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

Kansas

1.0 – General Information

Additional information that does not fit neatly in one of the other sections of this document.
Enter Additional H&S Information Here

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:

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

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.

In PY2017, Kansas began using a new reporting management tool that is providing additional insight into the H&S expenditures on homes at the state level. In tracking additional H&S measures individually instead of in aggregate, the new system allows for a better perspective on how different funding sources supplement DOE's H&S budget. In recent years, Kansas has been fortunate to have other, non-federal, funding that has helped both to increase the H&S measures possible under the weatherization umbrella and also cover some H&S expenditures to keep DOE's portion low. However, the demand for those more flexible, non-federals has shifted from covering H&S expenses to being needed to help address major deferral issues, such as roof repairs. As such, DOE's share of H&S costs, as well as an overall increase in H&S costs, will keep the need to budget a higher H&S budget.

The attached PDF shows the actual accrued H&S expenditures for recently weatherized homes. This data should be a valid representation of anticipated H&S expenses and installation frequency for DOE PY26 and supports a H&S budget of 23%.

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

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

Measure Matrix Final.xlsx

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 repairs are those repairs necessary for the effective performance or preservation of weatherization materials and are not Health and Safety measures and accordingly would not be charged as such.

Minor wall or roof repairs to preserve installed insulation shall be deemed an IRM, and not H&S. Minor repairs are those that can be corrected following IRM rules when the cost is associated with the ECM.

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

K-WAP staff and contractors will be required to take all reasonable precautions against performing work on homes that will subject workers or clients to health and safety risks.

Before work begins on the residence, the agency/contractor must take into consideration the health concerns of each occupant, the condition of the dwelling, and the possible effect of work to be performed on any particular health or medical condition of the occupants.

Subrecipients will provide a "Occupant Pre-Existing or Potential Health Conditions" form to the client which explains that some weatherization measures create dust, smells, or other conditions that may aggravate certain health conditions in some individuals. The client will then have the opportunity to self-identify any pre-existing or potential health concerns that may be aggravated by weatherization services.

Agencies, and contractors, are to take into account the client's concerns to the extent feasible to minimize health risks, such as scheduling weatherization work when the at-risk occupants aren't present. It is the responsibility of the occupants to take the appropriate safety precautions to protect themselves and notify weatherization workers in advance of any health risks they may have. Clients will be provided a point of contact, in writing, so that the client can inform the subrecipient of any new or developing health conditions. Failure or the inability to take appropriate actions must result in deferral.

Procedure for determining whether occupants suffer from health conditions which may be negatively impacted by the act of weatherizing their dwelling
See above.
Procedure for addressing potential health concerns including pre-existing health conditions when they are identified
See above
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 ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

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

Allowable Actions

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑

- Unsafe primary units must be proposed for replacement in the energy audit to determine if the system can be replaced as an ECM prior to repair or H&S replacement. If the unit does not qualify as an ECM, the unit will be assessed for repair or H&S replacement. If the estimated cost of repairs exceeds 50% or $1,000 of the estimated replacement cost, the piece of equipment shall be replaced.
- Non-functioning primary heating systems will be inspected to the extent possible for H&S issues and possible repair items. Before any repair, non-functioning units will be proposed for replacement in the energy audit to determine if the system can be replaced as an ECM. The name plate efficiency rating shall be used in the audit tool. This logic potentially allows an inefficient, albeit inoperable, unit to be replaced as an EMC before any repair costs are incurred. If the unit does not qualify as an ECM, the unit will be assessed for repair or H&S replacement. If the estimated cost of repairs exceeds 50% of the estimated replacement cost, the piece of equipment shall be replaced.
- Homes without any heating systems will be reviewed on a case by case basis by contacting KHRC before weatherization services begin. KHRC will require the review of pre-inspection and energy audit documents to evaluate if case by case H&S measures are appropriate and allowable for program expenditures.
- Electric space heaters are not considered unvented heaters nor are they considered unsafe heating sources for H&S weatherization purposes. No weatherization funds shall be used for the repair or replacement of electric resistance heaters. Electric resistance heating sources, both forced air and space heaters, should be proposed for ECM replacement with electric heat pumps.
- Repair or removal of unsafe primary and secondary solid fuel heating appliances.

