Arkansas Weatherization Health and Safety Plan

D POLICY SUBMITTED WITH PLAN

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

1.0 – GENERAL INFORMATION

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.

Health and Safety Budget 🗌

Contained in Program Operations

3.0 – HEALTH AND SAFETY EXPENDITURE LIMITS

Pursuant to <u>10 CFR 440.16(h)</u>, 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.

Arkansas is requesting that twenty-three percent of program operations budget be set aside for H&S expenditures H&S limit may vary by Subgrantee depending upon selected H&S measures, availability of alternate funding sources, and conditions found in different geographical areas. Subgrantee H&S costs may not exceed 23% by program year's end. However, the network has projected twenty-three percent (23%) for this up-coming 2021-22 Please see the WAP PY 21 Health and Safety Measure Costs Matrix to justify this request.

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 <u>should</u> 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

2021 Arkansas Health And Safety Plan Final

Page 1 | 24

H	&S Measure Matrix - C	Optional					
Do	ouble Click To Open Fo	r Editing					
C	Cells this shade auto calculate						
<u>Enter</u> Measure i	<u>Enter</u> Cost i	Enter Frequency % i	Auto Calculates				
			¢0.00				
Total Average H&S Cost Per Unit	(2) M/AD Dreaduction C	ahadula)	\$0.00				
Enter Estimated Production (Annual File: IN		Liteuule) -,					
Enter Estimated Program Operations Budg H&S Budget (Total Average H&S Cost Per L		ction	\$0.00				
			\$0.00				
Requested H&S Percentage Per Unit (H&S I	Budget/Program Opera	ations)					

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")

Arkansas has not identified any H&S measures as incidental repair measures (IRMs).

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 🛛

Where can this deferral/referral policy be accessed?

No O

No O

Arkansas Subgrantee Operations Manual

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 🛛

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 17-06 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 w	Concurrence with Guidance D Alternative Guidance O Results in Deferral O					
Air Conditioning Unallowable Measure 0 Heating Unallowable Measure 0						
Funding						
DOE 🛛	LIHEAP 🛛	State O	Utility $\mathbf 0$	Other 0		

Arkansas considers "red tagged", inoperable, or non-existent heating systems to constitute a Health & Safety issue. Evaluation of the home for replacement, repair, or installation is required, unless prevented by other guidance herein. Air conditioning system replacement, repair, or installation is allowed in homes of at-risk occupants.

"System" can mean a central unit or several 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. When a space conditioning system does not qualify as an ECM, the following conditions must be met before the unit can be replaced or repaired with Health and Safety funds:

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

Action/Allowability

- "Red tagged," inoperable, or nonexistent primary heating system may be replaced, repaired, or installed where climate conditions warrant, consistent with this guidance.
- Unsafe primary units must be repaired, replaced and removed, or rendered inoperable, or deferral is required.
- Use proper sizing protocols (Manual J, State Approved sizing protocols, ECOS, NEAT/MHEA outputs, etc.) based on post-weatherization housing characteristics, including installed mechanical ventilation, when installing or replacing a heating or cooling appliance.
- See Hazardous Materials Disposal section for more information.

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

Action/Allowability

- 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

• Primary air conditioning system replacement, repair, or installation is allowed only in homes 1) that have existing A/C systems, 2)

where current occupants meet Grantee's definition of "at-risk" AND climate conditions warrant, and 3) when a high efficiency heat pump is the most cost efficient heating system replacement choice, even when the additional cost of air conditioning the home is included in the economic evaluation of the heating replacement.

• Replacement of an inoperable unit that cannot be repaired must be based on the needs of the occupants and be done with H&S funds under the following circumstances: occupants are elderly, children, or person(s) with a medical condition documented by a physician's statement of requirement for air conditioning.

Testing Protocols

- Make sure primary systems are present, operable, and performing correctly.
- Check DOE-approved audit to determine if the system can be installed as an energy conservation measure (ECM) prior to replacement as an H&S measure.
- Determine and document presence of "at-risk" current occupants when installing air-conditioning as a Health and Safety (H&S) measure.
- On combustion equipment, inspect chimney and flue and test for Combustion Appliance Zone (CAZ) depressurization.
- For solid fuel appliances look for visual evidence of soot on the walls, mantel or ceiling or creosote staining near the flue pipe.

Client Education

- When deferral is necessary, 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.
- Discuss appropriate use and maintenance of units.
- If a heat pump is the most cost effective replacement in a previously un-air conditioned home (as described above) and the client does not qualify as "at-risk" for air conditioning, client education must include a discussion of the additional costs they will incur to operate the heat pump as an air conditioner.
- Provide all paperwork and manuals for any installed equipment.
- Discuss and provide information on proper disposal of bulk fuel tanks when not removed as part of the weatherization work.
- Where combustion equipment is present, provide safety information including how to recognize depressurization.

Training

- Comprehensive training has been provided during the annual conference and during the program year in the field. Specific training may be provided during the PY 20' if a need is determined.
- Licensing and/or certification for HVAC installers as required by authority having jurisdiction (AHJ).
- <u>CAZ</u> depressurization test and inspection training.

