

# Weatherization Grantee Health and Safety (H&S) Plan- *Optional Template* **ALASKA**

## 1.0 – GENERAL INFORMATION

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

Because of the condition of many of the homes that are lived in by DOE eligible clients, Health and Safety improvements crucial to the implementation of energy efficiency work often exceeds even 20% of the average cost per unit. Traditionally AHFC has covered this with other funds but is choosing to utilize DOE funds as well this year. Those costs that exceed 25% will be paid from other funding sources. Requesting 25% H&S.

We have limited the H&S category for DOE to the following (anything out side of these measures should be paid for with other funds. If there is a circumstance where DOE funds are needed for something that is not on the list, The Subgrantee must submit a written request to the AHFC Program Manager to expend DOE funds and explain why other funds cannot be used. Include an accurate estimate of costs for the measure and submit photos of the existing situation when possible. Do not proceed without written permission from the AHFC Program Manager.

Ground Vapor Retarder to reduce pollutants, radon and moisture from the ground into the living area.

Sump pump and or coverings

Crawl space ventilation strategies

Ventilation-whole house and spot, range hood-ASHRAE compliant

Heating System clean and tune and repair or replacement

Fuel switch heating and hot water for H&S reasons

Heating system stack and pipe repair and replacement, high temp caulk

Heating and/or Hot water heater replacement for H&S reasons, including stack and venting

LEAD RRP compliance costs/Asbestos/Mold/Pollutants/Hazardous Materials

Carbon Monoxide and Smoke Alarms

Dryer Ducting to Outside

Worker Protection and OSHA Compliance

This plan will provide guidance to the Alaska Weatherization Network. H&S issues will be identified by Program Assessors during the initial assessment and noted on the Occupant Prescreening form to be signed by the client. If other H&S issues are found during the course of the assessment, installation or the inspection a H&S notification form must be filled out and signed by the client. NOTE: Regarding H&S Client Education. All client education is paid from the TTA budget and not the H&S budget. Alternative funds can be used in exceptional circumstances with approval from the AHFC Program Manager.

**This is the first draft of the Alaska Health and Safety Plan using the DOE Template. It is a work in progress and although it will be in effect for the 2024 Program Year, Alaska reserves the right to make changes that we find are needed in implementation. All changes will be issued in interim notice and copied to the DOE Technical officer. Any new version of this plan will be issued at the start of the next program year April 1, 2025. This Health and Safety Plan is in effect for any DOE Weatherization funded projects.**

## 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.

Describe H&S Expenditure Limits and Justification Here

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. Alternatively, the measure matrix is also available as a standalone spreadsheet located at the following link: [Weatherization Program Notice 22-7: Weatherization Health and Safety | Department of Energy](#)

Click or tap here to enter text.

	A	B	C	D
1	H&S Measure Matrix			
2	Double Click To Open For Editing			
3	Cells This Shade Auto-Calculate			
4	Measure	Average Cos	Frequency Installed/Comple	Auto-Calculated Average Cos
5	GVB	\$1,167.00	44.0%	\$513.48
6	Crawl ventilation	\$1,175.00	6.0%	\$70.50
7	Heating System C&T	\$651.00	33.0%	\$214.83
8	Heating System Repair	\$1,892.00	14.0%	\$264.88
9	Heating system replace	\$0.00	0.0%	\$0.00
10	wood	\$7,500.00	6.0%	\$450.00
11	boiler	\$12,467.00	14.0%	\$1,745.38
12	mh	\$6,433.00	11.0%	\$707.63
13	furnace	\$7,067.00	11.0%	\$777.37
14	stack and chimney replace	\$3,317.00	14.0%	\$464.38
15	hot water system replace	\$4,767.00	8.0%	\$381.36
16	Range Hood replace	\$850.00	19.0%	\$161.50
17	Range Hood New	\$1,050.00	11.0%	\$115.50
18	Vent compliance controls replace	\$767.00	92.0%	\$705.64
19	vent compliceance controls new	\$1,417.00	11.0%	\$155.87
20	HRV	\$7,500.00	0.0%	\$0.00
21	RRP compliance PPE	\$450.00	8.0%	\$36.00
22	CO/Smokes	\$260.00	97.0%	\$252.20
23	Dryer ducting	\$467.00	25.0%	\$116.75
24	Sump pump	\$1,500.00	3.0%	\$45.00
25	PPE-all infectious	\$150.00	100.0%	\$150.00
26	Total Average H&S Cost Per Unit			\$7,328.27
27	Enter Estimated Production (Annual File: IV.2 WAP Production Schedule)			141
28	Enter Estimated Program Operations Budget (Annual File - Budget)			\$1,173,671.00
29	H&S Budget (Total Average H&S Cost Per Units * Estimated Production)			\$1,033,286.07
30	Suggested H&S Budget Request			88.039%

## 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.**

Incidental Repair Measures will not be assigned as a H&S measure.