Prohibited Actions

Concur with DOE Guidance ☐

- Using DOE WAP H&S funds for replacement or installation of secondary heat sources.
- Cooling system shall only be replaced as an ECM or as allowed by LIEAP funding. No H&S cooling systems are permitted with DOE funds.

Required Testing/Inspection

Concur with DOE Guidance ☐	Alternative Guidance ☑

- All combustion space and water heating appliances will be assessed at both the initial audit and at the post inspection. The most recently approved mechanical inspection forms available will be utilized to record and document the results. Forms will clearly identify the individual conducting the inspection and the date it was performed.

- Mechanical equipment forms will collect brand, model, and serial number of equipment. Equipment shall be modeled to reflect published efficiency usage as identified by the model number when available. When published data is unavailable the estimates and assumptions in the Subrecipient Procedures Manual must be used.

- Separate mechanical inspections forms will be used for pre- and post-inspections. Separate mechanical forms will be used for each mechanical system.

- Proper venting to the outside for combustion appliances, including gas dryers and refrigerators, furnaces, vented space heaters, and water heaters is required. Also see Gas Ovens, Stovetops, Ranges.

- When testing indicates a performance problem, venting corrections will be made. Prescriptive correction of preexisting venting code compliance issues, or combustion air calculations, are not eligible H&S measures unless triggered by code compliance requirements. When correction of preexisting code compliance issues is triggered and paid for with WAP funds, cite the specific code requirements with reference to the weatherization measure(s) that triggered the code compliance issue in the client file.

- Follow the Kansas SWS Field Guide for testing procedures and action levels.

- Follow the Subrecipient Procedures Manual, section Mechanical Systems, to assess combustion equipment and determine repair or replacement procedures.

- Combustion appliances must be deemed safe before weatherization measures are installed and must be documented as safe at the completion of the weatherization work. This requirement applies year-round regardless of whether the equipment is in use.

- All naturally drafting combustion equipment within the home's pressure boundary will be tested with the Combustion Appliance Zone (CAZ) in the worst-case depressurization state. This is required at the initial audit and final inspection.

- Primary solid fuel-fired heating sources will be inspected using the appropriate mechanical inspection form. Visually inspect the entirety of solid fuel- fired appliance installations including the venting system to ensure it adheres to the applicable code or local authority having jurisdiction. Safety inspection should include, but are not limited to, verification of adequate floor protection, code-compliant clearances to walls and other combustible materials, and looking for visual evidence of soot on the walls, mantel or ceiling, or creosote staining near the flue pipe.

- Fireplaces can present special hazards that may be affected by weatherization. Fireplaces, as well as all solid fuel appliances, should be inspected for visual evidence of soot on the walls, mantel, or ceiling, or creosote staining near the chimney/flue pipe. These can indicate combustion/drafting issues. Assess whether the fireplace is a primary heating source, a backup heating source, or merely decorative in nature. Operational fireplaces used for primary heating should have the CAZ zone tested under worst case conditions. CAZ depressurization exceeding 5 pascals in the space having the fireplace should have pressure imbalances corrected, additional combustion air added, or the fireplace disabled.

- When a fireplace is used for primary heating, other combustion appliances, such as gas water heaters, should be tested under simulated worst-case conditions. A blower door can be set to run at 300 CFM (depressurization) to mimic the airflow dynamics likely when the fireplace is in use.

- **Daily Test Out Procedures for Crew Based Weatherization:**

  - Any time the air seal/insulation crew performs work on a home, the crew will utilize a smoke pencil or mirror to conduct testing for spillage of any atmospheric draft appliance and measure ambient CO level present in the home prior to leaving the home. This testing will be conducted with all exhaust appliances running. In the event an appliance spills for more than 2 minutes, the appliance will be turned off, allowed to cool, and re-tested under natural conditions. If the appliance fails spillage under natural conditions, or if at any time the ambient CO level in the home exceeds 35 ppm during testing, the appliance will be turned off and the client will be instructed not to operate the appliance until it has been serviced and re-tested by HVAC or authorized personnel and found to be operating safely. Crews will notify HVAC or other authorized personnel that the home needs immediate attention.