7.2 - Asbestos - All

What is the blower door testing policy when suspected Asbestos Containing Material (ACM) is identified?

Where blower door tests are performed, it is a best practice to perform pressurization instead of depressurization. In Arkansas, general asbestos removal is not approved as a Health and Safety weatherization cost with federal funds. Major asbestos problems will be referred to the appropriate State agency and/or the Environmental Protection Agency (EPA).

7.2a – Asbestos - in siding, walls, ceilings, etc.							
		Concurrence, Alte	ernative, or Deferr	al			
Concurrence w	Concurrence with Guidance 🛛 🔹 Alternative Guidance 0 Results in Deferral 0						
In Ark	ansas, all care must be	taken not to damag	e asbestos contain	ing surfaces			
	Funding						
DOE 🛛	LIHEAP	State 0	Utility 0	Other ${f 0}$			
How do you a	address suspected AC	•.	, or ceilings that w ation work?	ill be disturbed through	the course of		

- Where suspected Asbestos Containing Material (ACM) is identified, precautions must be taken not to disturb the material. The ACM's overall condition and potential for disturbing the ACM will be evaluated.
- Where the material condition is good and intact at time of inspection and there is no risk of disturbing the material, a blower test can be conducted.
- Where the material is in less than good condition, that material is non-intact, or the material may be disturbed, the home will be deferred until the material is deemed non-asbestos containing, removed, or encapsulated by a certified asbestos professional.
- The existence of slate siding, or other suspected asbestos containing siding that is in good condition does not prevent installing dense-pack insulation. Siding may be removed and reinstalled in order to perform the ECM, and the associated costs may be charged as part of the ECM. All precautions must be taken not to damage siding. Slate type siding should not be cut or drilled.
- The use of PPEs and safe practices when working around suspected ACMs as outlined in the SWS's are recommended. Insulating through the interior of the home can be another option. General abatement of asbestos siding or replacement with new siding is not an allowable H&S cost.

Testing Protocols

- Visually inspect exterior wall surface and subsurface, floors, walls, and ceilings for suspected ACM. If asbestos is suspected, testing must be conducted by asbestos abatement professionals.
- Asbestos Hazard Emergency Response Act of 1986 (AHERA) sample collection and testing must be conducted by a certified tester.

Client Education

- Inform the client in writing that suspected ACMs are present and what precautions will be taken to ensure the occupants' and workers' safety during weatherization.
- Formally notify client in writing of results if testing was performed.

Training and Certification Requirements

- Specific training may be provided on safe practices for siding removal and replacement (if a need is determined).
- Specific training may be provided on how to identify asbestos containing materials and work around them without creating a hazard (if a need is determined).
- Licensing/certification for removal and reinstallation of asbestos siding if required by AHJ.

7.2b – Asbestos - in vermiculite							
Concurrence, Alternative, or Deferral							
Concurrence with Guidance 0 Alternative Guidance 0 Results in Deferral \Box							
Funding							
DOE 🛛	LIHEAP 🛛	State 0	Utility 0	Other 0			

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

Action/Allowability

- When vermiculite is present, the home will be deferred until the removal of vermiculite by a certified asbestos professional is completed.
- DOE/LIHEAP funds cannot be used for testing or removal.
- Clients will be instructed to not disturb the vermiculite.
- Asbestos safety information will be provided. Documentation of this instruction is maintained in the Client's file.
- When deferral is necessary due to asbestos, occupant must provide documentation that a certified professional performed the remediation before weatherization work continues.

Testing Protocols

• No testing will be performed by weatherization workers or weatherization contractors.

Client Education

- 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 in order for weatherization to commence.

Training and Certification Requirements

- Specific training may be provided on how to recognize vermiculite (if a need is determined).
- AHERA or other appropriate asbestos control professional certification/training is required to abate the ACM.

7.2c – Asbestos - on pipes, furnaces, other small covered surfaces						
		Concurrence, Alte	rnative, or Deferr	al		
Concurrence	with Guidance 🛛	Alternative G	uidance0	Results in Deferral ${f 0}$		
		Fui	nding			
DOE 🛛	LIHEAP 🗌	State O	Utility O	Other 0		
How do you a	ddress suspected ACN	l's (e.g., pipes, furn	aces, other small s	urfaces) that will be disturb	ed through	
		the course of we	atherization work	?		
Action/Allov	vability					
	•	Containing Material	(ACM) is identified	d, precautions must be taken	n not	
	1	0	· /	for disturbing the ACM will		
evalu	lated.		•	C		
• When	re the material condition	n is good and intact	at time of inspecti	on and there is no risk of		
distu	rbing the material, wea	therization work sho	ould proceed. Clier	ts and workers will be		
instru	icted not to disturb the	material.				
• When	re the material is in less	s than good condition	n, that material is a	non-intact, or the material ma	ay	

- be disturbed, the home will be deferred until the material is deemed non-asbestos containing, removed, or encapsulated by a certified asbestos professional.
- When suspected friable ACM is present, take precautionary measures as if it is asbestos unless testing determines otherwise.
- Encapsulation by an appropriately trained asbestos control professional is allowed and should be conducted prior to blower door testing if the materials are friable.
- Charge only those costs directly associated with 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.

