

Weatherization Grantee Health and Safety (H&S) Plan Louisiana

1.0 – GENERAL INFORMATION

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

DOE and LIHEAP WAP funded Health and Safety Measures outlined in this Guidance must be completed consistent with the requirements of the DOE/NREL Standard Work Specifications (SWS) <https://sws.nrel.gov/> and this H&S Plan.

2.0 – BUDGETING

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

Select which option used below.

Separate H&S Budget

Contained in Program Operations

3.0 – H&S EXPENDITURE LIMITS

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

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

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

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

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



weatherization materials.” This same section of the regulation excludes the H&S costs from the ACPU limitation if H&S costs are budgeted separately.

DOE recommends reviewing recent budget requests and compare those to actual H&S expenditures to see if previous budget estimates have been accurate. The resulting Total Average H&S Cost per Unit multiplied by the Grantee’s production estimate in the Annual File should correlate to the H&S budget amount listed in the Grantee’s annual plan.

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

The elimination of health and safety hazards is essential before installing weatherization materials on an approved property. This task is accounted for in a separate budget category of the Louisiana Grant Application.

Subgrantees may use funds to abate energy-related Health and Safety hazards only if elimination of such hazards are necessary before or as a result of installation of weatherization materials.

For example, the measure “Repair Leak/Adding a Gas Line” listed in the H&S Measure Matrix is allowable as a Health and Safety cost ONLY if it is done in conjunction with replacement of a heating system as a Health and Safety cost; or if it is to repair an existing gas line as a Health and Safety cost. It is not allowable as a Health and Safety cost to add gas lines for new systems installed as Energy Conservation Measures (ECMs).

LHC will review and track Subgrantee Health and Safety expenditures throughout the grant period. If it appears that a Subgrantee will have unexpended Health and Safety funds, the funds will be reprogrammed to the Program Operations line budget line and additional WAP units will be completed.

LHC’s Software of Record (Hancock) contains a Job Funding Limit feature for each Funding Source and Budget Type. LHC uses this feature to define a Funding Limit for overall Health and Safety expenditures on a job. The limit is changed annually, and the Total Average H&S Cost Per Unit as defined by the Health and Safety Plan – H&S Measure Matrix (below) is used as the limit. Any time Health and Safety expenditures on a unit exceed this limit, LHC review and approval will be triggered within the software. LHC must give approval within Hancock before the expenses can be added to the invoice.

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

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



Measure Matrix
Final.xlsx

H&S Measure Matrix			
Double Click To Open For Editing			
Cells This Shade Auto-Calculate			
Measure	Average Cost	Frequency Installed/Completed	Auto-Calculated Average Cost
Bathroom Exhaust Fan	\$238.64	30.8%	\$73.43
Blocking Heat Producing Devices	\$113.80	0.5%	\$0.58
Combustion Problems in CAZ	\$124.58	3.6%	\$4.46
Dryer Venting	\$85.48	89.2%	\$76.27
Install C/O Alarm	\$84.71	99.0%	\$83.84
Install GFI	\$0.00	0.0%	\$0.00
Install Smoke Alarm	\$89.54	97.4%	\$87.25
Install Window Heat or A/C Unit	\$1,176.19	2.1%	\$24.11
Range Hood Install	\$404.58	58.5%	\$236.52
Remove Unvented Space Heater	\$157.17	12.3%	\$19.34
Repair Leak/Adding a Gas Line	\$162.31	9.7%	\$15.82
Replace Mercury Thermostat	\$92.11	4.1%	\$3.78
Replace Unvented Space Heater	\$1,898.93	12.8%	\$243.44
Vent Existing Exhaust Appliance Outside	\$317.74	43.6%	\$138.50
Water Heater Pressure Relief Valve	\$42.33	35.9%	\$15.20
Water Heater Replacement	\$748.49	7.2%	\$53.73
Whole House Ventilation	\$497.05	53.3%	\$265.08
Zonal Pressure Combustion Make Up Air	\$97.71	4.1%	\$4.01
Worker/Occupant Injury Prevent	\$0.00	0.0%	\$0.00
Limited Removal of Pollutants	\$0.00	0.0%	\$0.00
Roofing Repair/Bio Prevention	\$0.00	0.0%	\$0.00
Total Average H&S Cost Per Unit			\$1,345.35
Enter Estimated Production (Annual File: IV.2 WAP Production Schedule)			141
Enter Estimated Program Operations Budget (Annual File - Budget)			\$1,026,213.00
H&S Budget (Total Average H&S Cost Per Units * Estimated Production)			\$189,694.16
Suggested H&S Budget Request			18.485%



4.0 – INCIDENTAL REPAIR MEASURES

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

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

No Health and Safety measures will be identified as incidental repair measures (IRMs) this year.

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

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

Required topics are:

- **Occupant Pre-existing or Potential Health Condition Screening**
 - Provides documentation that allows occupant(s) to self-report known or suspected health concerns as part of initial application for weatherization, during the energy audit, or other part of the weatherization process as specified. Must minimally contain the following:
 - Any known risks associated with the measures and materials being installed
 - Subgrantee point of contact information for occupant(s)
 - Date of screening
- **Hazard Identification Notification**
 - Provides documentation that the occupant and landlord (if applicable), have been informed of any potential hazards identified during the energy audit or intake process. Must minimally contain the following:
 - Date(s) of the energy audit/assessment and when the occupant(s) (and landlord, if applicable) was informed of a potential H&S issue
 - A clear description of the problem, including any testing results
 - A statement indicating if, or when weatherization could continue

Radon Informed Consent Form

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



- A list of precautionary measures WAP will install based on [EPA Healthy Indoor Environment Protocols](#).
- Some of the benefits of Weatherization including energy savings, energy cost savings, improved home comfort, and increased safety.

