew or subcontractor, the work, should not proceed until the condition is corrected. If conditions cannot be corrected weatherization will be deferred until the condition is corrected				
Client Education				
Inform client in writing of observed code compliance issues when it results in a deferral. • When deferral is necessary; provide information in writing describing conditions that must be met in order for weatherization to commence.				
Training				
How to determine what code compliance may be required.				

7.8 – Combustion Gases				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑		Alternative Guidance ☐		Results in Deferral ☐
Funding				
DOE ☐	LIHEAP ☑	State ☑	Utility ☑	Other ☑
Testing Protocols				
BPI Combustion Safety protocol is used when Proper venting to the outside for combustion appliances, including gas dryers and, furnaces, vented space heaters and water heaters is required. Correct venting when testing indicates a problem. If unsafe conditions whose remediation is necessary to perform weatherization cannot be remedied by repair or tuning, replacement is an allowable H& measure. Maintain documentation justifying the replacement with a cost comparison between replacement and repair in the client file. Replacement units meet safety guidelines as determined in the Plan or technical				
How are crews instructed to handle problems discovered during testing, and what are the specific protocols for addressing hazards that require an immediate response?				
BPI Combustion Safety protocol is used when Combustion safety testing is required when combustion appliances are present. • Test 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). • Inspect venting of combustion appliances and confirm adequate clearances. • Check DOE- approved audit to determine if the appliance can be justified as an ECM prior to replacement as an H&S measure.				
Client Education				
Provide client with combustion safety and hazards information.				
Training				
Component of Auditor 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?				
The visual inspection of the unit includes an analysis of electrical hazards. Subgrantees ensure that all electrical hazards that exist in areas where weatherization work is to be done are corrected prior to commencement of work. Subgrantees should avoid insulating any areas of a building where live knob-and-tube wiring is known to exist. Knob-and-tube wiring can be replaced if the cost of the rewiring and the cost of the insulation added together results in an SIR that is greater than or equal to one. If the hazard exists in areas where weatherization work is to be done, and can't be corrected by WAP prior to commencement of work, Deferral Form issued and the project is deferred until the hazard is remedied.				
How do you define "minor" or allowable electrical repairs, and at what point are repairs considered beyond the scope of weatherization?				

The visual inspection of the unit includes an analysis of electrical hazards. Subgrantees ensure that all electrical hazards that exist in areas where weatherization work is to be done are corrected prior to commencement of work. Subgrantees should avoid insulating any areas of a building where live knob-and-tube wiring is known to exist. Knob-and-tube wiring can be replaced if the cost of the rewiring and the cost of the insulation added together results in an SIR that is greater than or equal to one. If the hazard exists in areas where weatherization work is to be done, and can't be corrected by WAP prior to commencement of work, Deferral Form issued and the project is deferred until the hazard is remedied.
If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?
See Attachment A. When the cost of an ECM and the cost of the electrical repair together results in an SIR equal to or greater than one, the electrical repair is allowable. If the electrical repair is not necessary to complete an ECM, or group of ECMs, or doesn't meet the definition of a H&S measure, or the ECM including the electrical repair does not result in an SIR equal to or greater than one, the "minor" repair is not allowable and is considered beyond the scope of WAP.
Client Education
When electrical issues are the cause of a deferral, provide information to client on over-current protection, overloading circuits, and basic electrical safety/risks.
Training
How to identify electrical hazards. • Local (or AHJ) 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?				
Removal of pollutants is allowed and is required if they pose a risk to workers. • If pollutants pose a risk to workers and removal cannot be performed or is not allowed by the client, the unit must be deferred. • Refer to Hazardous Materials Disposal section for more information.				
Testing Protocols				
Sensory inspection.				
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, provide information in writing describing conditions that must be met in order for weatherization to commence.				
Training				
How to recognize potential hazards and when removal is necessary				

7.11 – Fuel Leaks

(please indicate specific fuel type if policy differs by type)

Concurrence, Alternative, or Deferral		
Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐

Funding				
DOE ☐	LIHEAP ☑	State ☑	Utility ☑	Other ☑
Remediation Protocols				
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?				
See Attachment A.				
Client Education				
Inform clients in writing if fuel leaks are detected				
Training				
Component of Auditor training – visual inspections				