Testing Protocols

- Assess whether suspected ACMs are present.
- AHERA sample collection and testing is allowed and must be conducted by a certified tester.

Client Education

- Instruct clients in writing not to disturb suspected ACM.
- Provide asbestos safety information to the client.
- Formally notify client in writing of results if testing was performed.
- When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.

Training and Certification Requirements

- Specific training may be provided on how to recognize suspected ACM if a need is determined.
- AHERA or other appropriate asbestos control professional certification/training is required to abate the ACM.

7.5 – Biologicals and Unsanitary Conditions						
(0	(odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.)					
Concurrence, Alternative, or Deferral						
Concurrence wit	h Guidance 🛛	Alternative Guidance O		Results in Deferral ${f 0}$		
Unallowable Measure 0						
Funding						
DOE 🛛		State 0	Utility 0	Other 0		

What guidance do you provide Subgrantees for dealing with biological and/or unsanitary conditions in homes slated for weatherization?

Action/Allowability

- 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.
- Assess the cost-effectiveness and necessity of remediation of these conditions on a case by case basis with prior approval from AEO;
- The use of personal protective equipment shall be strictly enforced. Respirators, protective eyewear, and protective clothing will be worn when biological agents are present or suspected in order to eliminate or minimize crew exposure.
- Caution should be taken when selecting air tightness limits for dwellings with these conditions. Since these conditions are often related to moisture, Arkansas requires local agency crews to assess moisture conditions as part of the initial energy audit procedure.
- Addressing raw sewage/gray water is not an allowable cost.
- See Mold and Moisture section for more information.
- Deferral may be necessary in cases where conditions in the home pose a health risk to occupants and/or weatherization workers.

Testing Protocols					
•	Sensory inspection.				
Client Education					
•	Inform client in writing of observed conditions.				

- Provide information on how to maintain a sanitary home and steps to correct deferral conditions.
- Safety and preventive measures regarding any observed biological and unsanitary conditions are addressed with the Client during the initial audit of the home.
- The Client is also given a copy of "A Brief Guide to Mold, Mildew and Moisture, and Your Home."
- The Client acknowledges receipt of this information and signs off on the Client Education Checklist (WAP 13).
- Documentation of the instruction is maintained in the client file.
- When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.

Training

• Specific training will be provided during PY 19' Grants Guidance on How to recognize unsafe conditions and when to defer.

Safe work practices when encountering such conditions.

7.6 – Building Structure and Roofing							
	Concurrence, Alternative, or Deferral						
Concurrence with Guidance 🛛 🔹 Alternative Guidance 0 🔹 Results in Deferral 0							
Funding							
DOE 🛛	LIHEAP	State 0	Utility $\mathbf 0$	Other O			

What guidance do you provide Subgrantees for dealing with structural issues (e.g., roofing, wall, foundation) in homes slated for weatherization?

Action/Allowability

- Building rehabilitation is beyond the scope of the Weatherization Assistance Program.
- Homes that require more than minor repairs must be deferred.
- See Mold and Moisture, Code Compliance, and Pests sections for more information.
- The Energy Auditor must have access to all aspects of the structure in order to adequately and appropriately gather data for the ECOS energy audit. Clothing, dogs, trash or other impediments restricting access to any portion or portions of the dwelling that block necessary access may constitute a deferral.
- Dwellings whose structural integrity is in question should be referred to other appropriate local and state agencies.

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

Minor repairs to protect DOE or LIHEAP materials installed may be used to protect the energy saving investment. However, building rehabilitation is beyond the scope of the WAP.

If the overall structure of the house is in good condition and the repairs are minor a request to address the condition can be submitted on a case-by-case scenario. A cost assessment and a feasible course of action must be submitted with the request to AEO.

Testing

- Visual inspection.
- Ensure that access to the portions of the home where weatherization will occur are safe for entry and performance of assessments, work, and inspections.

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

Arkansas requires site-specific audits.

Client Education

- Notify client in writing of structurally compromised areas.
- When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.

Training

• Specific training may be provided on How to identify structural and roofing issues if a need is determined. Trainers will be sought from the Arkansas Department of Health – State Code.