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

Subgrantees are required to gather occupant health information as part of the initial client application process. This takes place before any work is performed on the home by the agency auditor or subcontractor.

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

This occupant health information is then discussed with the client during the interview process. Weatherization Subgrantees and their representatives, including subcontractors, are trained to notify the clients of any health and safety conditions that may be exacerbated through receiving WAP services. All reasonable precautions will be taken against performing work on homes that will subject the workers, occupants or themselves to health and/or safety risks.

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

In cases where an occupant's health is fragile, or an occupant has been identified to have pre-existing health condition, including allergies, and/or the crew work activities would themselves constitute a health and/or safety hazard, the occupant(s) at risk may 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 allergic to the alternative materials and they meet DOE regulations, crews may substitute the alternative material(s). If no safe alternative material, meeting DOE standards, is available, LHC must provide written approval before proceeding. This must be well documented in the client file. Louisiana uses a **Hazard Identification Notification** which includes the client's name and address, dates of the audit/assessment, when the client was informed of a potential health and safety 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.

Location where forms have been uploaded/submitted

Separate attachment to SF424

Separate attachment to H&S Plan



6.0 – HEALTH AND SAFETY CATEGORIES

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

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



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

Required Actions

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

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



Allowable Actions	
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
<p>Primary air conditioning system replacement, repair, or installation is allowed only in homes where current occupants meet Louisiana’s WAP definition of “at-risk” AND climate conditions warrant.</p> <p>At-risk occupants are defined as under 5 years of age, elderly, or documented medical condition in Louisiana. Medical eligibility for an air conditioner is required for anyone under the age of 60. You must have written documentation from a third-party medical professional.</p> <p>“System” can mean a central unit or multiple existing individually operating units; however, when a central unit is in place, it shall be considered the primary unit, and all other units are to be considered secondary. Use proper sizing protocols (Manual J, State Approved sizing protocols, NEAT/MHEA outputs, etc.) based on post-weatherization housing characteristics, and assess the mechanical ventilation when installing or replacing a heating or cooling appliance.</p>	
Prohibited Actions	
Concur with DOE Guidance <input checked="" type="checkbox"/>	
Using DOE WAP H&S funds for replacement or installation of secondary heat sources if prohibited.	
Required Testing/Inspection	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
<ul style="list-style-type: none"> • Verify that primary heating systems are present, operable, and performing correctly. • Conduct combustion appliance testing and visual inspection of all combustion appliances and their related venting. • Depressurization and spillage testing is required for all Category 1 appliances pre- and post-weatherization and before leaving the home on any day when work has been done that could affect draft (e.g., air or duct sealing, adding exhaust ventilation). • CO testing is required for all combustion appliances, regardless of venting type. • Verify proper clearances for all combustion venting types. • Visually inspect the entirety of solid fuel-fired appliance installations (e.g., wood stoves, coal stoves, pellet stoves, fireplaces) including the venting system to ensure it adheres to the applicable code or local authority having jurisdiction. Appliances must be inspected pre- and post-weatherization. Look for visual evidence of soot on the walls, mantel, or ceiling or creosote staining near the flue pipe. • Conduct/simulate pre- and post- weatherization worst case CAZ depressurization testing at negative 5 Pascal in spaces having a fireplace or woodstove. • Treat vented gas- and liquid-fueled space heaters the same as furnaces in terms of combustion safety testing, repair and replacement. • Safety inspections related to space heaters, fireplaces, and woodstoves must include, but not be limited to, verification of adequate floor protection, and code-compliant clearances to walls and other combustible materials. 	



Grantee Combustion Testing Action Levels

CO will be tested for in undiluted flue gases of combustion appliances under worse case CAZ (largest negative pressure). Furnace CO should not exceed 400 ppm air free measurements or service will be provided (unless CO measurements are within manufactured specifications). If CO exceeds 200 ppm air-free measurement in water heaters and room heaters, service will be provided to reduce CO to below these levels (unless CO measurements are within manufactured specifications). A clean and tune will be conducted if measured CO in the undiluted flue gases of the oven vent at steady state exceeds 225 ppm as measured (unless CO measurements are within manufactured specifications).

Combustion spillage will be tested for in undiluted flue gases of combustion appliances under worse case CAZ (largest negative pressure). If spillage in a combustion appliance with a warm vent (i.e. water heater) exceeds two minutes during pressure testing, identify measures to mitigate spillage. If spillage in a combustion appliance with a cold vent (i.e. unused heating system) exceeds five minutes during spillage testing, identify measures to mitigate. 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 (i.e., tightening the home, adding exhaust). Inspect and test for gas or oil leakage at connections of natural gas, propane piping, or oil systems. If leaks are found, immediate action will be taken to notify occupant to help ensure leaks are repaired.

Emergency problems (e.g., ambient gas levels greater than 10% Lower Explosion Limit (LEL) and/or ambient CO levels that exceed 70 ppm) will be communicated clearly and immediately to the customer, the home shall be evacuated, and appropriate personnel (i.e. HVAC technician, utility, emergency services) shall be contacted.

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

Concur with DOE Guidance

Alternative Guidance

Conduct pre- and post- weatherization worst case CAZ depressurization testing at negative 5 Pascal in spaces having a fireplace or woodstove. Fireplace or woodstove venting that is left operational after weatherization must meet current local or national standards or the home must be deferred.