7.12 – Gas Ovens / Stovetops / Ranges

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 addressing unsafe gas ovens/stoves/ranges in homes slated for weatherization?		
Subgrantees/Auditor follow BPI Combustion Safety procedures to test the oven for combustion safety following these steps and recommended actions. They are to measure CO in the ambient air in the kitchen during these tests. The EPA recommends that the ambient air should never be more than 35 parts per million (ppm) during the test. The basic procedure is: • Test for gas leaks in the gas piping in and around the range and oven. • Turn the oven on and set it to bake on high temperature. Sample the CO level in exhaust gases at the oven vent and in the ambient air nearby after 10 minutes. • If the vent CO reading is over 225 ppm as measured, or if the ambient-air reading exceeds 35 ppm as measured during the test, discontinue testing. In the case where both spillage and excessive CO are present, ventilate the area and recommend that the appliance be shut down immediately until it can be serviced. • Clean and tune the oven by removing aluminum foil, dirt, and corrosion around the burner. Many range and oven burners are equipped with adjustable needle-and seat valves. Adjust the burner's gas control to reduce CO. If the vent CO reading remains over 225 ppm as measured, consider replacing the oven and range if ***non-DOE funds are available*** ; if not, advise the homeowner/occupant that the appliance should be shut down and serviced immediately by a qualified professional		
Testing Protocols		
BPI Combustion Safety Test Procedures and Action Levels can be found on BPI's Web site		

Client Education
It is recommended the following topics are discussed: • Never use a range burner or gas oven as a space heater. • Open a window, and/or turn on the kitchen exhaust fan when using the range or oven. • Never install aluminum foil around a gas range burner or gas oven burner because the foil could interfere with the flame. • Keep range burners and ovens clean to prevent dirt from interfering with combustion. Gas burners should display hard blue flames. Call a service company if you notice yellow flames, white flames, wavering flames, or noisy flames.
Training
Component of Auditor training – visual inspections

7.13 – Hazardous Materials Disposal [Lead, Refrigerant, Asbestos, Mercury (including CFLs/fluorescents), etc.]

(please indicate material where policy differs by material)

Concurrence, Alternative, or Deferral		
Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐

Funding				
DOE ☐	LIHEAP ☑	State ☑	Utility ☐	Other ☑

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. • Document proper disposal requirements in contract language with responsible party. • Refer to Lead and Asbestos sections for more information on those topics. Testing • Not applicable. • Refer to Lead and Asbestos sections for more information on those topics. WPN 22-5 Table of Issues 9
Client Education
Inform client in writing of hazards associated with hazardous waste materials being generated/handled in the home.
Training
OSHA 10-hour worksite training is a mandatory training per program policy. All technicians performing diagnostic tests or inspections, must have access to all necessary personal protective equipment required by OSHA. (Personal safety standards are from BPI's technical standards. See www.bpi.org.) Required protective equipment includes, but is not limited to, fitted respirators with canister filters, dust masks, gloves, protective clothing, safety glasses, and hard hats. Technicians are trained in proper use and applications for these devices and must adhere to OSHA regulations when on the job site. A copy of the Safety Data Sheets (SDS) for all materials used on the job and installed in the unit is kept on each crew vehicle and made available to all workers and assisted households upon request.
Disposal Procedures and Documentation Requirements
All refrigerators containing hazardous material, or any other possibly hazardous materials encountered (CFLs/Fluorescents, etc.) that are removed or replaced are de-manufactured or disposed of in accordance with local laws, regulations and EPA requirements, Proper disposal requirements are documented in contract language with responsible parties (subcontractors).

7.14 – Injury Prevention of Occupants and Weatherization Workers (Measures such as repairing stairs and replacing handrails)				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐		
Funding				
DOE ☐	LIHEAP ☑	State ☑	Utility ☑	Other ☑
What guidance do you provide Subgrantees regarding allowable injury-related repairs (e.g., stairs, handrails, porch deck board)?				
Mandatory training is provided to weatherization crews to avoid falls and other on-the-job injuries. Subgrantees take all reasonable precautions to reduce the risk of injury to workers or occupants of assisted buildings. In limited cases, minor repairs may be conducted to avoid injury risk. In cases where serious safety conditions exist, work will be deferred and subgrantees will notify owner in writing.				
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.				
See Attachment A.				
Training				
Training • Hazard identification				