			Compliance				
Concurrence, Alternative, or Deferral							
Concur	rence with Guidance 🛛	Alternative Gu	iidance U	Results in Deferral O			
			ding				
DOE 🛛	LIHEAP 🛛	State 0	Utility O	Other 0			
\ A/b	at guidance de vou provide S	ubgrantoos for doa	ling with code cor	npliance issues in homes receiving			
vvii	at guidance do you provide 5	-	on measures?	inpliance issues in nomes receiving			
Actio	on/Allowability						
•	Correction of preexisting co	ode compliance issu	ues is not an allow	vable cost unless triggered			
	by weatherization measures	-					
•	•	0	•	d and paid for with WAP funds, cite			
	specific code requirements v	with reference to the	weatherization m	easure(s) that triggered the			
	code compliance issue must	be placed in the clie	ent file.				
•	Follow State and local or	AHJ codes while i	installing weather	zation measures, including			
	H&S measures.						
•	Condemned properties and			conditions exist that cannot			
What s	be corrected under this guida	ance must be deferr	ed.	ments for your network? How are they			
vviiat s	pecific situations commonly th		essed?	ments for your network: now are they			
•	Visual inspection.						
	•	, check with the lo	cal code enforcem	ent office in the city or county where			
_	the weatherization job is loc			ent office in the enty of county where			
•	Ũ		to be out of cor	npliance with applicable code, so that			
				the weatherization program, and			
•				codes, including license required of			
	installers and permits necess						
•			•	weatherization measures. These vary by			
		•		o know what the codes are in each of the			
	areas they work in, as well as	^	^	d in each of the areas they work in.			
	T.C. 11		ducation	·			
•	Inform client in writing of o						
•	•	*	n in writing descrit	bing conditions that must be met			
in order for weatherization to commence. Training							
•	Comprehensive and/or Spec			ne PY 19' on how to determine what			
				he Arkansas Department of Health –			
		-	-	bing, mechanical, and fuel gas)			
L				<i></i>			
		7.8 <u> - Comb</u>	ustion Gases				
		Concurrence, Alte		al			
Concurr	rence with Guidance 🛛	Alternative Gu		Results in Deferral O			

Funding					
DOE 🛛	LIHEAP 🛛	State O	Utility 0	Other ${f 0}$	

- Proper venting to the outside for combustion appliances, including gas dryers and refrigerators, furnaces, vented space heaters and water heaters is required.
- Arkansas does not allow drilling into the flue pipe on 80 percent furnaces for testing purposes Options for testing are: (1) Replace part of the flue pipe with Duravent piping which has a test port vent or (2) Efficiency measurements will be taken at the point where the pipe connects to the unit.
- 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.
- Replacement units must meet safety guidelines as determined in the Grantee Plan or technical Field Guide.
- See Air-Conditioning and Heating Systems section and Attachment A for more information.

Testing Protocols

- Combustion safety testing is required when combustion appliances are present. Arkansas uses ANSI BPI 1200-s-2017.
- 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 a H&S measure.

How are crews instructed to handle problems discovered during testing, and what are the specific protocols for addressing hazards that require an immediate response?

When a health or safety hazard is detected, inform the client and address the hazard according to protocol.

Client Education

• Provide client with combustion safety and hazards information.

Training

- Specific training may be provided on How to perform appropriate testing, determine when a building is excessively depressurized, and the difference between air free and as-measured CO (if a need is determined).
- CO action levels. These levels can be found on the WAP 10 (Health & Safety) form and within the Subgrantee Operations manual.

7.9 - Electrical						
Concurrence, Alternative, or Deferral						
Concurrence with Guidance D Alternative Guidance O Results in Deferral O						
Funding						
DOE 🛛 LIHEAP 🗆	State O	Utility 0	Other ${f 0}$			
What guidance do you provide Subgrantees for dealing with electrical hazards, including knob & tube wiring, in						
homes slated for weatherization?						

- Arkansas WAP will screen for the presence of knob-and-tube wiring during the application process.
- When the H&S of the occupant/worker(s) is at risk, minor repairs, as defined by the Grantee, are allowed when necessary for weatherization measures.
- Evaluate and if necessary provide sufficient over-current protection and damming (if required) prior to insulating building components containing knob and tube wiring, as required by the AHJ.
- If the applicant acknowledges the presence of knob-and-tube wiring at the time of application, the client will be referred to the appropriate agency for assistance to remedy this problem.
- 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 electrical repairs are defined as incidental repairs necessary to effectively perform or preserve weatherization materials are allowed. Minor electrical repairs to protect DOE or LIHEAP materials installed may be used to protect the energy saving investment. Typical minor repair are:

- Frayed, loose, or damaged wiring.
- Missing junction boxes where wires meet: must be installed prior to insulating.
- Light fixtures hanging by wire.
- Electrical outlet or switch with loose wires or other issues.
- Appliances or electrical equipment incorrectly wired or otherwise incorrectly connected to electrical power.
- Electrical problems/upgrades necessary to install weatherization measures.

Electrical work other than the list above is considered major repairs and is beyond the scope of the WAP. Repair of problems must be by a licensed electrician.

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

Arkansas requires site-specific audits.

Client Education

• When electrical issues are the cause of a deferral, provide information to client on overcurrent protection, overloading circuits, and basic electrical safety/risks.

Training

- Specific training may be provided on How to identify electrical hazards (if a need is determined) by a licensed electrician.
- Local (or AHJ) code compliance.

7.10 – Formaldehyde, Volatile Organic Compounds (VOCs), Flammable Liquids, and other Air Pollutants Concurrence, Alternative, or Deferral Concurrence, Alternative, or Deferral Concurrence, Alternative, or Deferral Concurrence with Guidance 0 Results in Deferral 0 Funding DOE 0 LIHEAP 0 State 0 Utility 0 Other 0 What guidance do you provide Subgrantees for dealing with formaldehyde, VOCs, flammable liquids, and other

air pollutants identified in homes slated for weatherization?

- Removal of pollutants is allowed and is required if they pose a risk to workers.
- If pollutants pose a risk to workers and removal cannot be performed or is not allowed by the client, the unit must be deferred.
- Refer to *Hazardous Materials Disposal* section for more information.