## 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**

The Ak Occupant Pollution Source Survey must be used to document possible health and safety concerns before work begins. At that time subgrantee should discuss any concerns that the homeowner may have about the work to be performed. Clients are able to share (not required) medical information during this interview that might affect the work to be determined. During the course of work, other H&S issues may be noted on the H&S Notification Form and discussed with the client.

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

Describe Guidance Provided To Subgrantees Here. Subgrantee must discuss information obtained from the questionnaire with clients and identify potential measures being considered for installation to determine if any measures could have an effect on the occupant's health. Precautions taken to avoid client health and/or safety should be well documented in the client file.

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

Weatherization agencies and their representatives, including subcontractors, are required to take all reasonable precautions against performing work on homes that will subject the occupants or themselves to health and/or safety risks. In cases where an occupant's health is fragile, or an occupant has been identified to have a health condition, and/or the crew work activities would themselves constitute a health and/or safety hazard, the occupant(s) at risk shall be required to leave during the performance of the work activities. In cases where specific weatherization material(s) present an occupant health concern, crews/contractors may substitute a comparable alternative material that meets DOE specifications. Precautions taken to avoid client health and/or safety should be well documented in the client file.

**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 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 weatherization in manufactured homes must meet these standards, including secondary heating sources. No unvented fuel-burning space heating appliances may remain in a MH after weatherization under any circumstances. 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.
- Detailed documentation justifying the replacement with a cost estimation between replacement and repair must be maintained in the client file. The assessor should be experienced and familiar enough with the costs associated with the cost of major repairs to make reasonable and defensible decisions.

**Allowable Actions**

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Replacement of primary Heating Systems, permits, proper venting or compliant chimney repairs. Repair or removal of hazardous primary and secondary heating systems.

**Prohibited Actions**

Concur with DOE Guidance

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

**Required Testing/Inspection**

Concur with DOE Guidance

Alternative Guidance

- Verify that primary heating systems are present, operable, and performing correctly.
- Conduct a visual inspection of all combustion appliances and their related venting
- Conduct combustion appliance testing of all gas and liquid-fueled combustion appliances.
- 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 gas and liquid-fueled 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. Appliances must be inspected pre- and post-weatherization and any safety issues found should be included in the client H&S notification form.
- Conduct pre- and post- weatherization worst case CAZ depressurization testing in spaces having a fireplace or woodstove. Since there is no consensus method for verifying safe operation of fireplaces and woodstoves, Grantees can propose testing policies and limits. If the Grantee does not propose a policy and fireplaces or woodstoves are left operational, the vent must meet national or local codes, or the home cannot be weatherized.
- Safety inspections related to space heaters, fireplaces, and woodstoves must include, but not be limited to, verification of adequate floor protection, and code-compliant clearances to walls and other combustible materials.

**Grantee Combustion Testing Action Levels**

Describe the Grantee policy and actions based on the results of depressurization, spillage, and CO measurements taken during combustion testing for all combustion appliances.

<b>TABLE D.1.A ACTION LEVELS FOR SPILLAGE IN COMBUSTION APPLIANCES</b> <b>The following actions shall be taken when spillage occurs under the specific circumstances detailed below.</b>	
TEST RESULT	ACTION REQUIRED
Greatest CAZ depressurization occurs with the air handler on*	Conduct further analysis of the distribution system to determine if leaky ducts or other HVAC-induced imbalances are the cause of the spillage. If so, recommend distribution system repairs that will reduce or eliminate the CAZ depressurization.
Greatest CAZ depressurization occurs with door to CAZ closed, but is alleviated when door to CAZ is open*	Recommend measures to improve air transfer between the CAZ and the core of the house
The cause of spillage has been traced to excessive exhaust** independent of CAZ door position, air handler, or a problem with the flue†	Verify that sufficient combustion air is available per <i>ANSI Z223.1/NFPA 54</i> for gas-fired appliances and <i>NFPA 31</i> for oil-fired appliances or recommend verification by a qualified professional  and/or Recommend further evaluation/service by a qualified professional to address the venting/combustion air issues
<small>*In the case where both spillage and excessive CO are present, in addition to the specific recommendations above, recommend that the appliance be shut down until it can be serviced by a qualified professional.  ** Refers to exhaust caused by mechanical ventilation and/or other means of exfiltration.  †When a recommendation to replace atmospherically-vented combustion equipment inside the pressure boundary is made, and when cost-effective, recommend replacement with direct-vented, or power-vented equipment (or non-combustion equipment, such as a heat pump), which is ENERGY STAR®-labeled.</small>	

Depressurization and Spillage assessment action levels shall be based on the following criteria:

- Spillage assessed at 2 minutes of main burner operation for warm vent applications and domestic water heaters (*utilize appropriate action outlined in TABLE D.1.A*)
- Spillage assessed at 5 minutes of main burner operation for cold vent except domestic water heaters (*utilize appropriate action outlined in TABLE D.1.A*)