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				
Crews must follow EPA's Lead; Renovation, Repair and Painting Program (RRP) when working in pre-1978 housing unless testing confirm the work area to be lead free. • 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 allowable.				
Testing Protocols				
Testing to determine the presence of lead in paint that will be disturbed by WAP measure installation is allowed with EPA-approved testing methods. • Testing methods must be economically feasible and justified. Job site set up and cleaning verification by a Certified Renovator is required. • DOEE verifies that crews are using lead safe work practices during monitoring.				
Client Education				
Follow pre-renovation education provisions for RRP. • When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.				
Training and Certification Requirements				
All employees and contractors working on pre-1978 homes must receive training to install measures in a lead-safe manner in accordance with the field guide/SWS and EPA protocols, and installation must be overseen by an EPA Certified Renovator. • DOEE Monitors and Subgrantee Inspectors must be Certified Renovators.				

Documentation Requirements
Client file must include Certified Renovator 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.

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 ☑	Alternative Guidance ☐	Results in Deferral ☐

Funding				
DOE ☐	LIHEAP ☑	State ☑	Utility ☐	Other ☑

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?

Limited water damage repairs that can be addressed by weatherization workers are allowed when necessary in order to weatherize the home and to ensure the long-term stability and durability of the measures. • Source control (i.e. correction of moisture and mold creating conditions) is 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. • 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.

How do you define "minor" or allowable moisture-related measures, and at what point is work considered beyond the scope of weatherization?

Mold testing and cleanup is not an allowable H&S cost. Where severe mold and moisture issues cannot be addressed, deferral is required.

Client Education

Provide client written notification and disclaimer on mold and moisture awareness. • 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, provide information in writing describing conditions that must be met in order for weatherization to commence.

Training

National curriculum on mold and moisture or equivalent. • How to recognize drainage issues.

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. • Screening of windows and points of access, and incorporating pest exclusion into air sealing practices to prevent intrusion is allowed
Define Pest Infestation Thresholds, Beyond Which Weatherization Is Deferred
Infestation of pests may be cause for deferral where it cannot be reasonably removed or poses H&S concern for workers.
Testing Protocols
Assessment of presence and degree of infestation and risk to worker.
Client Education
Inform client in writing of observed condition and associated risks. • When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.
Training
How to assess presence and degree of infestation, associated risks, and deferral policy.

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?				
Radon mitigation is not an allowable H&S cost. • Clients must sign an informed consent form prior to receiving weatherization services. This form must be kept in the client file. • 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. • Whenever site conditions permit, cover exposed dirt floors within the pressure/thermal boundary with 6 mil (or greater) polyethylene sheeting, lapped at least 12” and sealed with appropriate sealant at all seams, walls and penetrations. • Other precautions may include, but are not limited to, sealing any observed floor and/or foundation penetrations, including open sump pits, isolating the basement from the conditioned space, and ensuring crawl space venting is installed.				
Testing Protocols				
Testing at their discretion in areas with high radon potential.				
Client Education				
DOEE provides all clients with a copy of EPA’s A Citizen’s Guide to Radon and informs them of radon related risks. • 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.				
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 http://www.epa.gov/radon/pdfs/zonemapcolor.pdf				
Documentation Requirements				

Energy Auditor will obtain client acknowledgement of receiving "EPA's A Citizen's Guide to Radon" once the energy audit is completed. DOEE emails the Radon division within the agency a list of clients serviced at the end of the fiscal year so they can receive a free radon test kit once weatherization work is completed