  - Appliances that fail under CAZ worst-case depressurization but pass at natural are not necessarily immediate hazards but will be addressed before the final inspection. HVAC or other authorized personnel will be notified to schedule servicing. Residents will be instructed to avoid the conditions causing CAZ depressurization until repairs are completed.

  - Crew HVAC personnel will test any equipment they service or install. They will also conduct spillage, draft, flue CO, and ambient CO testing on any atmospheric drafting appliances during CAZ worst-case depressurization prior to leaving the home. Testing will follow the same procedures as auditors and inspectors. Hazards that require an immediate response will be addressed during the visit. If unable to correct the issue prior to leaving, the client will be instructed not to operate the appliance until it has been serviced and re-tested by HVAC personnel and found to be operating safely.

Grantee Combustion Testing Action Levels	
Worst case depressurization and spillage testing is required for all atmospherically drafting appliances pre and post weatherization using the appropriate and required Kansas mechanical inspection form. Draft testing is also part of our procedures and is compared to minimum draft required (Temp/40)-2.75. Both warm and cold vented appliances must stop spillage within 2 minutes, meet or exceed the minimum draft requirements, and have passing CO measurements (200 PPM AF for water heaters, 400 PPM AF for furnaces, 450 for ovens).	
Grantee Woodstove & Fireplace inspection/testing policy including actions/limits	
Concur with DOE Guidance ☐	Alternative Guidance ☑
Venting on fireplaces or woodstoves used as primary heating sources that are 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 ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

- 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

Where suspected Asbestos Containing Material (ACM) is identified precautions must be taken not to disturb the material. The suspected ACM's overall condition and potential for disturbing the material will be evaluated.

In siding, walls, ceiling, etc: Where suspected ACM's will be disturbed, the home will be deferred until the suspected material is deemed non-asbestos containing, removed, or encapsulated by a certified asbestos professional. The exception is slate type siding. Slate type sliding may be removed and reinstalled in order to install sidewall insulation and where the associated costs are charged as part of the ECM. All precautions must be taken not to damage the siding. Slate type siding should not be cut or drilled. Where possible, insulate through home interior.

On pipes, furnaces, other small covered surfaces: Suspected asbestos containing material present on pipes, furnaces, or other small covered surfaces, shall be assumed to contain asbestos, unless testing determines otherwise. The material's overall condition and the potential for disturbing the material will be evaluated. Where the material condition is good and intact at time of inspection and there is no risk of disturbing the material, weatherization work should proceed. Clients and workers will be instructed not to disturb the material. Where the material is in less than good condition, the 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. DOE funds may be used for limited (<$1000) testing, encapsulation, or removal of suspected ACM on small surfaces (pipes, ductwork, furnaces, other small covered surfaces, etc) by an appropriately licensed asbestos control professional if necessary to safely weatherize the dwelling. Testing is not required, and encapsulation and removal may occur of suspected ACMs.

In vermiculite: When vermiculite is present, the home will be deferred until the removal of vermiculite by a certified asbestos professional is completed. DOE funds cannot be used for removal. Clients will be instructed to not disturb the vermiculite and asbestos safety information will be provided. The deferral language will provide information in writing describing that in order for weatherization to proceed there must be documentation that a licensed professional removed the vermiculite.

Grantee Blower Door Testing Policy When Suspected ACM Exists

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, the 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 exception to the above approach is vermiculite. No blower door test will occur, and the home will be deferred until the removal of vermiculite by a certified asbestos professional is completed.

General blower door testing is allowed with slate siding.