Ambient CO and Lower Explosive Limit (LEL) assessment action levels shall be based on the following criteria:

- Ambient CO and LEL shall be monitored at all times while in the work environment utilizing a designated ambient monitor.
  - If the monitor indicates an ambient CO level of 70 ppm or greater, the auditor shall immediately terminate the inspection and notify the homeowner/occupant of the need for all building occupants to evacuate the building. The auditor shall immediately leave the building and the appropriate emergency services shall be notified from outside the home.
  - If the monitor indicates an ambient CO reading in the range of 36 ppm to 69 ppm, the auditor shall advise the homeowner/occupant that elevated levels of ambient CO have been detected. Windows and doors shall be opened. The auditor shall recommend that all possible sources of CO be turned off immediately. Where it appears that the source of CO is a permanently installed appliance, the auditor shall recommend that the appliance be turned off, and the homeowner/occupant shall be advised to contact a qualified professional.
  - If the monitor indicates an ambient CO reading in the range of 9 ppm to 35 ppm, the auditor shall advise the homeowner/occupant that CO has been detected and recommend that all possible sources of CO be checked and windows and doors opened. Where it appears that the source of CO is a permanently installed appliance, the homeowner/occupant shall be advised to contact a qualified professional.
  - If any measured concentrations of combustible fuel gas exceed 10% of the LEL, the auditor shall inform the homeowner/occupants of the unsafe condition and advise evacuation of the home. The auditor shall leave the home, and the appropriate emergency services and fuel gas providers shall be notified from outside the home.

CO measurement result action levels shall be based on the following criteria:

- CO measured at 5 minutes of main burner operation;
- CO level at or below threshold in **Section 7.9.5, Table 1** for the appliance being tested is ACCEPTABLE (*utilize appropriate action outlined in TABLE D.1.B*);
- CO level exceeding threshold in **Section 7.9.5, Table 1** for the appliance being tested is UNACCEPTABLE (*utilize appropriate action outlined in TABLE D.1.B*); and
- In addition to BPI-1200 range top burners visual inspection requirement, each burner shall be tested to meet the current adopted IRC Range Top Burner CO threshold. (*utilize appropriate action outlined in TABLE D.1.B*),
  - Current **IRC Range Top Burner CO threshold** is **25ppm as measured (per burner)**.

**Note**-Carbon Monoxide (CO) Air Free Air free emission levels are based on a mathematical equation (involving carbon monoxide and oxygen or carbon dioxide readings) to convert an actual diluted flue gas carbon monoxide testing sample to an undiluted air free flue gas carbon monoxide level utilized in the appliance certification standards. For natural gas or LP gas, using as-measured CO ppm and O2 percentage:

$$CO\ AF\ ppm = (20.9 / (20.9 - O_2)) \times CO\ ppm$$

Where:

- COAF ppm = Carbon monoxide, air-free ppm
- CO ppm = As-measured combustion gas carbon monoxide ppm
- O2 = Percentage of oxygen in combustion gas, as a percentage

**TABLE D.1 B. ACTION LEVELS FOR CO IN COMBUSTION APPLIANCES**

TEST RESULT	ACTION REQUIRED
Unacceptable CO level	Advise the homeowner/occupant that the appliance should be serviced immediately by a qualified professional  Note: If ambient CO levels do not exceed 70 ppm, testing of other appliances and other audit procedures may continue at the discretion of the auditor
Acceptable CO level	No action required

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

Concur with DOE Guidance

Alternative Guidance

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

**Required Occupant Education**

Concur with DOE Guidance

Alternative Guidance

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

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

### Required Actions

Concur with DOE Guidance <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.
- Grantees must have written policy included in their H&S plan for:
  - Identifying and managing suspected ACM that provides for reasonable and necessary precautions to prevent asbestos contamination in the home.
  - Addressing blower door testing where suspected friable ACM is present (as defined by EPA), including vermiculite.

### Grantee ACM policy

Describe Grantee’s policy for identifying and managing suspected ACM :

If asbestos containing material (ACM) is suspected within the components of the structure, the Subgrantee must determine if the material is friable, if there would be a disturbance of that material during the weatherization process, and determine the size of the area affected.

