

South Carolina

Weatherization 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.

For DOE funding, each subgrantee will have 12% of their program operations set aside for energy related health and safety repairs. The maximum amount of funds to be spent on health and safety per dwelling is \$1,050.

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

4.0 – INCIDENTAL REPAIR MEASURES

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

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

INCIDENTAL REPAIRS

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 weatherstripped 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 an Energy Conservation Measure (ECM) is installed that they could be attached to as an IRM. In accordance to WPN 12-9, 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
- Vapor Barrier
- 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.

The maximum amount of spending with DOE funds for incidental repairs per dwelling is \$500.

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

5.0 – DEFERRAL/REFERRAL POLICY

Deferral of services may be necessary if H&S issues cannot be adequately addressed according to WPN 17-06 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?

Weatherization PY 2021 State Plan, section V.1.2 Approach to Determining Building Eligibility

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 ☐

Agencies shall use Form 107 Deferral of Service Notification to identify health & safety issues.

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 17-06, Grantees must concur, or choose to defer all units where the specific category is encountered.
- "Allowable" items under WPN 17-06 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?
Action/Allowability When a space conditioning system does not qualify as an Energy Conservation Measure, the following conditions must be met before the unit can be replaced or repaired with Health and Safety funds: <ul style="list-style-type: none"> • Agencies are to use alternative funds (LWAP) to pay for air conditioning repairs or replacement. • At a minimum, a licensed South Carolina HVAC contractor is required to perform all work. • Masonry chimneys used by vented space heaters should be properly lined in compliance with the International Fuel Gas Code (IFGC). • Masonry chimneys that have been retired (i.e. not being used by existing equipment) should be assessed for energy savings opportunities such as air sealing and capping to reduce thermal bypass.
How do you address unsafe or non-functioning secondary heating systems, Including unvented secondary space heaters?
<ul style="list-style-type: none"> • Replacement or installation of secondary units is not allowed. • Unsafe secondary units, including space heaters, must be repaired, removed or rendered inoperable, or deferral is required.
Indicate Documentation Required for At-Risk Occupants
N/A
Testing Protocols
Refer to the Retrofitting South Carolina Weatherization Field Guide, 2.0201.1 Combustion Appliance Zone (CAZ) Testing
Client Education
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 must also be placed in the client file. <ul style="list-style-type: none"> • Discuss appropriate use and maintenance of units. • Provide all paperwork and manuals for any installed equipment. • Discuss and provide information on proper disposal of bulk fuel tanks when not removed as part of the weatherization work. • Where combustion equipment is present, provide safety information including how to recognize depressurization. • Dirty or non-existent furnace filters shall be evaluated for replacement. Clients shall be instructed in proper intervals for replacement of the filters.
Training
Weatherization Assistance Program Health and Safety policy training on allowable activities. <ul style="list-style-type: none"> • Licensing and/or certification for HVAC installers as required by authority having jurisdiction (AHJ). • CAZ depressurization test and inspection training.

7.2 - Asbestos - All				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input type="checkbox"/>	Alternative Guidance <input type="checkbox"/>		Results in Deferral <input checked="" type="checkbox"/>	
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What is the blower door testing policy when suspected Asbestos Containing Material (ACM) is identified?				
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.				
7.2a – Asbestos - in siding, walls, ceilings, etc.				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>		Results in Deferral <input type="checkbox"/>	
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
How do you address suspected ACM's in siding, walls, or ceilings that will be disturbed through the course of weatherization work?				
Removal of 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 the course of weatherization work in a way which would cause the transmission of asbestos dust into the air.				
Testing Protocols				
Visually inspect exterior wall surface and subsurface, floors, walls, and ceilings for suspected ACM.				
Client Education				
Inform the client that suspected asbestos siding is present and how precautions will be taken.				
Training and Certification Requirements				
<ul style="list-style-type: none"> • OSHA Construction - 10 hour • Safe practices for siding removal and replacement. How to identify asbestos containing materials. 				