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

- Appropriate use and maintenance of units.
- Provide all paperwork and manuals for any equipment installed by weatherization.
- Discuss and provide information on proper disposal of bulk fuel tanks when not removed as part of the weatherization work.
- Where combustion equipment is present, provide combustion safety and hazards information including how to recognize depressurization, dangers of CO poisoning, and fire risks associated with combustion appliance use.



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

Required Actions

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

When suspected friable Asbestos Containing Materials (ACM) are present, including vermiculite, assume they contain asbestos and take precautionary measures to prevent disturbing it during the audit and work unless testing determines otherwise.

Grantee ACM policy

- When suspected friable Asbestos Containing Materials (ACM) are present, including vermiculite, take precautionary measures as if it is asbestos unless testing determines otherwise.
- Inspect heating, ventilation and HVAC system piping and other small surface coverings for asbestos.
- Assume asbestos is present in suspect covering materials.
- Keep activities to a minimum in areas having damaged material that may contain asbestos. Do not further disturb the material.
- Do not dust, sweep, or vacuum debris that may contain asbestos. Never saw, sand, scrape, heat, burn or drill holes in asbestos materials.
- Do not track material that could contain asbestos through the unit.
- Follow EPA, DEQ, and OSHA regulations regarding the safe handling of asbestos to insure worker and client safety.
- If the unit contains suspected ACMs in siding, walls, foundation or ceiling, assume that this material is contaminated with asbestos and do not disturb it.
- Do not open any walls to check for vermiculite.
- The existence of asbestos siding that is in good condition does not prevent installing dense-pack insulation from the exterior. Siding in good condition may be removed and reinstalled in order to perform the ECM, and the associated costs may be charged as part of the ECM. Charge only those costs directly associated with the testing and encapsulation to the H&S budget category.
- When deferral is necessary due to asbestos, occupant must provide documentation that a certified professional performed the remediation before work continues. Document with signatures and inform the client regarding the damaged material and suspected asbestos.

Grantee Blower Door Testing Policy When Suspected ACM Exists

A pressurized blower door test will be conducted where suspected friable ACM is present (as defined by EPA), including vermiculite. Do not perform a blower door test if it will disturb the vermiculite.

Allowable Actions

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
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- Encapsulation by an appropriately trained asbestos control professional. This should be conducted prior to blower door testing if the materials are friable.
- Temporary removal and reinstallation of ACM siding to perform an ECM (e.g., wall insulation).
- Limited encapsulation or removal of suspected ACM on small surfaces (pipes, ductwork, furnaces, other small, covered surfaces, etc.) by an appropriately trained asbestos control professional.



Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for general abatement/removal/or replacement of asbestos siding, thermal system insulation (TSI) or Transite, or vermiculite is prohibited.		
Required Testing/Inspection		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> • Visually inspect all surfaces (i.e., walls, floors, ceilings, roofs) for suspected ACM prior to drilling or cutting • Assume asbestos is present in suspect materials unless testing reveals otherwise. 		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
N/A		
Required Occupant Education		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	
<ul style="list-style-type: none"> • Formally notify the occupant, and landlord if applicable, in writing: <ul style="list-style-type: none"> ○ of suspected ACMs are present and what precautions will be taken to ensure the occupants' and workers' safety during weatherization; ○ of results if testing was performed; ○ not to disturb suspected ACM; ○ Client education from the EPA web site on vermiculite insulation. http://www2.epa.gov/asbestos/protect-your-family-asbestos-contaminated-vermiculite-insulation; ○ When deferral is necessary due to asbestos, occupant and/or landlord if applicable, must provide documentation that a certified professional performed the remediation before work continues. • Clients must sign the Acknowledgement of Pre-Weatherization Client Education form and document in the client file. 		



6.3 – Biologicals and Unsanitary Conditions

Required Actions

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

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

Allowed Actions

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
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Limited remediation of conditions that may lead to or promote biological concerns and unsanitary conditions (e.g., repairing leaking sewage pipe). Addressing bacteria and viruses is not an allowable cost.

Required Testing/Inspection

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

- Sensory inspection of interior, exterior, attics, and subspaces of dwelling.
- Use of personal protective equipment shall be strictly enforced. Respirators, protective eyewear, and protective clothing will be worn when there is suspicion or knowledge that biological agents may be present in order to eliminate or minimize crew exposure.
- The inspection will be conducted by the agency representative provided that they are not exposed to hazardous biological contaminants.
- Subgrantee Weatherization coordinators, assessors and final inspectors are trained with curriculum that includes how to recognize Biological and Unsanitary Conditions and when to defer.

Prohibited Testing/Inspection

Concur with DOE Guidance

- DOE WAP H&S funds may not be used for testing of materials for biological contaminants.
- Cleanup of contaminants due to the occupant's neglect are not eligible.
- Hazardous conditions must be corrected by a certified professional and signed clearance notification must be provided to the agency prior to weatherization continuing. Non-hazardous conditions can be corrected by the client.

Required Occupant Education

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
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- Inform occupant in writing:
 - of observed biological and unsanitary conditions.
 - of any testing results or disposal documentation from hazards
- Clients must sign the **Acknowledgement of Pre-Weatherization Client Education** form and document in the client file.



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

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Minor roofing repairs are allowable to prevent biological growth or moisture development from occurring.