- Where suspected ACM will not be disturbed during the weatherization process, is not creating a hazard due to being friable, or vermiculite is not present, weatherization work may proceed at the Subgrantee’s discretion. If the Subgrantee proceeds with providing weatherization services, they must ensure of the following during the weatherization process:
  - All reasonable and necessary precautions are taken to prevent asbestos contamination in the home
  - Suspected ACM will not be cut, drilled, sanded, scraped, or otherwise disturbed
  - Measures taken to prevent suspected ACM disturbance and precautions taken to ensure of occupant/worker safety are documented/retained
- Where suspected ACM is present on small surfaces (pipes, ductwork, furnaces, other small covered surfaces, etc.) and must be addressed to safely weatherize the dwelling, limited encapsulation or removal of suspected ACM materials can be allowed by an appropriately trained asbestos control professional at the Subgrantee’s discretion.
  - Documentation that the hazard has been eliminated through remediation or encapsulation from the certified asbestos professional must be maintained in the client file.
  - Limited encapsulation or removal cost of suspected ACM material does not exceed \$750.
- Where suspected ACM will be disturbed during the weatherization process, prevent a major measure installation, the suspected ACM is creating a hazard due to being friable, or vermiculite is present, weatherization services must be deferred. Before the weatherization process can proceed, the client must provide documentation that a certified asbestos professional has certified the suspected ACM is free of asbestos, encapsulated, or the asbestos hazard has been remediated. A copy of the documentation must be kept in the client file.
  - An exception to this guidance is removal of suspected ACM siding in good condition for wall insulation installation where insulation cannot be installed from the interior of the structure. This exception is at the Subgrantee’s discretion and would require the following precautions:
    - All reasonable and necessary precautions are taken to prevent asbestos contamination in the home;
    - Siding will only be removed where necessary to install wall insulation;
    - Siding will not be cut, drilled, sanded, scraped, etc; and
    - Precautions are taken to not damage the siding during the removal and reinstallation process.

### Allowable Actions

#### Grantee Blower Door Testing Policy When Suspected ACM Exists

**Grantee Blower Door Testing Policy When Suspected ACM Exists**

Suspected ACM’s overall condition and potential for disturbing the suspected material through blower door testing will be evaluated.

- Blower door testing **allowed** where suspected ACM will not be disturbed during blower door testing process, is intact and not creating a hazard due to being friable, and/or vermiculite is not present.
- Blower door testing **not allowed** where suspected ACM may be disturbed during the blower door testing process, the suspected ACM is not intact and creating a hazard due to being friable, and/or vermiculite is present. Unit must be deferred until a certified asbestos professional has certified the suspected ACM is free of asbestos, encapsulated, asbestos hazard has been remediated, and blower door testing can proceed.

**Allowable Actions**

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Temporary removal and reinstallation of ACM siding to perform an ECM (e.g., wall insulation). 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 if necessary to safely weatherize the dwelling. **Client education, containment areas costs when needed, safety equipment for dealing with asbestos**

- “Limited” as an encapsulation or removal of suspected ACM material that does not exceed \$2500

**Prohibited Actions**

Concur with DOE Guidance

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

**Required Testing/Inspection**

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

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

**Allowable Testing/Inspection**

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

No testing for asbestos is allowed.

**Required Occupant Education**

Concur with DOE Guidance

Alternative Guidance

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

**6.3 – Biologicals and Unsanitary Conditions**

**Required Actions**

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

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

**Allowed Actions**

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowed. Limited remediation of conditions that may lead to or promote biological concerns and unsanitary conditions (e.g., repairing leaking sewage pipes, minor plumbing repairs, areas of water intrusion, etc.) as defined in the Grantee’s H&S Plan “Limited” as a remediation that does not exceed \$2500. Limited cleaning of the workspace to protect the health and safety of workers and occupants . “Limited” as cleaning that does not exceed \$2500	
<b>Required Testing/Inspection</b>	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>
Sensory inspection of interior, exterior, attics, and subspaces of the dwelling.	
<b>Prohibited Testing/Inspection</b>	
Concur with DOE Guidance <input checked="" type="checkbox"/>	
DOE WAP H&S funds may not be used for testing of materials for biological contaminants.	
<b>Required Occupant Education</b>	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
Inform occupant in writing of observed biological and unsanitary conditions.	

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

<b>Allowable Actions</b>	
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
Major building structure repairs and roofing are not allowable with DOE funds. Minor repairs to enable other weatherization measures are allowed. Minor repairs are those under \$2500.	
<b>Prohibited Actions</b>	
Concur with DOE Guidance <input type="checkbox"/>	
Using DOE funds for major structural and roofing repairs is prohibitive.	
<b>Define “major” repairs</b>	
Major repairs are those that exceed \$2500. Examples of major repairs include roof replacement, foundation repair extensive siding repair and major structural repair.	
<b>Required Testing/Inspection</b>	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
DOE WAP H&S Funds <input checked="" type="checkbox"/>	Alternative Funds <input checked="" type="checkbox"/>
Visual inspection of building structure and roofing for damages that compromise building durability and to verify that portions of the home where weatherization will occur are safe for entry and performance of assessments, work, and inspections.	
<b>Allowable Testing/Inspection</b>	
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
Other than required testing for building structure and roofing, allowable testing will not be allowed with H&S funding.	
<b>Prohibited Testing/Inspection</b>	
Concur with DOE Guidance <input checked="" type="checkbox"/>	
Using DOE WAP H&S funds for any testing/evaluation of structural materials by a third-party is prohibited.	
<b>Required Occupant Education</b>	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
Using the Health and Safety Notification form that client signs, describe the structurally compromised area of the roof or building.	