7.19 – Safety Devices: Smoke and Carbon Monoxide Alarms, Fire Extinguishers

Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑		Alternative Guidance ☐		Results in Deferral ☐
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☑
What is your policy for installation or replacement of the following:				
Smoke Alarms: Smoke alarms may be installed where alarms are not present or are inoperable.				
Carbon Monoxide Alarms: where alarms are not present or are inoperable. CO alarms must be installed				
Fire Extinguishers: fire extinguishers may be provided as an allowable H&S measure				
Testing Protocols				
Check existing alarms for operation., Verify operation of installed alarms.				
Client Education				
Provide client 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 ☑		Alternative Guidance ☐		Results in Deferral ☐
Funding				
DOE ☐	LIHEAP ☑	State ☑	Utility ☐	Other ☑
What guidance do you provide Subgrantees for soliciting the occupants' health and safety concerns related to components of their homes?				
The Subgrantee and its contractors are required to take all reasonable precautions against performing work on homes that will subject the occupants or themselves to health and safety risks. In cases where an occupant's health is fragile, or an occupant has been identified to have a health condition, including allergies, and/or the crew work activities would themselves constitute a health and/or safety hazard, the occupant(s) at risk shall be required to leave during the performance of the work activities. In cases where an occupant is identified as having an allergy to a specific weatherization material, that material will not be installed. If comparable alternative materials are available and the occupant has no known allergies to the alternative materials and they meet DOE regulation, crews/contractors may substitute the alternative material(s). If no safe alternative material meeting US DOE standards is available, the measure shall not be installed. This must be well documented in the client file.				
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?				

When performing an energy audit, the energy auditor should be referencing the information on the Client Questionnaire. This questionnaire provides the auditor with information about the building and the lifestyle of its occupants to help the auditor identify, among other things, any potential health and safety concerns. Once identified, these areas can be dealt with through client education or adjustments to the work scope.

What guidance do you provide Subgrantees for dealing with potential health concerns when they are identified?

subgrantees to notify DOEE ,owners and occupants of any adverse health or safety conditions discovered in a building where weatherization work will be conducted, or where a decision to defer work has been made. Subgrantees are required to complete the Health and Safety Notification with client sign off to inform and educate occupants and owners of potential health or safety hazards present in the building. Subgrantees are required to take all reasonable precautions against performing work on buildings that will subject workers or clients to health and safety risks

Client Education

The auditor is also required to complete a visual health and safety inspection and provide documentation of any concerns discovered. Where serious concerns are found, that can or cannot be addressed through weatherization, occupants are advised of these possible hazards in writing (Health and Safety Notification;) regarding their safety. Where necessary, occupants will be advised to relocate from the building or unit during installation of energy conservation materials to ensure the household's safety.

Documentation Form(s) have been developed and comply with guidance? Yes ☑ No ☐

7.21 – Ventilation and Indoor Air Quality

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☐ Results in Deferral ☐

Funding

DOE ☐ LIHEAP ☑ State ☑ Utility ☐ Other ☑

Identify the Most Recent Version of ASHRAE 62.2 Implemented (optional: identify Addenda used)

Install ventilation as required by ASHRAE 62.2 - 2016. • If the ASHRAE normative Appendix A is employed and an existing fan is being replaced or upgraded to meet whole-house ventilation requirements, take actions to prevent zonal pressure differences greater than 3 pascals across the closed door, if one exists. •

Testing and Final Verification Protocols

ASHRAE 62.2-2016 evaluation to determine required ventilation. • Measure fan flow of existing fans and of installed equipment to verify performance.

Client Education

Provide client with information on function, use, and maintenance (including location of service switch and cleaning instructions) of ventilation system and components. • Provide client with equipment manuals for installed equipment. • Include disclaimer that ASHRAE 62.2 -2016 does not account for high polluting sources or guarantee indoor air quality.

Training

ASHRAE 62.2-2016 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 ☑		Alternative Guidance ☐		Results in Deferral ☐
Funding				
DOE ☐	LIHEAP ☑	State ☑	Utility ☐	Other ☑
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 ☑		Alternative Guidance ☐		Results in Deferral ☐
Funding				
DOE ☐	LIHEAP ☑	State ☑	Utility ☐	Other ☑
How do you verify safe work practices? What is your policy for in-progress monitoring?				
Workers must follow OSHA standards where required and take precautions to ensure the H&S of themselves and other workers. • All Subgrantee's and contractors must maintain compliance with the current OSHA Hazard Communication Standard, including on-site organized Safety Data Sheets (SDS). DOEE conducts in progress inspections to ensure work is completed in sequential order, using safe work practices, and work being performed meets state and federal requirements. Once the in-progress inspections are completed the DOEE energy auditor determines if work should proceed or stop based on their findings. The documentation and recommendation is uploaded into the Quickbase system for the Subgrantee and internal entities to review.				
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 Program.,				