7.2b – Asbestos - in vermiculite				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>		Results in Deferral <input checked="" type="checkbox"/>	
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
How do you address suspected ACM's in vermiculite that will be disturbed through the course of weatherization work?				
Action/Allowability <ul style="list-style-type: none"> • When vermiculite is present, assume it contains asbestos unless testing determines otherwise. • Defer the house. • Occupant must provide documentation that a certified professional performed a test to verify that the suspected vermiculite does not contain asbestos. • Use proper respiratory protection while in areas containing vermiculite. 				
Testing Protocols				
<ul style="list-style-type: none"> • Asbestos Hazard Emergency Response Act of 1986 (AHERA) sample collection and testing must be conducted by a certified tester. 				
Client Education				
<ul style="list-style-type: none"> • Instruct clients in writing not to disturb suspected ACM. • Provide asbestos safety information to the client. • When deferral is necessary, provide information in writing describing conditions that must be met for weatherization to commence. 				
Training and Certification Requirements				
<ul style="list-style-type: none"> • OSHA Construction – 10 hour - Training on how to recognize vermiculite. • South Carolina Licensed Asbestos Inspector to conduct testing. 				

7.2c – Asbestos - on pipes, furnaces, other small covered surfaces				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>		Results in Deferral <input checked="" type="checkbox"/>	
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
How do you address suspected ACM's (e.g., pipes, furnaces, other small surfaces) that will be disturbed through the course of weatherization work?				
Action/Allowability <ul style="list-style-type: none"> • 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. 				
Testing Protocols				
Asbestos Hazard Emergency Response Act of 1986 (AHERA) sample collection and testing is allowed and must be conducted by a certified tester.				

Client Education
<ul style="list-style-type: none"> • 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. • When deferral is necessary, provide information in writing describing conditions that must be met for weatherization to commence.
Training and Certification Requirements
<p>OSHA Construction – 10 hour - Training will include how to recognize asbestos insulation, potential asbestos containing material found in a home, and existing vermiculite that may contain asbestos. As well as how to avoid disturbing asbestos in any way.</p>

7.5 – Biologicals and Unsanitary Conditions (odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.)				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input checked="" type="checkbox"/>		
Unallowable Measure <input type="checkbox"/>				
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for dealing with biological and/or unsanitary conditions in homes slated for weatherization?				
Action/Allowability <ul style="list-style-type: none"> • 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				
<ul style="list-style-type: none"> • Inform client in writing of observed conditions. • Provide information on how to maintain a sanitary home. • When deferral is necessary, complete Deferral Form# 107 describing conditions that must be met for weatherization to commence. 				
Training				
<ul style="list-style-type: none"> • How to recognize unsafe conditions and when to defer. • Safe work practices when encountering such conditions. • OSHA Construction - 10 hour 				

7.6 – Building Structure and Roofing				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input type="checkbox"/>	Alternative Guidance <input checked="" type="checkbox"/>		Results in Deferral <input type="checkbox"/>	
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
Incidental and minor repairs, as defined below, are allowable. Otherwise, project will be deferred until area of repairs can be corrected or eliminated through other funding sources.				
What guidance do you provide Subgrantees for dealing with structural issues (e.g., roofing, wall, foundation) in homes slated for weatherization?				
<ul style="list-style-type: none"> • Building rehabilitation is beyond the scope of the Weatherization Assistance Program. • Homes that require more than minor repairs must be deferred 				
How do you define “minor” or allowable structure and roofing repairs, and at what point are repairs considered beyond the scope of weatherization?				
Incidental Repairs for Minor work Funds will be used for incidental repairs of building structure and roofing. If no attic insulation is installed and the repair cannot be an incidental repair, then a minor repair may be done under Health & Safety.				
Beyond Scope of Weatherization Homes with conditions that require more than incidental repairs have to be deferred.				
If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?				
N/A				
Client Education				
Energy Auditors shall inform the residents of the potential hazard and recommendation to seek remedy of the condition.				
Training				
How to identify structural and roofing issues. OSHA Construction – 10 hr				

7.7 – Code Compliance				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input type="checkbox"/>	Alternative Guidance <input checked="" type="checkbox"/>		Results in Deferral <input checked="" type="checkbox"/>	
Funding				
DOE <input type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
Correction of preexisting code compliance issues is not an allowable cost other than where 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 particular health and safety category.				