## 6.5 – Code Compliance

Allowable Actions		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
All H&S measures installed must be code compliant.		
Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
<ul style="list-style-type: none"> <li>Using DOE WAP H&amp;S funds for correction of preexisting code compliance issues not directly related to the installation of specific weatherization measures in the home is prohibited.</li> <li>Using DOE WAP funds for work on condemned properties and properties where H&amp;S conditions exist that cannot be corrected under this guidance is prohibited</li> </ul>		
Required Testing/Inspection		
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"/>	
Visual inspection.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
No other testing is allowable using DOE funds.		
Required Occupant Education		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input checked="" type="checkbox"/>	
Inform occupant in writing of observed code compliance issues when it results in a deferral.		

6.6 – Electrical		
Required Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input checked="" 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 type="checkbox"/>	
If DOE WAP H&S Funds are used for any “allowable” actions, detail them here. Minor electrical repairs (e.g., junction box covers, improper splices, exposed electrical connections, damaged/non-working switches/receptacles, etc.) to protect the occupant or workers from electrical hazards within the living area or in the immediate area where weatherization activities will occur. Minor electrical repairs as repairs to electrical hazards that do not exceed \$2500 and are corrected to assist in the implementation of a weatherization measure. In unforeseen limited instances, AHFC reserves the right to provide case-by-case exceptions that will require prior written approval from AHFC staff. The request must include the lack of using other funding, reason for exception, reason of the additional cost, and energy benefit provided by WAP services. In cases the where excessive cost is determined to exceed the unit’s energy benefit, are determined to be unreasonable, or the cost is prohibitive by available H&S funding within the Subgrantee H&S budget the unit will be deferred.		
Prohibited Actions		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for <i>major</i> electrical repairs as defined by the Grantee’s H&S plan is prohibited		
Define “major” repairs		
Repairs that exceed \$2500.		
Required Testing/Inspection		
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"/>	

<ul style="list-style-type: none"> <li>• Visual inspection for presence and condition of knob-and-tube wiring.</li> <li>• Evaluate knob-and-tube wiring for safety prior to work.</li> <li>• Check for alterations that may create an electrical hazard.</li> </ul>	
<b>Allowable Testing/Inspection</b>	
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
Inspection of knob and tube prior to any weatherization work in that area of the house.	
<b>Required Occupant Education</b>	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Provide occupant with written documentation of any electrical hazards identified that will not be addressed by weatherization</li> <li>• Provide information to occupant on over-current protection, overloading circuits, and basic electrical safety/risks if conditions warrant.</li> </ul>	

<b>6.7 – Fuel Leaks</b>		
<b>Required Actions</b>		
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"/>	
<ul style="list-style-type: none"> <li>• 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.</li> <li>• Fuel leaks that are the responsibility of the occupant (vs. the utility) must be repaired before installing weatherization measures in the home.</li> </ul>		
<b>Allowable Actions</b>		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
If DOE WAP H&S Funds are used for any “allowable” actions, detail them here. 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.		
<b>Prohibited Actions</b>		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
<ul style="list-style-type: none"> <li>• Using DOE WAP H&amp;S funds to repair leaks that are the responsibility of the utility to correct is prohibited.</li> <li>• Using DOE WAP H&amp;S funds for environmental cleanup resulting from bulk fuel leaks is prohibited</li> </ul>		
<b>Required Testing/Inspection</b>		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral/Referral <input type="checkbox"/>
DOE WAP H&S Funds <input type="checkbox"/>	Alternative Funds <input type="checkbox"/>	
<ul style="list-style-type: none"> <li>• Test all exposed gas lines, fittings, valves, and connections for fuel leaks from utility connection to the appliance throughout the home.</li> <li>• Test all gas appliances for fuel leaks at all connections, valves, fittings, and burners.</li> <li>• Conduct sensory inspection of all bulk fuels lines and storage tanks to determine if leaks exist.</li> </ul>		
<b>Allowable Testing/Inspection</b>		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
Concur with DOE Guidance		
<b>Prohibited Testing/Inspection</b>		
Concur with DOE Guidance <input type="checkbox"/>		
Using DOE WAP H&S funds for environmental testing of soil or water is prohibited.		
<b>Required Occupant Education</b>		
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/Stove Tops/Ranges

### Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

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

Limited cleaning or repair of ovens/ranges/stove tops not exceeding \$500.

### 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.
- Grantee H&S plan must define action levels and resulting actions.
- Visually inspect cooking burners and ovens for operability and flame quality.

### Define action levels for oven CO testing and resulting actions

Define action levels for oven CO testing and resulting actions. See BPI standards

### Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

Test the ovens as noted in the BPI standard. No additional testing allowed.

### 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. Utilize CO detectors and ensure occupant understands them. Inform client in the practice of utilizing the range hood when cooking to reduce possible CO exposure.