Prohibited Actions

Concur with DOE Guidance

- Using DOE WAP H&S funds for **major** repairs as defined by this plan is prohibited.
- Using DOE WAP H&S funds for building rehabilitation is also prohibited.

Define “major” repairs

Only the structural integrity shall be replaced or repaired. Major repairs are defined as roofing repairs exceeding \$400.

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

Visual inspection of the building structure and roofing for damages that compromise building durability and to verify that portions of the home where weatherization will occur are safe for entry and performance of assessments, work, and inspections.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

N/A

Prohibited Testing/Inspection

Concur with DOE Guidance

Using DOE WAP H&S funds for any testing/evaluation of structural materials by a third-party is prohibited.

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

Notify occupant in writing of structurally compromised areas observed.



6.5 – Code Compliance

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

- Correction of preexisting code compliance issues triggered by weatherization measures being installed in a specific room or area of the home is allowable.
- The specific code requirements with reference to the weatherization measure(s) that triggered the code compliance issue must be documented in the occupant file.
- Follow State, Federal and local or AHJ codes while installing weatherization measures, including H&S measures.
- The cost of complying with code requirements tied to installation of a specific measure will be charged as part of the measure, such as securing a permit to install a furnace. When work is not a direct component of the measure, but still necessary to perform weatherization work, the costs must be charged to the H&S budget category.

Prohibited Actions

Concur with DOE Guidance

- Using DOE WAP H&S funds for correction of preexisting code compliance issues not directly related to the installation of specific weatherization measures in the home is prohibited.
- Using DOE WAP funds for work on condemned properties and properties where H&S conditions exist that cannot be corrected under this guidance is prohibited.

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

Visual Inspection

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

N/A

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

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



6.6 – Electrical

Required Actions

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

Provide sufficient over-current protection and damming prior to insulating building components containing knob and tube wiring, as required by the AHJ.

Allowable Actions

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
--	--

- Minor electrical repairs (e.g., junction box covers, improper splices) are allowed to protect the occupant or workers from electrical hazards within the living area or in the immediate area where weatherization activities will occur.
- When minor electrical repairs, within the scope of weatherization, are required (moisture venting, GFCI receptacles, heating system, etc.), the typical standard of remedy shall be to sub-contract the repair work to a licensed electrician.
- All appropriate procurement and local permit procedures shall be followed when sub-contracting.

Prohibited Actions

Concur with DOE Guidance

Using DOE WAP H&S funds for *major* electrical repairs as defined by this plan is prohibited.

Define “major” repairs

Replacement of *major* electrical systems (i.e. main electrical panel, rewiring non code compliant attics, or electrical issues in units having multiple additions) is prohibited. Major repairs are defined as electrical repairs exceeding \$400.

Required Testing/Inspection

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

- Visual inspection for presence and condition of knob-and-tube wiring.
- Evaluate knob-and-tube wiring for safety prior to work.
- Check for alterations that may create an electrical hazard.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
--	--

- To determine if wiring is live, use non-contact testing methods.
- Proper clearance will be maintained around live knob and tube as required by the National Electrical Code (NEC) or local authority having jurisdiction.
- When required, a non-conductive dam that does not cover the top will be created to separate insulation from the wire path on knob and tube wiring with a minimum clearance of three inches (3”) to combustibles.
- Old wiring will be rendered inoperable and removed by a licensed electrician in accordance with the NEC National Electrical Code and local codes.
- Voltage drop and voltage detection testing is allowable, as necessary.



Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

- Provide occupant with written documentation of any electrical hazards identified that will not be addressed by weatherization.
- Provide information to occupant on over-current protection, overloading circuits, and basic electrical safety/risks if conditions warrant.
- Clients must sign the **Acknowledgement of Pre-Weatherization Client Education** form and document in the client file.

6.7 – Fuel Leaks

Required Actions

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

- When a gas leak is found on the utility side of service, the utility service must be contacted, work must be temporarily halted, and the leak must be repaired before work may proceed.
- Fuel leaks that are the responsibility of the occupant (vs. the utility) must be repaired before installing weatherization measures in the home.

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

- Replacement or repair of leaking bulk fuel tanks and/or lines if connected systems will remain after weatherization.
- Replacement of flexible appliance gas connectors that are not compliant with current fuel gas codes.
- Identify for repair or replacement any kinked, corroded or visibly worn flexible gas lines and any flexible connectors manufactured prior to 1974. Visible minor gas leaks in fitting and connectors can be repaired.

Prohibited Actions

Concur with DOE Guidance

- Using DOE WAP H&S funds to repair leaks that are the responsibility of the utility to correct is prohibited.
- Using DOE WAP H&S funds for environmental cleanup resulting from bulk fuel leaks is prohibited.
- Major gas leaks underground, in walls, and in confined spaces are considered beyond the scope of weatherization.

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

- Test all exposed gas lines, fittings, valves, and connections for fuel leaks from utility connection to the appliance throughout the home.
- Test all gas appliances for fuel leaks at all connections, valves, fittings, and burners.
- Conduct sensory inspection of all bulk fuels lines and storage tanks to determine if leaks exist.



Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
<ul style="list-style-type: none">Gas leaks will be detected through use of properly calibrated combustion gas detector, utility service information, sensory recognition or bubble test of piping system.For all natural gas, butane, and propane gas leak repairs, Subgrantees are required to use licensed, professional plumbing services that operate by city and parish local codes, permits and AHJ (authority having justification).	
Prohibited Testing/Inspection	
Concur with DOE Guidance <input checked="" type="checkbox"/>	
Using DOE WAP H&S funds for environmental testing of soil or water is prohibited.	
Required Occupant Education	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
Inform occupants in writing of fuel leak testing results, including specific location if fuel leaks are detected.	