What guidance do you provide Subgrantees for dealing with code compliance issues in homes receiving weatherization measures?
When a condition cannot be corrected within the Incidental Repair costs category, work should be deferred.
When applicable, code violations shall be listed on Form 107 Deferral Notification.
What specific situations commonly trigger code compliance work requirements for your network? How are they addressed?
Follow State and local codes while installing weatherization measures. <ul style="list-style-type: none"> • Condemned and “red tagged” properties where health and safety conditions exist that cannot be corrected under this guidance must be deferred. • If code issues are cause for deferral, or if code compliance work is triggered by weatherization work, the agency must cite the specific code in the client file.
Client Education
<ul style="list-style-type: none"> • Inform client in writing of observed code compliance issues when it results in a deferral. • When deferral is necessary, complete Deferral Form# 107 describing conditions that must be met for weatherization to commence.
Training
OSHA Construction – 10 hour

7.8 – Combustion Gases				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
Action/Allowability				
<ul style="list-style-type: none"> • 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&S measure unless prevented by other guidance herein. • Maintain documentation justifying the replacement with a cost comparison between replacement and repair in the client file. 				
Testing Protocols				
<ul style="list-style-type: none"> • 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. • Potential CO related health and safety concerns shall be discussed with the client. The client shall be immediately advised of any serious concerns relative to CO. 				

How are crews instructed to handle problems discovered during testing, and what are the specific protocols for addressing hazards that require an immediate response?
<ul style="list-style-type: none"> • Testing must be conducted before work begins and after work is completed and, for some tests, at the end of each work day. • Subgrantees will provide proper venting and minor heating system repairs when necessary to ensure indoor air quality and mitigate combustion gas hazards. • In cases where serious hazards exist that cannot be resolved with weatherization program funding, work on the unit will be deferred. • When any combustion gas hazard is detected, subgrantees will notify owners and occupants.
Client Education
<ul style="list-style-type: none"> • Provide client with combustion safety and hazards information. • Provide client with Owner's Manual and Warranty papers.
Training
<ul style="list-style-type: none"> • How to perform appropriate testing, determine when a building is excessively depressurized, and the difference between air free and as-measured CO. • BPI 1200 Carbon Monoxide Action Levels.

7.9 – Electrical
Concurrence, Alternative, or Deferral
Concurrence with Guidance <input type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input checked="" type="checkbox"/>
Funding
DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
What guidance do you provide Subgrantees for dealing with electrical hazards, including knob & tube wiring, in homes slated for weatherization?
<ul style="list-style-type: none"> • Electrical repairs and installation must be done by a licensed electrician. • If live knob and tube wiring is evident, defer the weatherization work.
Testing Protocols
<ul style="list-style-type: none"> • Visual inspection for presence and condition of knob-and-tube wiring. • Check for alterations that may create an electrical hazard. • Voltage drop, and voltage detection testing are allowed.
How do you define “minor” or allowable electrical repairs, and at what point are repairs considered beyond the scope of weatherization?
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. Rewiring an entire dwelling is beyond the scope of weatherization.
If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?
South Carolina does not utilize a Priority List.
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
<ul style="list-style-type: none"> • Identifying electrical hazards. • OSHA Construction - 10 hour

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?

Action/Allowability

- 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 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 the dwelling.
- Notify the utility company and temporarily halt work when leaks are discovered that are the responsibility of the utility to address.
- Test exposed gas lines for fuel leaks from utility coupling into, and throughout, the home.

How do you define allowable fuel leak repairs, and at what point are repairs considered beyond the scope of weatherization?
<ul style="list-style-type: none"> • 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 utility company and temporarily halt work when leaks are discovered that are the responsibility of the utility to address.
Client Education
<ul style="list-style-type: none"> • Complete Deferral Form# 107 if fuel leaks are detected. • Notify client.
Training
Fuel leak testing

7.12 – Gas Ovens / Stovetops / Ranges				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for addressing unsafe gas ovens/stoves/ranges in homes slated for weatherization?				
Action/Allowability				
<ul style="list-style-type: none"> • When testing indicates a problem, standard maintenance on gas cooktops and ovens is allowed. • Replacement is not allowed. 				
Testing Protocols				
<ul style="list-style-type: none"> • Test gas ovens for CO. • Inspect cooking burners for operability and flame quality. 				
Client Education				
Inform clients of the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit the production of CO.				
Training				
<ul style="list-style-type: none"> • Testing techniques • Carbon Monoxide Action Levels 				

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 <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>		Results in Deferral <input type="checkbox"/>	
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
Client Education				
Inform client in writing of hazards associated with hazardous waste materials being generated and handled in the home.				
Training				
<ul style="list-style-type: none"> • Appropriate Personal Protective Equipment (PPE) for working with hazardous waste materials. • Disposal requirements and locations. • Health and environmental risks related to hazardous materials. • OSHA certification requirements for handling hazardous materials. 				
Disposal Procedures and Documentation Requirements				
Action/Allowability <ul style="list-style-type: none"> • Hazardous Waste Materials generated during 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. 				