## 6.9 – Hazardous Materials

### Required Actions

Concur with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

DOE WAP H&S Funds

Alternative Funds

- Hazardous waste material generated by weatherization work (i.e., refrigerants, asbestos, lead, mercury, CFL lighting bulbs and ballasts) must be disposed of according to all local and federal laws, guidelines, as applicable.
- Subgrantees must document disposal requirements in contract language with the reasonable language.
- Limited removal of pollutants that pose a risk to workers is required. (e.g. Flammable liquids, hazardous chemicals, and other air pollutants.)
- If removal cannot be performed or is not allowed by the occupant the unit must be deferred.

### Define “limited” removal of pollutants

Costs must be under \$2500.

### Allowable Actions

Allowed with DOE WAP H&S Funds

Allowed with Alternative Funds

If DOE WAP H&S Funds are used for any “allowable” actions, detail them here. Using DOE WAP H&S funds for Lead, Asbestos, and Radon abatement is prohibited.

### 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 type="checkbox"/>	Results in Deferral/Referral <input checked="" type="checkbox"/>
DOE WAP H&S Funds <input type="checkbox"/>		Alternative Funds <input checked="" type="checkbox"/>
Sensory inspection.		
<b>Allowable Testing/Inspection</b>		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>		Allowed with Alternative Funds <input type="checkbox"/>
If DOE WAP H&S Funds are used for any “allowable” testing, detail them here. Other than the required sensory inspection of hazardous materials, additional testing will not be allowed with H&S funding.		
<b>Prohibited Testing/Inspection</b>		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
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.		
<b>Required Occupant Education</b>		
Concur with DOE Guidance <input type="checkbox"/>		Alternative Guidance <input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Inform occupant in writing of hazards associated with hazardous waste materials being generated/handled in the home.</li> <li>• Inform occupant in writing of observed hazardous condition and associated risks.</li> <li>• Provide occupant written materials on safety issues and proper disposal of household pollutants.</li> </ul>		

<b>6.10 - Injury Prevention of Occupants</b>		
<b>Allowable Actions</b>		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>		Allowed with Alternative Funds <input type="checkbox"/>
Minor repairs and installations (e.g., repairing stairs, replacing handrails, etc.) as defined by the Grantee’s H&S plan. AHFC defines minor repairs as injury prevention of occupant repairs that do not exceed \$2500.		
<b>Prohibited Actions</b>		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for <i>major</i> repairs, as defined by the Grantee’s H&S Plan is prohibited		
<b>Define “major” repairs</b>		
Over \$2500.		
<b>Required Testing/Inspection</b>		
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"/>
Visually inspect for dangers that would prevent weatherization.		
<b>Allowable Testing/Inspection</b>		
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. Other than the required visual inspection of dangers that would prevent weatherization, additional testing will not be allowed with H&S funding.		
<b>Required Occupant Education</b>		
Concur with DOE Guidance <input type="checkbox"/>		Alternative Guidance <input type="checkbox"/>
Inform the client of any corrections that will be made during the course of weatherization work and explain any maintenance that might be required over time.		

<b>6.11 – Lead-Based Surface Coverings (Paint, Varnishes, Roofing, etc.)</b>		
<b>Required Actions</b>		
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"/>	
<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>Client file documentation including the Certified Renovator's certification; any training provided on-site; description of specific actions taken; lead testing and assessment documentation; and photos of site and containment set up. Include the location of photos referenced if not in file.</li> <li>Certification and training requirements of the RRP rule.</li> <li>Job site set up and cleaning verification by a Certified Renovator.</li> </ul> </li> <li>Only those costs directly associated with lead safe work practices for surfaces directly disturbed during weatherization activities are allowable WAP H&amp;S expenses.</li> </ul>			
<b>Allowable Actions</b>			
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>		Allowed with Alternative Funds <input checked="" type="checkbox"/>	
Assessment, testing, containment, lead safe weatherization are allowable.			
<b>Prohibited Actions</b>			
Concur with DOE Guidance <input type="checkbox"/>			
<ul style="list-style-type: none"> <li>Using DOE WAP H&amp;S funds for lead abatement is prohibited.</li> <li>Using DOE WAP H&amp;S funds for purchase, resourcing, or maintenance of X-ray Fluorescence (XRF) devices is prohibited.</li> </ul>			
<b>Allowable Testing/Inspection</b>			
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. Alternatively, if EPA-approved testing is not conducted, the Subgrantee may assume lead is present and work in compliance with EPA RRP rule.			
<b>Required Occupant Education</b>			
Concur with DOE Guidance <input checked="" type="checkbox"/>		Alternative Guidance <input checked="" type="checkbox"/>	
Follow pre-renovation education requirements per EPA RRP rules.			