Testing Protocols

• Sensory inspection.

Client Education

- Inform client in writing of observed hazardous condition and associated risks.
- Provide client written materials on safety issues and proper disposal of household pollutants.
- When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.

Training

• How to recognize potential hazards and when removal is necessary.

7.11 – Fuel Leaks (please indicate specific fuel type if policy differs by type) Concurrence, Alternative, or Deferral Concurrence with Guidance Alternative Guidance Results in Deferral 0

		Fundi	ing		
DOE 🗌	LIHEAP	State O	Utility 0	Other ${f 0}$	

Action/Allowability

- 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 at the applicant's expense before weatherizing a unit.
- Notify utilities and temporarily halt work when leaks are discovered that are the responsibility of the utility to address.

Remediation Protocols

How do you define allowable fuel leak repairs, and at what point are repairs considered beyond the scope of weatherization?

Testing

- Test exposed gas lines for fuel leaks from utility coupling into, and throughout, the home.
- Conduct sensory inspection on bulk fuels to determine if leaks exist.

Client Education

• Inform clients in writing if fuel leaks are detected.

Training

• Specific training may be provided on Fuel leak testing (if a need is determined) by a licensed professional.

Concurrence, Alternative, or Deferral					
Concurrence with Guidance 🛛 Alternative Guidance O Results in Deferral O					
Funding					
DOE I LIHEAP I State O Utility O Other O					

What guidance do you provide Subgrantees for addressing unsafe gas ovens/stoves/ranges in homes slated for weatherization?

Action/Allowability

- When testing indicates a problem, entities may perform standard maintenance on or repair gas cooktops and ovens.
- Replacement is not allowed.

Testing Protocols

- Test gas ovens for CO.
- Inspect cooking burners and ovens 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

- Specific training may be provided on testing techniques (if a need is determined) by a licensed professional
- CO action levels are found in section 7 Technical Standards within the AWAP Subgrantee Operations Manual and on the Health & Safety (WAP 10) form.

7.13 – Hazardous Materials Disposal

[Lead, Refrigerant, Asbestos, Mercury (including CFLs/fluorescents), etc.]

(please indicate material where policy differs by material)

Concurrence, Alternative, or Deferral

Concurrence with Guidance		Alternative Guidance O R		Results in Deferral $f 0$			
	Funding						
DOE 🛛	LIHEAP 🗌	State O	Utility $\mathbf 0$	Other ${f 0}$			

Action/Allowability

- Hazardous Waste Materials generated in the course of weatherization work shall be disposed of according to all local laws, regulations and/or Federal guidelines, as applicable.
- Disposal of refrigerants must be in accordance with EPA's safe disposal requirements.
- WAP agency must have signed agreement with the company providing refrigerator/air conditioners stating guaranteeing removal of old appliances and proper disposal of refrigerants according to EPA requirements.
- Document proper disposal requirements in contract language with responsible party.
- Refer to *Lead* and *Asbestos* sections for more information on those topics.

Testing

- Not applicable.
- Refer to *Lead* and *Asbestos* sections for more information on those topics.

Client Education

• Inform client in writing of hazards associated with hazardous waste materials being generated/handled in the home.

Training

- Appropriate Personal Protective Equipment (PPE) for working with hazardous waste materials.
- Disposal requirements and locations.
- Health and environmental risks related to hazardous materials.
- EPA-approved section 608 type I or universal certification.

	Disposal	Procedures and De	ocumentation Re	quirements	
	Documentation in the client fi	ile must include de	scription of speci	fic material disposed of; who	
	disposed of hazardous materia	als lead testing and	assessment; and,	photos of site and containment.	
	7.14 – Injury Preve	ntion of Occup	ants and We	atherization Workers	
				lacing handrails)	
		Concurrence, Alte			
<u> </u>		Alternative Gu		•	
Concurre	ence with Guidance 🛛	Alternative Gu	lidance U	Results in Deferral $f 0$	
		F	dina		
		-	nding		
DOE 🛛	LIHEAP 🛛	State O	Utility 0	Other 0	
Action	/Allowability				
•	When necessary to effectively				
				are not allowed. Minor repairs	
	are defined in the AWAP Sub	grantee Operation	s manual.		
Testing	g				
•	Inspect for dangers that would	d prevent weathering	zation.		
	Education				
•				rved hazards and associated risk	s.
		_		wable injury-related repairs	
		g., stairs, handrail	-		
		•	en necessary, to e	effectively weatherize the home;	
	e these measures are not allow				
				nd at what point are repairs cor	
b				ble injury prevention measures	
•				for example, and the staircase is	
				veatherization work, and repairir	
				es, crews shall perform the minor	r
	repair work so that they may				
•				ecklist and Health and Safety Cl	necklist.
•	A copy of the Client Education				
•	•	.	•	nd the scope of the DOE WAP (n	
				nerization work shall be deferred	
				Follow all appropriate Deferral a	and
	Referral policies and protocol		-	ope of the DOE WAP.	
			ining		
•	1 1	0.	provided on Iden	tifying Hazards. Training will be	2
	provided by OSHA representation	atives.			
		7.15 – Lead	d Based Paint		
	C	oncurrence, Alter	native, or Defer	ral	
Concurre	ence with Guidance 🛛	Alternative Gu		Results in Deferral O	

		Fur	nding		
DOE 🛛	LIHEAP 🛛	State O	Utility 0	Other 0	

- 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.
- Job site set up and cleaning verification is required by a Certified Renovator.
- Only those costs directly associated with the testing and lead safe practices for surfaces directly disturbed during weatherization activities are allowable.
- Deferral is required when the extent and condition of lead-based paint in the house would potentially create further H&S hazards.