7.14 – Injury Prevention of Occupants and Weatherization Workers (Measures such as repairing stairs and replacing handrails)				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>		Results in Deferral <input type="checkbox"/>	
Funding				
DOE <input type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees regarding allowable injury-related repairs (e.g., stairs, handrails, porch deck board)?				
Action/Allowability <ul style="list-style-type: none"> • Inspect for dangers that would prevent weatherization. • If conditions will not be repaired, inform client in writing of observed hazards and associated risks. • When necessary to effectively weatherize the home, workers may make minor repairs and installations. 				
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.				
Repairs of stairs and installation of handrails may be conducted only when necessary to effectively weatherize the home and may be charged according to the guidelines in WPN 19-5 to either Incidental Repairs or Health and Safety.				

Training
Identifying hazards. OSHA Construction – 10 hours

7.15 – Lead Based Paint				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
Safe Work Protocols				
Action/Allowability <ul style="list-style-type: none"> • Crews must follow EPA's Lead; Renovation, Repair and Painting Program (RRP) when working in pre-1978 housing unless testing confirms 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. • Documentation in the 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. 				
Testing Protocols				
<ul style="list-style-type: none"> • 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. • SC OEO will-verify that contractors and crews are using lead safe work practices during monitoring. 				
Client Education				
<ul style="list-style-type: none"> • Follow pre-renovation education provisions for RRP. • When deferral is necessary, complete Deferral Form# 107 describing conditions that must be met for weatherization to commence. 				
Training and Certification Requirements				
<ul style="list-style-type: none"> • All employees and contractors working on pre-1978 homes must receive training to install measures in a lead-safe manner in accordance with the SWS and EPA protocols, and installation must be overseen by an EPA Certified Renovator. • State monitors required to have the Renovation, Repair and Painting Program (RRP) course. 				
Documentation Requirements				
Document Lead Safe Weatherization Protocols on Form # 103A Lead Safe Renovator				

7.16 – Mold and Moisture (Including but not limited to: drainage, gutters, down spouts, extensions, flashing, sump pumps, dehumidifiers, landscape, vapor retarders, moisture barriers, etc.)				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>		Alternative Guidance <input type="checkbox"/>		Results in Deferral <input type="checkbox"/>
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for dealing with moisture related issues (e.g., drainage, gutters, down spouts, moisture barriers, dehumidifiers, vapor barrier on bare earth floors) in homes slated for weatherization?				
<ul style="list-style-type: none"> • Source control (i.e. correction of moisture and mold creating conditions) is allowed 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. • Where severe Mold and Moisture issues cannot be addressed, deferral is required. • Mold cleanup is not an allowable H&S cost. • Surface preparation where weatherization measures are being installed (e.g., cleaning mold off window trim to apply caulk) must be charged as part of the ECM, not to the H&S budget category. • Visual assessment including exterior drainage. • Diagnostic tools such as moisture meters are recommended for pre-weatherization and at the final inspection. • Mold testing is not an allowable cost. 				
How do you define “minor” or allowable moisture-related measures, and at what point is work considered beyond the scope of weatherization?				
Limited water damage repairs that can be addressed by weatherization workers are allowed when necessary to weatherize the home and to ensure the long-term stability and durability of the measures.				
Client Education				
<ul style="list-style-type: none"> • Provide client written notification and disclaimer on mold and moisture awareness utilizing Mold and Moisture Form# 102. • 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 describing conditions that must be met for weatherization to commence. 				
Training				
<ul style="list-style-type: none"> • Specific Training for Mold & Moisture (Tier 2 Training). • How to recognize drainage issues. • OSHA Construction – 10 hours 				

7.17 – Pests				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for dealing with pests and pest intrusion prevention in homes slated for weatherization?				
<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. 				
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				
<ul style="list-style-type: none"> • Inform client in writing of observed condition and associated risks. • When deferral is necessary, complete Deferral Form# 107 describing conditions that must be met for weatherization to commence. 				
Training				
How to assess presence and degree of infestation, associated risks, and deferral policy. OSHA Construction – 10 hours				
7.18 – Radon				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees on radon?				
<ul style="list-style-type: none"> • All counties in South Carolina have some risks of radon. • Clients must sign the Radon Informed Consent form prior to receiving weatherization services. This form must be kept in the client file. • Radon mitigation is not an allowable H&S cost. 				
Testing Protocols				
Free testing is made available to all weatherization clients through the South Carolina Department of Environmental and Quality Control.				
Client Education				
Provide all clients EPA's "A Citizen's Guide to Radon".				
Training and Certification Requirements				
<ul style="list-style-type: none"> • 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. • Auditors, assessors, inspectors, and contractors must have taken the OSHA Construction 10-hour course. 				
Documentation Requirements				
Radon Notification Form #108				