<b>6.12 – Mold and Moisture</b>			
<b>Allowable Actions</b>			
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>		Allowed with Alternative Funds <input type="checkbox"/>	
If DOE WAP H&S Funds are used for any "allowable" actions, detail them here. the home and to ensure the long-term stability and durability of the measures as defined in the Grantee's H&S plan. AHFC defines limited water damage repairs as repairs that do not exceed \$2500. 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, Ground vapor barrier, moisture barriers, etc. Window and door repairs are allowed with H&S funds to resolve a bulk water intrusion issue that is the cause of visible biological growth and in compliance with the most current program notice (WPN 19-5 at the time of this writing).			
<b>Prohibited Actions</b>			
Concur with DOE Guidance <input type="checkbox"/>			
<ul style="list-style-type: none"> <li>Using DOE WAP H&amp;S funds for mold cleanup is prohibited.</li> <li>Using DOE WAP H&amp;S funds for window and door replacements is prohibited</li> </ul>			
<b>Required Testing/Inspection</b>			
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"/>	
Visual assessment for moisture or mold damage including exterior drainage.			
<b>Allowable Testing/Inspection</b>			

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
Diagnostics such as material moisture content, or relative humidity measurements at the audit and/or final inspection.	
<b>Prohibited Testing/Inspection</b>	
Concur with DOE Guidance <input checked="" type="checkbox"/>	
Using DOE WAP H&S funds for mold testing of any type is prohibited.	
<b>Required Occupant Education</b>	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input checked="" type="checkbox"/>
Provide occupant written notification of identified mold/moisture hazards and information regarding the associated hazard.	

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### 6.13 - Occupant Pre-existing or Potential Health Conditions

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

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

1. Occupant temporary relocation costs on a case-by-case basis. Grantee must define the allowable costs, relocations options, procedure for this case-by case determination, and what documentation is required from the client if DOE WAP funds are used for this purpose.
2. Allowable cost is defined as cost associated with relocation of occupant's whose health is fragile, or an occupant has been identified to have a health condition, and/or the crew work activities would themselves constitute a health and/or safety hazard to allow for weatherization services to proceed when no other reasonable solution(s) exist. Relocation options shall be limited to providing at risk occupant temporary lodging to not exceed the current approved GSA lodging rate (cost must be paid to directly to the temporary lodging vendor).

Procedure for cases-by-case approval are as follows:

1. Subgrantee are required to contact AHFC staff for prior approval before proceeding with temporary location of occupants. Staff will factor in the reason for client relocation, weatherization measure(s)/practice(s) requiring the relocation, available client documentation, energy benefit provided by WAP services vs. non-energy benefit such as H&S/repair expenditures, and current reported Subgrantee H&S expenditure level in the approval/denial determination process. In cases the where relocation cost is determined to exceed the unit's energy benefit, are determined to be unreasonable, or the Subgrantee does not have funding available to relocate the client within its existing H&S budget the unit will be deferred.
2. Required client documentation must be kept in client file and shall consist of the following:  
Reason the client has to be relocated to include identification of the weatherization measure(s)/work practice(s) requiring the client to be relocated.

Required Testing/Inspection		
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"/>

Screen occupants for known or suspected health concerns either as part of the initial application for weatherization, or during the assessment or both utilizing the Ak Pollution Source Occupant Survey form.

<b>Allowable Testing/Inspection</b>	
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
If DOE WAP H&S Funds are used for any “allowable” testing, detail them here. Other than the required screening for known or suspected health concerns, additional screening/testing will not be allowed with H&S funding.	
<b>Required Occupant Education</b>	
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <li>• Inform occupant in writing of any known risks and provide pre-weatherization screening form.</li> <li>• Provide occupant with Subgrantee point of contact information in writing.</li> </ul>	

<b>6.14 – Pests</b>		
<b>Required Actions</b>		
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 checked="" type="checkbox"/>	
Deferral of homes where infestation of pests cannot be reasonably removed or poses H&S concern for workers.		
<b>Allowable Actions</b>		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
No DOE funds can be used for mitigation of pests.		
<b>Allowable Testing/Inspection</b>		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
No testing allowed for identification of pests.		
<b>Required Occupant Education</b>		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	
Inform occupant in writing of observed conditions and associated risks.		

<b>6.15 – Radon</b>		
<b>Required Actions</b>		
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"/>	
<ul style="list-style-type: none"> <li>• Cover exposed dirt floors within the pressure/thermal boundary with a sealed soil gas retarder</li> <li>• Cover sump well/pits with airtight covers</li> <li>• Implement ventilation as required by ASHRAE 62.2-2016</li> </ul>		
<b>Allowable Actions</b>		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
GVB, sump covers, and ventilation are allowable measures using DOE funds. In homes where radon may be present, work scope may include additional precautionary measures based on EPA Healthy Indoor Environment Protocols for Home Energy Upgrades.		
•Other precautions may include, but are not limited to, sealing any observed floor and/or foundation penetrations, isolating the basement from the conditioned space, and ensuring crawl space venting is installed and operable.		
<b>Prohibited Actions</b>		
Concur with DOE Guidance <input checked="" type="checkbox"/>		
Using DOE WAP H&S funds for radon mitigation is prohibited.		
<b>Allowable Testing/Inspection</b>		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
Testing is not an eligible expense.		
<b>Required Occupant Education</b>		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input checked="" 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 consent form prior to receiving weatherization services.