Safe Work Protocols

Program operators will be required to show that all Lead Based Paint protocols: information sharing, Lead safe work practices, proper equipment, and so forth are up to date and in compliance to all regulations whatever they turn out to be. Those programs that are not in compliance, and fail to comply once identified, will face the most serious sanctions that can be leveled: reduced allocation to start with, loss of contract if necessary. Special attention will be aimed at those programs failing to meet requirements in the area of Lead Safe Work Practices since it poses such tangible consequences for the households that are served.

Workers must:

- Test areas where weatherization work is likely to occur.
- Follow the proper DOE LSW protocols, OSHA regulations and EPA regulations in all pre-1978 homes.
- Don't just assume that all mobile homes are categorically exempt. Any home built before 1978, or any mobile home remodeled using paints and varnishes prior to 1978, may contain lead-based paint. These paints should considered "guilty until proven innocent" by way of testing.
- All sub grantees have applied for and received Lead Renovator Firm status. All evaluators (inspectors) have acquired Lead Renovator (RRP) certification as well as select crew leaders.
- Private contractors must also meet the requirement of having adequate RRP certified employees among their ranks.
- As new contractors apply to work on weatherization projects the EPA requirements are explained during the application process.
- No private contractors will be awarded work on any pre-1978 dwellings that don't meet the EPA rules.
- Private contractors will be required to furnish proof of RRP and Lead Renovator Firm status as a condition of working for the weatherization programs. The monitoring staff will routinely check that documentation is on file at each agency verifying compliance to the EPA rules.
- All weatherization crews working on pre-1978 homes must receive the 8 hour LSW training or a certified renovator must be assigned to the project and be readily available.
- State Monitors must be Lead Renovator (RRP) and receive the 8 hour LSW training.

The certified renovator must be physically present at the work site while signs are being posted, containment is being established, and the work area is being cleaned after the renovation to ensure that these tasks are performed correctly. Although the certified renovator is not required to be on-site at all times, while the renovation project is ongoing, a certified renovator must nonetheless regularly direct the work being performed by other workers to ensure that the work practices are being followed. When a certified renovator is not physically present at the work site, the workers must be able to contact the renovator immediately by telephone or other mechanism. In addition, the certified renovator must perform the post-renovation cleaning verification.

Testing Protocols

- Testing to determine the presence of lead in paint that will be disturbed by WAP measure installation is allowed with EPA-approved testing methods.
- Testing methods must be economically feasible and justified.
- Job site set up and cleaning verification by a Certified Renovator is required.

Client Education
• Follow pre-renovation education provisions for RRP.
• The head of household of every home to be weatherized receives the informational pamphlet: "Renovating Right".
 The inspector also conducts a client education segment as part of the initial inspection to assure that
the occupants are fully aware of the hazards posed by Lead Based Paint exposure.
 This procedure is documented by using a signed receipt from the head of household which confirms that
the information was not only distributed, but also explained.
 This receipt is kept in the Client file.
 When deferral is necessary, provide information in writing describing conditions that must be met
• when deterral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.
Training and Certification Requirements
 Comprehensive training is provided to 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.
 Grantee Monitors and Inspectors must be Certified Renovators.
Documentation Requirements
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.
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 \Box Alternative Guidance 0 Results in Deferral 0
Funding
DOE 🛛 LIHEAP 🗌 State O Utility O Other O
What guidance do you provide Subgrantees for dealing with moisture related issues (e.g., drainage, gutters,
down spouts, moisture barriers, dehumidifiers, vapor barrier on bare earth floors) in homes slated for
weatherization?

- Limited water damage repairs that can be addressed by weatherization workers are allowed when necessary in order to weatherize the home and to ensure the long-term stability and durability of the measures.
- Mold remediation program and funds should not be used to test, abate, remediate, purchase insurance or alleviate existing mold conditions identified during the audit, the work performance period or the quality assurance inspection.
- Mold cleanup is not an allowable H&S cost.
- Surface preparation where weatherization measures are being installed (e.g., cleaning mold off window trim in order to apply caulk) must be charged as part of the ECM, not to the H&S budget category.
- Whenever site conditions permit, cover exposed earth in crawl space with 6 mil (or greater) polyethylene sheeting in a manner consistent with SWS to prevent moisture issues.

Testing

- Visual assessment including exterior drainage.
- Diagnostics such as moisture meters are recommended during pre-weatherization and at the final inspection.

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

If possible, and within the scope of the DOE WAP, repair minor moisture problems that will diminish the effectiveness of weatherization measures. Minor repairs are defined in the AWAP Subgrantee Operations manual.