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 (<$1000) testing, encapsulation, or removal of suspected ACM on small surfaces (pipes, ductwork, furnaces, other small covered surfaces, etc) by an appropriately licensed asbestos control professional if necessary to safely weatherize the dwelling. Testing is not required, and encapsulation and removal may occur of suspected ACMs.	
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 ☑
Limited (<$1000) testing, encapsulation, or removal of suspected ACM on small surfaces (pipes, ductwork, furnaces, other small covered surfaces, etc) by an appropriately licensed asbestos control professional if necessary to safely weatherize the dwelling. Testing is not required, and encapsulation and removal may occur of suspected ACMs.	
Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
• Formally notify the occupant, and landlord if applicable, in writing: o of suspected ACMs that are present and what precautions will be taken to ensure the occupants' and workers' safety during weatherization; o of results if testing was performed; o not to disturb suspected ACM; o 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 ☑	Allowed with Alternative Funds ☑	
DOE funds may be used for limited (<$1,000) remediation of conditions that may lead to or promote biological concerns and unsanitary conditions (e.g., repairing leaking sewage pipe).		
Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
Sensory inspection of interior, exterior, attics, and subspaces of the dwelling.		
Prohibited Testing/Inspection		
Concur with DOE Guidance ☑		

DOE WAP H&S funds may not be used for testing of materials for biological contaminants.
Required Occupant Education
Concur with DOE Guidance ☑ | Alternative Guidance ☐
Inform occupant in writing of observed biological and unsanitary conditions.

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

Allowable Actions		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☑	
Building rehabilitation is beyond the scope of the Weatherization Assistance Program; however, program workers frequently encounter homes in poor structural condition. Dwellings whose structural integrity is in question should be referred to housing rehabilitation programs where appropriate. Weatherization services may need to be delayed until the dwelling can be made safe for crews and occupants. Incidental repairs necessary for the effective performance or preservation of weatherization materials are allowed. Examples of these limited repairs include sealing minor roof leaks to preserve new attic insulation and repairing water-damaged flooring as part of replacing a water heater. All minor repairs must meet and follow the definition and requirement of incidental repairs.		
Prohibited Actions		
Concur with DOE Guidance ☑		
Using DOE WAP H&S funds for building rehabilitation.		
Define "major" repairs		
NA- H&S funds not allowed for major repairs.		
Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
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.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☑	
If DOE WAP H&S Funds are used for any "allowable" testing, detail them here.		
Prohibited Testing/Inspection		
Concur with DOE Guidance ☑		
Using DOE WAP H&S funds for any testing/evaluation of structural materials by a third-party is prohibited.		
Required Occupant Education		
Concur with DOE Guidance ☑	Alternative Guidance ☐	
Notify occupant in writing of structurally compromised areas.		

6.5 – Code Compliance

Allowable Actions

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑

- The correction of preexisting code compliance issues is not an allowable cost unless triggered by weatherization measures being installed in a specific room or area of the home. When correction of preexisting code compliance issues is triggered and paid for with WAP funds, cite specific code requirements with reference to the weatherization measure(s) that triggered the code compliance issue in the client file. State and local (or jurisdiction having authority) codes must be followed while installing weatherization measures. Condemned properties and properties where "red tagged" or health and safety conditions exist that cannot be corrected under this guidance must be deferred.

Common allowable code compliance situations:

- Flue liners or resizing of water heater flues when a weatherization installed furnace orphans the water heater. Flue liners and flue corrections are allowable H&S items.
- Federal Pacific breaker boxes are present in Kansas homes and where mechanical equipment replacements are required, this unsafe breaker box must be replaced. This is an allowable H&S expense, but typically will require additional non-federal funding.
- The correction of all mechanical code violations may be required when pulling a mechanical permit for the installation of new mechanical equipment. This may include installing a gas line drip leg on water heaters when installing in a new furnace. The correction of code issues when required, is an allowable H&S expense.
- Electrical code compliance work is allowed when required when installing new ventilation equipment.

Prohibited Actions

Concur with DOE Guidance ☑

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

Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

Visual inspection.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑

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

Required Occupant Education

Concur with DOE Guidance ☑	Alternative Guidance ☐

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

6.6 – Electrical

Required Actions

Concur with DOE Guidance ☐	Alternative Guidance ☑	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

The two primary energy-related health and safety electrical concerns are insulating homes that contain knob-and-tube wiring and identifying overloaded electrical circuits. Knob-and-tube wiring located in a wall cavity or exposed on an attic floor was intended by code to have free air movement to cool the wire when it is carrying an electric current. Laboratory tests have shown that retrofitting thermal insulation around electric wiring can cause it to overheat, resulting in a fire hazard. For this reason, the installation of insulation around live knob and tube wiring should not be performed. Sidewalls that contain live knob and tube wiring are not to be blown with insulation. In attics, a reasonable cost of rewiring live knob and tube should be included in the cost of the attic insulation for audit approval. The cost of rewiring will be charged with the cost of the energy conversation measure of attic insulation if audit approved. If the cost of rewiring is prohibitive, the cost of attic insulation shall be run independently and should be valleyed or dammed to prevent covering live knob and tube. Subrecipients are to abide by more stringent applicable codes in jurisdictions where the work is being performed.