6.8 – Gas Ovens/Stovetops/Ranges

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Limited cleaning or repair of ovens/ranges/stovetops is allowable. Repair work may include cleaning, repairs under \$100, and venting.

Prohibited Actions

Concur with DOE Guidance

Using DOE WAP H&S funds for replacement of gas ovens/ranges/stovetops is prohibited.

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

- Test gas ovens for CO.
- Ovens and other combustion appliances will be assessed for CO levels, venting, cleaning and proper operation.
- Use ASHRAE 62.2 2016 standards for installed kitchen ventilation requirements.

Define action levels for oven CO testing and resulting actions

- A clean and tune will be conducted if measured CO in the undiluted flue gases of the oven vent at steady state exceeds 225 ppm as measured (unless CO measurements are within manufactured specifications).
- Visually inspect cooking burners and ovens for operability and flame quality.
- Specify a clean and tune if the flame has any discoloration, flame impingement, an irregular pattern, or if burners are visibly dirty, corroded, or bent on gas range burners.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

N/A

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

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



6.9 – Hazardous Materials

Required Actions

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

- Hazardous Waste Materials generated by weatherization work (e.g., refrigerant, asbestos, lead, mercury, CFL lighting bulb/ballasts, etc.) must be disposed of according to all local and federal laws, regulations, and guidelines, as applicable. Costs specifically related to disposal may be charged as an H&S expense.
- Subgrantees must document disposal requirements in contract language with the responsible party.
- **Limited** removal of pollutants that pose a risk to workers is required (e.g., flammable liquids, hazardous chemicals, and other air pollutants) as defined by this plan.
- If removal cannot be performed or is not allowed by the occupant, the unit must be deferred.

Define “limited” removal of pollutants

Limited removal is defined as costs not to exceed \$250.

Allowable Actions

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
--	--

Limited removal of pollutants that pose a risk to occupants (e.g., flammable liquids, hazardous chemicals, and other air pollutants) as defined by this plan.

Prohibited Actions

Concur with DOE Guidance

Using DOE WAP H&S funds for Lead, Asbestos, and Radon **abatement** is prohibited.

Required Testing/Inspection

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

- Sensory inspection
- Follow OSHA Safety Data Sheet (SDS) guidelines for material disposal location requirements, environmental risks, appropriate Personal Protective Equipment (PPE) for working with hazardous waste materials and all state and local codes.
- Subgrantees must adhering to manufacture’s SDS/MSDS sheets for disposed of hazardous materials according to all local laws, regulations and/or Federal guidelines, as applicable.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

N/A



Prohibited Testing/Inspection

Concur with DOE Guidance

Using DOE WAP H&S funds for any testing for hazardous materials other than that specifically permitted in the asbestos, lead, and radon sections of this document is prohibited.

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

- Inform occupant in writing of hazards associated with hazardous waste materials being generated/handled in the home.
- Inform occupant in writing of observed hazardous condition and associated risks.
- Provide occupant written materials on safety issues and proper disposal of household pollutants.
- Clients must sign the **Acknowledgement of Pre-Weatherization Client Education** form and document in the client file.



6.10 - Injury Prevention of Occupants

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Minor repairs and installations to prevent occupant injury (e.g., repairing stairs, replacing handrails, etc.) are allowable but must be necessary to effectively weatherize the home.

Prohibited Actions

Concur with DOE Guidance

Using DOE WAP H&S funds for *major* repairs as defined by this plan.

Define "major" repairs

Major repairs are defined as costs exceeding \$300.

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

Visually inspect for dangers that would prevent weatherization.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

N/A

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

If identified hazardous conditions will not be corrected during weatherization, inform occupant in writing of observed hazards and associated risks utilizing the **Hazard Identification Notification** form.



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

Required Actions

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

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

Allowable Actions

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

N/A

Prohibited Actions

Concur with DOE Guidance

- Using DOE WAP H&S funds for lead abatement is prohibited.
- Using DOE WAP H&S funds for purchase, resourcing, or maintenance of X-ray Fluorescence (XRF) devices is prohibited.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
--	--

- Testing to determine the presence of lead on surfaces that will be disturbed by WAP measure installation is allowed with EPA approved testing methods.
- Testing methods must be economically feasible and justified. Testing shall only be performed by a certified Lead Paint Inspector or Risk Assessor who is trained in sampling techniques. Before incurring a testing expense consider the following:
 - Dwelling exact age is unknown - assume the presence of lead-based paint.
 - Dwelling built from 1978 on - may be assumed to be free of lead-based paint.
 - Dwelling built prior to 1978 - assume the presence of lead-based paint.
 - Routine testing, before and after weatherization work, of dwelling for lead-based paint is not an allowable expenditure.

Required Occupant Education

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input checked="" type="checkbox"/>
--	--

- Follow pre-renovation education requirements per EPA RRP rules.
- Clients must sign the **Acknowledgement of Pre-Weatherization Client Education** form and document in the client file.



6.12 – Mold and Moisture

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

- **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 WAP measures installed not to exceed \$400.
- Source control (i.e., correction of moisture and mold creating conditions) when necessary, to weatherize the home and to ensure the long-term stability and durability of the measures. Source control is independent of latent damage and related repairs. Source control includes, but is not limited to site drainage, gutters, down spouts, extensions, flashing, sump pumps, dehumidifiers, landscape, leaking roofs, vapor retarders, moisture barriers, etc.
- Window and door repairs are allowed with H&S funds to resolve a bulk water intrusion issue that is the cause of visible biological growth and in compliance with the most current program notice.