7.19 – Safety Devices: Smoke and Carbon Monoxide Alarms, Fire Extinguishers				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What is your policy for installation or replacement of the following:				
Smoke Alarms: <ul style="list-style-type: none"> Smoke alarms may be installed where alarms are not present or are inoperable. Smoke alarms must be UL 217. 				
Carbon Monoxide Alarms: <ul style="list-style-type: none"> CO alarms must be UL 2034 listed and OSHA compliant. In accordance to ASHRAE 62.2 (2016), all weatherized dwellings shall have at least one UL listed CO alarm installed 				
Fire Extinguishers: Fire Extinguishers are not allowable.				
Testing Protocols				
<ul style="list-style-type: none"> 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				
<ul style="list-style-type: none"> Where to install alarms. Local code compliance. 				

7.20 – Occupant Health and Safety Concerns and Conditions				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Subgrantees for soliciting the occupants' health and safety concerns related to components of their homes?				
<ul style="list-style-type: none"> How to assess occupant preexisting conditions and determine what action to take if the home is not deferred. Awareness of potential hazards. 				
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?				
Screen occupants to reveal known or suspected health concerns either as part of initial application for weatherization, during the audit, or both.				
What guidance do you provide Subgrantees for dealing with potential health concerns when they are identified?				
<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 will be required to take appropriate action based on severity of risk. Failure or the inability to take appropriate actions must result in deferral. 				

Client Education		
<ul style="list-style-type: none"> • Inform client in writing of any known risks. • Provide client with Subgrantee point of contact information in writing so client can inform of any issues. • When deferral is necessary, complete Deferral Form# 107 describing conditions that must be met for weatherization to commence. 		
Documentation Form(s) have been developed and comply with guidance?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Deferral form 107 - http://oeo.sc.gov/weatherizationdocs.html		

7.21 – Ventilation and Indoor Air Quality				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>		Alternative Guidance <input type="checkbox"/>		Results in Deferral <input type="checkbox"/>
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
Identify the Most Recent Version of ASHRAE 62.2 Implemented (optional: identify Addenda used)				
ASHRAE 62.2 - 2016				
Testing and Final Verification Protocols				
<ul style="list-style-type: none"> • Install ventilation as required by ASHRAE 62.2 - 2016. • The Residential Energy Dynamics REC Calc ASHRAE 62.2-2016 online tool will be used to determine ventilation requirements. • Measure fan flow of existing fans and of installed equipment to verify performance 				
Client Education				
<ul style="list-style-type: none"> • 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. 				
Training				
ASHRAE 62.2 training, including proper sizing, evaluation of existing and new systems.				

7.22 – Window and Door Replacement, Window Guards				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>		Alternative Guidance <input checked="" type="checkbox"/>		Results in Deferral <input type="checkbox"/>
Funding				
DOE <input type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide to Subgrantees regarding window and door replacement and window guards?				
Doors and windows are allowed to be replaced using LWAP funds with a SIR less than 1.0 not included in the cumulative SIR. Documentation must be provided.				
Testing Protocols				
Not applicable				
Client Education				
Provide written information on lead risks wherever issues are identified.				
Training				
Awareness of guidance.				

7.23 – Worker Safety (OSHA, etc.)				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>		Results in Deferral <input type="checkbox"/>	
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
How do you verify safe work practices? What is your policy for in-progress monitoring?				
Action/Allowability <ul style="list-style-type: none"> Workers must follow OSHA standards where required and take precautions to ensure the H&S of themselves and other workers. All Subgrantees and contractors must maintain compliance with the current OSHA Hazard Communication Standard, including on-site organized Safety Data Sheets. QCI will conduct at least one in-progress inspection if available and time permits to verify that Subgrantees, crews and contractors follow safe work practices. 				
Training and Certification Requirements				
<ul style="list-style-type: none"> 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. 				

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