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

### 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 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). Install CO detectors in every home as required by local code

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

Install smoke alarms where the AHJ requires them if alarms are not present or are inoperable.

- Replace functional smoke alarms and carbon monoxide alarms if they are beyond the manufacturer’s stated lifetime (usually 10 years). Detectors should have a ten-year lithium battery.

See more details on detectors in the Alaska Field Guide.

- Replace functional smoke or CO alarms batteries if designed to be replaceable.
- Provide fire extinguishers where solid fuel burning equipment is present.

### Prohibited Actions

Concur with DOE Guidance <input checked="" type="checkbox"/>
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Using DOE WAP H&S funds for replacement of functional smoke or CO alarms that are not beyond the manufacturer’s stated lifetime is prohibited.

### Required Testing/Inspection

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

Verify operation and age of installed alarms.

### Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
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If DOE WAP H&S Funds are used for any “allowable” testing, detail them here.

Other than the required testing/inspection, additional testing/inspection will not be allowed with H&S funding.

### Required Occupant Education

Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>
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Provide occupant with verbal and written information on use of newly installed devices and the potential risks of not properly maintaining these devices.

## 6.17 – Ventilation and Indoor Air Quality

### Required Actions

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

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

### Allowable Actions

Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>
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If DOE WAP H&S Funds are used for any “allowable” actions, detail them here.

### 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"/>	
<ul style="list-style-type: none"> <li>ASHRAE 62.2 evaluation to determine required post-weatherization ventilation.</li> <li>Measure fan flow of existing fans and of installed equipment to verify performance.</li> </ul>		
<b>Allowable Testing/Inspection</b>		
Allowed with DOE WAP H&S Funds <input type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
Other than the required testing/inspection, additional testing/inspection will not be allowed with H&S funding		
<b>Required Occupant Education</b>		
Concur with DOE Guidance <input type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	
<ul style="list-style-type: none"> <li>Provide occupant with information on function, use, and maintenance (including location of service switch and cleaning instructions) of ventilation system and components.</li> <li>Provide occupant with equipment manuals for installed equipment.</li> <li>Include disclaimer that ASHRAE 62.2 does not account for high polluting sources or guarantee indoor air quality.</li> </ul>		

<b>6.18 – Water Heaters</b>		
<i>(see Combustion Appliances for combustion related requirements)</i>		
<b>Allowable Actions</b>		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input type="checkbox"/>	
<p>Subgrantees may replace water heaters on a limited basis when the water heater poses a life-safety risk to occupants (e.g., leaking primary tank, high CO measurements) and/or if the current appliance is creating moisture, combustion, and/or electrical related hazards that could impact occupant(s) Health and Safety. Document the situation and why DOE funds need to be used to eliminate a H&amp;S threat with the hot water heater.</p> <p>The Subgrantee must initially attempt to qualify existing Water Heater as an ECM. If the Water Heater does not rank, the Subgrantee may repair or replace the existing unit as a Health and Safety Measure with the caveat that there is a documented threat to the health and/or safety of the occupant(s).</p> <p>Minor safety repairs of water heaters (e.g., T&amp;P valve piping, backflow prevention devices, expansion tanks) of under \$2500 are allowed. Replace, repair, or install primary water heater heaters when existing primary water heater is unsafe, inoperable, or nonexistent.</p>		
<b>Required Testing/Inspection</b>		
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"> <li>Visual inspection of all water heaters and related piping for safety and leaks</li> <li>See Combustion Appliances section for related combustion safety testing requirements.</li> </ul>		
<b>Allowable Testing/Inspection</b>		
Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>	
If DOE WAP H&S Funds are used for any “allowable” testing, detail them here. Other than the required testing/inspection, additional testing/inspection will not be allowed with H&S funding.		
<b>Required Occupant Education</b>		
Concur with DOE Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	
<ul style="list-style-type: none"> <li>Appropriate use and maintenance of units.</li> <li>Provide all paperwork and manuals for any installed equipment.</li> <li>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.</li> </ul>		

## 6.19 – Worker Safety

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

### 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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If DOE WAP H&S Funds are used for any “allowable” actions, detail them here. Minor repairs and installations (stairs, handrails, holes in floors, etc. that will impede the workers accessing an area for work and are allowable when necessary to safely weatherize the dwelling. Minor is defined as less than \$2500.

Personal Protective Equipment (PPE) designed to protect the health and safety of the worker and to make the job site safe are allowed.

### Prohibited Actions

Concur with DOE Guidance

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

### Define “major” repairs

Over \$2500

### Allowable Testing

Allowed with DOE WAP H&S Funds <input checked="" type="checkbox"/>	Allowed with Alternative Funds <input checked="" type="checkbox"/>
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Environmental and surveillance testing required by OSHA or EPA regulation are allowed.

## 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"/>
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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"/>
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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"/>
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Insert required item text