Prohibited Actions

Concur with DOE Guidance

- Using DOE WAP H&S funds for mold cleanup is prohibited.
- Using DOE WAP H&S funds for window and door replacements is prohibited.

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

Visual assessment for moisture or mold damage including exterior drainage.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Diagnostics such as material moisture content, or relative humidity measurements at the audit and/or final inspection.

Prohibited Testing/Inspection

Concur with DOE Guidance

Using DOE WAP H&S funds for mold testing of any type is prohibited.

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

- Provide occupant written notification of identified mold/moisture hazards and information regarding the associated hazard.
- Clients must sign the **Acknowledgement of Pre-Weatherization Client Education** form and document in the client file.



6.13 - Occupant Pre-existing or Potential Health Conditions

Required Actions

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

- When a person’s health may be at risk and/or WAP work activities could constitute an H&S hazard, the occupant is required to take appropriate action based on severity of risk.
- Deferral, if occupant risk cannot be mitigated.

Allowable Actions

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

N/A

Required Testing/Inspection

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

- Screen occupants for known or suspected health concerns either as part of initial application for weatherization, during the audit, or both.
- Utilize the **Occupant Pre-existing or Potential Health Condition Screening Form**.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

N/A

Required Occupant Education

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
--	---

- Inform occupant in writing of any known risks and provide pre-weatherization screening form.
- Provide occupant with Subgrantee point of contact information in writing.



6.14 – Pests

Required Actions

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

Deferral of homes were infestation of pests cannot be reasonably removed or poses H&S concern for workers.

Allowable Actions

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
--	--

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

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
--	--

Visual assessment of the presence and degree of infestation and risk to worker.

Required Occupant Education

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input checked="" type="checkbox"/>
--	--

Inform occupant in writing of observed conditions and associated risks.



6.15 – Radon

Required Actions

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

- Cover exposed dirt floors within the pressure/thermal boundary with a sealed soil gas retarder.
- Cover sump well/pits with airtight covers.
- Implement ventilation as required by ASHRAE 62.2-2016.

Allowable Actions

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

N/A

Prohibited Actions

Concur with DOE Guidance

Using DOE WAP H&S funds for radon mitigation.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
--	--

Limited short term radon testing is allowable with low-cost "do it yourself" radon test kits available at home improvement stores from \$10 to \$50. Short-term tests take 48-120 hours to complete.

Louisiana does not have any high radon potential areas. See map of Radon Zones for Louisiana: <https://www.epa.gov/sites/production/files/2014-08/documents/louisiana.pdf> .

Required Occupant Education

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
--	---

- Provide all occupants EPA’s A Citizen’s Guide to Radon and inform them of radon related risks.
- Occupants must sign an informed radon consent form prior to receiving weatherization services.
- Clients must sign the **Acknowledgement of Pre-Weatherization Client Education** form and document in the client file.



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

Required Actions

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

Install CO alarms in every home where alarms are not present or are inoperable in compliance with ASHRAE 62.2-2016 which references NFPA 720 (note: NFPA 720 has been incorporated into NFPA 72).

Allowable Actions

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
--	--

- Install smoke alarms where the AHJ requires them if alarms are not present or are inoperable on each level.
- Replace functional smoke alarms and carbon monoxide alarms if they are beyond the manufacturer’s stated lifetime (usually 10 years).
- Replace functional smoke or CO alarms batteries, if designated to be replaceable.
- A fire extinguisher may be provided in units whose primary heat source is solid fuel (wood, coal, wood pellets, grains, etc.).
- The fire extinguisher must be installed according to manufacturer’s standards and local code in vicinity of the primary heating source.
- Properly disposal of detectors following local code and state compliance.

Prohibited Actions

Concur with DOE Guidance <input checked="" type="checkbox"/>
--

Using DOE WAP H&S funds for replacement of functional smoke or CO alarms that are not beyond the manufacturer’s stated lifetime.

Required Testing/Inspection

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

- Verify the presence, operation, and age of installed detectors.
- Follow manufacturer guides for installation and testing. Do not leave detectors with client.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

N/A

Required Occupant Education

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
--	---

Provide occupant with verbal and written information on use of newly installed devices and the potential risks of not properly maintaining these devices.



6.17 – Ventilation and Indoor Air Quality

Required Actions

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

Install ventilation as required by ASHRAE 62.2 - 2016. If occupant refuses ventilation as required by ASHRAE 62.2, the home must be deferred.

Allowable Actions

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

N/A

Required Testing/Inspection

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

- ASHRAE 62.2 evaluation to determine required post-weatherization ventilation.
- Measure fan flow of existing fans and of installed equipment to verify performance.
- Conduct ASHRAE calculations with exhaust only fan’s CFM flow rate, not re-circulating fans CFM.
- Make CFM adjustments as needed to meet the ASHRAE standard.
- Post weatherization blower door numbers can be assumed to calculate required CFM, but ventilation must be adjusted and documented in the unit file once final blower door numbers are performed.
- Use whatever is greater for ASHRAE calculations: the bedrooms plus one or number of occupants.
- Take action to prevent zonal pressure differences greater than 3 Pascal across the closed interior door (if one exists), when replacing existing or upgrading whole house ventilation fans.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

N/A

Required Occupant Education

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
--	---

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



6.18 – Water Heaters

(see Combustion Appliances for combustion related requirements)

Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

- **Limited case-by-case** replacement of water heaters if the water heater poses a life-safety risk to occupants. **Limited** is defined as leaking primary tank, high CO measurements, and obvious burnt flame roll out.
- **Minor** safety repairs of water heaters (e.g., T&P valve piping, backflow prevention devices, expansion tanks) are allowed. **Minor** is defined as costs not exceeding \$250.
- Replace and install primary water heater when existing primary water heater is nonexistent.