Client Education

- Provide client written notification and disclaimer on mold and moisture awareness.
- Provide information on importance of cleaning and maintaining drainage systems.
- Provide information on proper landscape design and how this impacts site drainage and moisture control.
- When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.

Training

• Comprehensive and/or Specific training may be sought on mold and moisture, recognizing drainage issues or equivalent.

7.17 – Pests							
	Concurrence, Alternative, or Deferral						
Concurrence with Guidance 🛛 🔹 Alternative Guidance 0 🔹 Results in Deferral 0							
		Fu	nding				
DOE 🛛	LIHEAP 🛛	State 0	Utility O	Other ${f 0}$			
What guidance do you provide Subgrantees for dealing with pests and pest intrusion prevention in homes							
		slated for we	eatherization?				

- Pest removal is allowed only where infestation would prevent weatherization. Cost limits are found in the Subgrantee Operations manual.
- Screening of windows and points of access, and incorporating pest exclusion into air sealing practices to prevent intrusion is allowed.
- Infestation of pests may be cause for deferral where it cannot be reasonably removed or poses H&S concern for workers. If the cost of removing the pest exceeds the cost limits, it is considered beyond reasonable.

Define Pest Infestation Thresholds, Beyond Which Weatherization Is Deferred

In the instance where pests are excessive or expose the weatherization workers to unsafe or unsanitary conditions and causing a major health and safety risk.

Testing Protocols

• Assessment of presence and degree of infestation and risk to worker.

Client Education

- Inform client in writing of observed condition and associated risks.
- When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.

Training

• How to assess presence and degree of infestation, associated risks, and deferral policy.

	7.18 – Radon					
	Concurrence, Alternative, or Defe	erral				
Concurrence with Guidance \Box	Alternative Guidance ${f 0}$	Results in Deferral O				
	Funding					
DOE 🛛 LIHEAP 🗌	State 0 Utility 0	Other 0				
	dance do you provide Subgrantees	around radon?				
 Cover sump wells/pits with a Implement ventilation as req All measures will be installe Allowable: In homes where radon may be EPA Healthy Indoor Environ Other precautions may include 	thin the pressure/thermal boundary wairtight covers uired by ASHRAE 62.2-2016 ed in accordance with the SWS. be present, work scope may include a nment Protocols for Home Energy Up ude, but are not limited to, sealing ar asement from conditioned space, and	additional precautionary measures based on pgrades.				
	Testing Protocols					
No testing will be allowed.						
Using DOE funds for Radon mitigat	Prohibited Using DOE funds for Radon mitigation					
021 Arkansas Health And Safety Plan	Final	Page 19 2				

Client Education Required

- Provide all homes EPA's A Citizen's Guide to Radon and inform them of radon related risks.
- Occupants must sign an informed consent form prior to receiving weatherization services

Training and Certification Requirements

- AEO has provided Training from the Department of Health at Grants Guidance in June 2022.Radon will also be addressed at our fall training. No certifications are required
- Workers must be trained in proper vapor retarder installation. A zonal map can be located at <u>https://www.epa.gov/sites/default/files/2014-08/documents/arkansas.pdf</u>

Documentation Requirements

The client acknowledges receipt of client consent form (WAP 65) and initials the Client Education Checklist (WAP 13). Documentation is maintained in the client file.

7.19 – Safety Devices: Smoke and Carbon Monoxide Alarms, Fire Extinguishers							
Concurrence, Alternative, or Deferral							
Concurrence with Guidance ${f 0}$	Alternative Gu	idance 🛛	Results in Deferral ${f 0}$				
	Fun	ding					
DOE LIHEAP	State O	Utility O	Other 0				
Action/Allowability							
• Smoke alarms must be in	stalled in sleeping areas	s as described belo	w and per local code require	ements.			
• CO alarms must be instal	led where alarms are no	ot present or are in	operable.				
Where solid fuel burning		ïre extinguishers n	nay be provided as				
an allowable H&S measu	ire.						
What is yo	What is your policy for installation or replacement of the following:						
Smoke Alarms: Must be installed	in each bedroom.						
	Carbon Monoxide Alarms: Must be installed in all homes (including all electric) on each level in the proximity						
of fuel burning devices if they are	A						
Fire Extinguishers: Arkansas will not install.							
Testing Protocols							
Check existing alarms fo	r operation.						
Verify operation of instat	led alarms.						
	Client E	ducation					

Page 20 | 24

2021 Arkansas Health And Safety Plan Final

• Provide client with verbal and written information on use of devices installed.

Training

• Specific training may be provided on where to install alarms and Local code compliance if a need is determined.