Required Testing/Inspection

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

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

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

N/A

Required Occupant Education

Concur with DOE Guidance

Alternative Guidance

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



6.19 – Worker Safety

Required Actions

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

- Adherence to all federal, state, and local worker safety regulations (e.g., OSHA, EPA).
- All Subgrantees and contractors must maintain compliance with the current OSHA Hazard Communication Standard <https://www.osha.gov/Publications/OSHA3514.html>, including on-site organized Safety Data Sheets (SDS).

Allowable Actions

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
--	--

Minor repairs and installations to prevent injury (e.g., repairing stairs, replacing handrails, etc.) are allowable to permit installers access to the areas needed to safely complete authorized weatherization measures.

Prohibited Actions

Concur with DOE Guidance <input checked="" type="checkbox"/>
--

Using DOE WAP H&S funds for **major** repairs as defined by this plan.

Define “major” repairs

Major repairs are defined as costs exceeding \$300.

Allowable Testing

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

N/A



6.X – (Insert Additional H&S Items for Use of DOE WAP H&S funds)

Required Actions

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

Insert required item text

Allowable Actions

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

If DOE WAP H&S Funds are used for any “allowable” actions, detail them here.

Prohibited Actions

Concur with DOE Guidance

What is prohibited

Required Testing/Inspection

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

Insert required item text

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
---	---

If DOE WAP H&S Funds are used for any “allowable” testing, detail them here.

Prohibited Testing/Inspection

Concur with DOE Guidance

What is prohibited

Required Occupant Education

Concur with DOE Guidance <input type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
---	---

Insert required item text



Occupant Pre-existing or Potential Health Condition Screening

Certain aspects of weatherizing a home may affect individuals that have certain medical conditions. Prior to weatherization beginning, each home receives an energy audit to determine the measures needed to effectively weatherize and make each home more energy efficient. If a certain medical condition may be affected by a weatherization measure, it is the responsibility of the client to notify the Subgrantee prior to work beginning. Deferral of services is required if:

- No cost-effective option for the material can be identified
- The measure is defined as a “**major measure**”, and
- The client does not accept the risks.

“**Major measure**” is defined as follows: *A high priority measure, which if skipped, would result in “partial” weatherization of a unit. Major measures are as follows: air sealing, duct sealing of ducts outside the thermal boundary, attic insulation, wall insulation and floor or belly insulation.*

Possible Risks

- **Indoor pollutant exposures may be increased due to air-tightening activities.**

Tightening a building is essential for energy efficiency but may also have the unintended consequence of allowing contaminants that would otherwise be diluted in leaky homes to build up to unhealthy levels, including:

- Combustion gases, including deadly carbon monoxide
 - Secondhand smoke in homes of smokers, or in attached multi-family dwellings adjacent to smokers
 - Hundreds of chemicals — volatile organic compounds, or VOCs — used in many building materials and consumer products.
- **Indoor pollutant exposures caused by retrofit activities.**
 - Retrofits may disturb dangerous materials such as lead in paint and asbestos in flooring and insulation products.
 - **Mold and moisture problems caused or exacerbated by retrofit activities.**
 - If a retrofit does not properly address mold and moisture control, such as water vapor transport and condensation, significant moisture problems can occur in a retrofitted home. In addition, moisture-laden building materials can trap additional moisture in a retrofitted building.

Do any household members have pre-existing or potential health conditions to take into consideration for weatherization of the residence? Circle: Yes or No



Measures/Materials to be Installed

Known Risks

I am aware that weatherization may result in negative impacts on occupant health, and that mechanical ventilation (indoor air quality) may decrease those affects.

I have received information on the measures to be installed and health-related risks were discussed.

I have chosen to go forward with weatherization and accept all risks of injury or damages on behalf of my household. I have carefully read this informed consent form and have signed it of my own free will.

Site Address: _____

Client Printed Name: _____

Client Signature: _____ Date: _____

Landlord Printed Name (if applicable): _____

Landlord Signature: _____ Date: _____

Subgrantee Representative Printed Name: _____

Subgrantee Representative Signature: _____

Subgrantee Contact Information: _____



**Weatherization Assistance Program (WAP)
Hazard Identification Notification**

Inspection Date: _____ **Inspector:** _____

Building ID: _____ **Subgrantee:** _____

Applicant Name: _____ **Notification Date:** _____

Address: _____

Lessor/Owner Name & Address (if applicable): _____

Recently your home was inspected for weatherization services. It is the policy of this Subgrantee to provide weatherization services when those services may be delivered effectively and safely, without undue hazards to our staff or our clients. Health and Safety problems and or conditions were noted on _____(date). Those conditions are checked below:

- Standing water, mold, friable asbestos, deteriorated lead-based paint surfaces or other hazardous materials, this cannot be addressed by the weatherization work.
- Evidence of infestations of rodents, insects, and/or other vermin.
- Un-vented space heater(s) that may have a harmful effect on the air quality of the home.
- Unsecured pets that may prevent workers from safely completing their work.
- The presence of sewage or animal feces in the home.
- Improperly stored chemicals, combustible materials, or other fire hazards that present a danger to the occupants or the workers.
- Maintenance or housekeeping practices that limit the access of workers to the dwelling or create an unhealthy work environment.
- Major remodeling is in progress, which limits the proper completion of major weatherization measures.
- Preexisting code compliance issues, combustion safety, mold, moisture.
- Electrical or plumbing hazards or structural failures that cannot be addressed as a part of weatherization services.
- Threat(s) of violence or abusive behavior to worker(s) or household member(s) during the weatherization process.
- The illegal presence or use of any controlled substance in the home during the weatherization process.
- Occupant has known health conditions that prohibit the installation of insulation or other weatherization materials.
- Other: _____

LA WAP: Hazard Identification Notification

Weatherization may be reconsidered, if you are able to meet the conditions listed below by:
_____ (date).

(List specific steps which must be taken below)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

When you have met the conditions listed above, or if you believe a mistake has been made in this determination, or would like to appeal the decision, please contact the party listed below, and we will re-inspect your home within ____ working days of hearing from you.

Subgrantee Contact: _____

Contact Title: _____

Phone: _____

Email: _____

To assure that you have received this notice it has been sent to you by certified mail or hand delivered to you for signature. The signature on the receipt verifies your receipt of this notice.

_____	_____	_____
Applicant Signed Name	Applicant Printed Name	Date Signed
_____	_____	_____
Lessor/Owner Signed Name	Lessor/Owner Printed Name	Date Signed

Please note your eligibility for weatherization services lapses on _____ (date).

If you have not re-contacted us by _____ (date), your application will be denied.

Instructions for completing the form:

Regardless of whether weatherization services are performed or not, auditors will provide the client with a written list of found health and safety concerns, with a copy inserted into the client file, using the form **Hazard Identification Notification** resources for specific safety issue corrections whenever possible. Potential referral resources include but may not be limited to:

- Childhood Lead Poisoning Prevention Program
- Lead Hazard Control
- Maternal and Child Health home visiting programs
- Housing and Urban Development
- City or Town welfare
- Rural Economic Development
- Landlords/homeowners
- Any other such sources known by Community Action Programs to be available

The evaluation is in no way intended to be a code compliance inspection and should not be construed as such. The form will also indicate repairs the client/owner is responsible for correcting prior to weatherization, if applicable. The client will also be informed that corrective action of all items is recommended and that it is the client's responsibility to do so.

Health and safety problems found during the health and safety assessment will result in a Subgrantee taking one of four actions:

1. If the problem(s) will not prevent the dwelling from being weatherized and installing the weatherization measures will not exacerbate the problem, the Subgrantee can proceed with weatherization.
2. If the problem(s) must be remedied before or during weatherization, the corrective action is allowable under this guidance, and the cost is reasonable as defined earlier in this document, weatherization can proceed; the health and safety issues must be corrected prior to job completion.
3. If the problem(s) must be remedied before weatherization measures can be installed, and the corrective action is not allowable under this guidance or the cost is not reasonable, then correction of the health and safety issue becomes the client/owner's responsibility. The Subgrantee must defer weatherization, until the issue can be corrected.

When deferral is necessary due to H&S problems, occupant may be required to provide documentation that a certified professional performed the remediation before work continues. The Subgrantee must also refer the client/owner to any known resource(s) that may be able to help correct the problem.

Regardless of which option is chosen, the Subgrantee must notify the client of all found Health and Safety issues on the Hazard Identification Notification form. It is very important for the Subgrantee to document any found health and safety problems and/or any problems or conditions that could potentially result in health and safety problems. Documentation must include photos. Careful and complete documentation can protect the Subgrantee from future client claims regarding the results of weatherization.



Radon Informed Consent Language

Weatherization achieves energy and cost savings and improved comfort, health, and safety of homes through a variety of home retrofit measures, including some which improve the airtightness of the building. According to the Department of Energy (DOE) sponsored study, Building Assessment of Radon Reduction Interventions with Energy Retrofits Expansion (BEX) Final Report (ORNL/TM- 2020/1769): "There is a small risk of increased radon levels in homes when the building air tightness levels are improved. The study results show that current practices have produced substantial benefit compared to previous practices, and that there are no statistically significant changes in indoor radon levels on the lowest living levels with these practices". These increases are smaller in manufactured housing everywhere, and all homes in low-radon potential counties, and higher in site-built homes in high-radon-potential counties. There is some evidence that the installation of continuous mechanical ventilation reduces radon levels in homes, and counteracts any radon increases that are due to improved building air tightness levels.

Precautionary Measures: Precautionary measures indicated below will be installed as part of weatherization:

- checkbox Cover exposed dirt floors within the pressure/thermal boundary with a sealed soil gas retarder
checkbox Cover sump well/pits with airtight covers
checkbox Implement ventilation as required by ASHRAE 62.2-2016
checkbox Other: _____
checkbox Other: _____
checkbox Other: _____
checkbox Other: _____

I am aware that weatherization may result in increased levels of radon, and that mechanical ventilation may counteract those increases.

I have received the Environmental Protection Agency's (EPA's) "A Citizen's Guide to Radon," and radon-related risks were discussed.

I have chosen to go forward with weatherization and accept all risks of injury or damages. I have carefully read this informed consent form and have signed it of my own free will.

Site Address: _____

Client Printed Name: _____

Client Signature: _____ Date: _____

Subgrantee Representative Printed Name: _____

Subgrantee Representative Signature: _____