	7 20 – Occupar	nt Health and Sa	fetv Concern	s and Conditions				
	7.20 00000	Concurrence, Alterr						
Concurrence	with Guidance 🛛	Alternative Gui		Results in Deferral 0				
	Funding							
DOE 🛛		State 0	Utility 0	Other 0				
			*					
What guidan	ce do you provide Sub	grantees for soliciting components of		health and safety concern	ns related to			
 by heat, cold Clients physical/ 	, poor air quality or disr	uption of the home er Freport known or initial application for	vironment. suspected health	son with medical problems				
	ce do you provide Sub			cupants suffer from health rizing their home?	h conditions			
that the rClient matrix	neasure is being installe	d.	-	e medical condition is the r may be made during the	eason			
What gu	idance do you provide	Subgrantees for deal identif		al health concerns when t	hey are			
	ssess occupant preexisting so of potential health ha	-	termining what a	ction to take if the home is	not deferred.			
	person's health may be a pant at risk will be requi			constitute a health or safet n severity of risk.	y hazard,			
Tempora	ry relocation of at-risk of	occupants may be allo	wed on a case by	y case basis.				
	where an occupant is ide rial will not be installed		allergy to a speci	fic weatherization material	,			
	rable alternative materia ve materials and they me			no known allergy to the atternative materia	ul(s).			
• If no safe alternative material meeting DOE standards is available, the measure shall not be installed.								
A reques	A request to install alternative materials must be submitted to AEO for approval.							
		Client Ed	ucation					
	client information of any worker contact informat		m of any issues.					
Document	tation Form(s) have bee	en developed and co	mply with guida	nce? Yes 🗌	No O			

7.21 – Ventilation and Indoor Air Quality				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance \Box Alternative Guidance $f 0$ Results in Deferral $f 0$				

		Fu	Inding	
DOE 🛛	LIHEAP 🛛	State 0	Utility 0	Other 0
•	meet whole-house ventilati differences greater than 3 p Implementing ASHRAE 62 exists as defined by ASHR. Existing fans and blower sy if not adequate.	Appendix A is emplon requirements, tak ascals across any clo 2.2 2016 is not require AE 62.2 2016. Tystems should be upon rsion of ASHRAE 62	oyed and an existing a actions to prevent z osed door. red where acceptable dated as required to c .2 Implemented (opt	indoor air quality already omply with ASHRAE 62.2 2016 ional: identify Addenda used)
			erification Protocols	l
•	ASHRAE 62.2 evaluation t Measure fan flow of existir to verify performance and c	g fans and of install	ed equipment at the c	onclusion of all weatherization wor
		Client	Education	
•	Provide client with informa switch and cleaning instruc Provide client with equipm	tions) of ventilation ent manuals for insta	system and compone alled equipment.	ncluding location of service nts.
		Tr	aining	
•	Comprehensive and Specifi Training includes: proper s			62.2 (if determined a need) ems.
	7.22 – Wind	ow and Door R	eplacement, Wi	ndow Guards
			ernative, or Deferral	
Concurr	ence with Guidance 🛛	Alternative G	uidance 0	Results in Deferral O
		_		
DOE 🛛	LIHEAP 🛛	State 0	nding Utility 0	Other 0
What g	idance do you provide to S	ubgrantees regardi	ng window and door	replacement and window guards?
Action	Allowability Replacement, repair, or ins	allation is not an all	owable H&S cost.	
			g Protocols	
٠	Not applicable			
		Client	Education	
٠	Provide written information	on lead risks where	ever issues are identif	ied.
		Tra	aining	
•	Awareness of guidance.			

7.23 – Worker Safety (OSHA, etc.) Concurrence, Alternative, or Deferral

Concurrence with Guidance 🛛		Alternative Guidance 0		Results in Deferral O		
	Funding					
DOE 🛛	LIHEAP 🛛	State O	Utility O	Other 0		

- 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 (SDS) (formerly called MSDS).
- SDS will be made available wherever workers may be exposed to hazardous materials.
- Weatherization work may be deferred if doing the work would put crews at undue health and safety risk.

Testing

• Grantees must verify that Subgrantees, crews and contractors follow safe work practices.

Client Education

• Not applicable.

How do you verify safe work practices? What is your policy for in-progress monitoring?

By conducting a methodological audit/inspection of the building, performing safety and diagnostic tests, and by observing the retrofit work; in order to ensure the completion, appropriateness and quality of the work providing for the safety, comfort, and energy savings of the building occupants.

Policy

Technical monitor will:

- Verify the work performed against the work plan, specifications and standards.
- Perform building diagnostics, records/reports findings and concerns, and specifies corrective actions.
 Training and Certification Requirements

Training

- Comprehensive training on Use and importance of PPE was provided. If Specific training is determined, additional training will be provided during PY 19. Other Specific training could include:
- Safety training appropriate for job requirements.
- All crew leaders, energy auditors, inspectors, and AEO field staff must complete OSHA 10 training.
- Ongoing training as required in Hazard Communication Program.

7.24 – <add in="" topic=""></add>								
Concurrence, Alternative, or Deferral								
Concurrence with Guidance ${f 0}$		Alternative Guidance O		Results in Deferral ${f 0}$				
Funding								
doe 0	LIHEAP O	State 0	Utility O	Other 0				
Remediation Protocols								
Testing Protocols								
Client Education								
Training								

7.24 – <add in="" topic=""></add>								
Concurrence, Alternative, or Deferral								
Concurrence with Guidance O		Alternative Guidance O		Results in Deferral O				
Funding								
doe 0	LIHEAP O	State O	Utility O	Other 0				
Remediation Protocols								
Testing Protocols								
Client Education								
Training								