Voltage detection testing is required on knob and tube wiring.

Serious electrical hazards exist when gross overloads are present. Should auditors and crews find such existing problems, they should notify the owner. Weatherization measures that involve the installation of new equipment such as air conditioners, heat pumps, ventilation systems, or electric water heaters can exacerbate previously marginal overload problems to hazardous levels. The problem should also be noted in the client file. To the extent that these problems prevent adequate weatherization, the agency should consider repairing them.

Allowable Actions

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑

Minor electrical repairs (e.g., junction box covers improper splices) to protect the occupant or workers from electrical hazards within the living area or in the immediate area where weatherization activities will occur.

Prohibited Actions

Concur with DOE Guidance ☑

Using DOE WAP H&S funds for ***major*** electrical repairs as defined by the Grantee's H&S plan is prohibited

Define "major" repairs

Major electrical repairs are those over $1,000.

Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

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

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☑

Not applicable with DOE H&S funds

Required Occupant Education

Concur with DOE Guidance ☑	Alternative Guidance ☐

- Provide occupant with written documentation of any electrical hazards identified that will not be addressed by weatherization
- Provide information to occupant on over-current protection, overloading circuits, and basic electrical safety/risks if conditions warrant.

6.7 – Fuel Leaks

Required Actions

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

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

Allowable Actions

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑

- Exposed gas lines will be inspected using an electronic combustion gas detector from the utility coupling into and throughout the home. Gas leaks should be verified with a soap solution and marked for repair. When a gas leak is found on the utility side of service, the client must contact the utility service before work may proceed. Fixing fuel leaks inside the home are allowable H&S expenses but may be assigned as a responsibility of the client.
- 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. Allowable but not required.

Prohibited Actions

Concur with DOE Guidance ☑

- Using DOE WAP H&S funds to repair leaks that are the responsibility of the utility to correct is prohibited.
- Using DOE WAP H&S funds for environmental cleanup resulting from bulk fuel leaks is prohibited

Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

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

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☑

No additional allowable activities.

Prohibited Testing/Inspection

Concur with DOE Guidance ☑

Using DOE WAP H&S funds for environmental testing of soil or water is prohibited.

Required Occupant Education

Concur with DOE Guidance ☑	Alternative Guidance ☐

Inform occupants in writing of fuel leak testing results, including specific location if fuel leaks are detected.

6.8 – Gas Ovens/Stovetops/Ranges

Allowable Actions	
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☐

Replacement of gas ovens, stovetops, and ranges is not allowed.

Gas ovens will be tested for CO following BPI's test procedures. If units exceed 450 ppm air-free at steady state, a clean and tune will be conducted. Clients will be notified if units do not improve after cleaning and tuning and a CO alarm will be installed and client will be informed of the importance of using exhaust ventilation when cooking and the importance of keeping burners and broilers clean to limit the production of CO.

Gas ranges will be visually inspected for operability and flame quality. Clients will be notified that a clean and tune or repair is recommended if the flame has any discoloration, flame impingement, an irregular pattern, or if the burners are visibly dirty, corroded, or bent.

Prohibited Actions
Concur with DOE Guidance ☑
Using DOE WAP H&S funds for replacement of gas ovens/ranges/stovetops is prohibited.

Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
See above		

Define action levels for oven CO testing and resulting actions
See above

Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑
See above	

Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
Inform occupants of the importance of using exhaust ventilation when cooking and the importance of keeping burners and broilers clean to limit the production of CO.	

6.9 – Hazardous Materials

Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

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

Define "limited" removal of pollutants
Limited removal is limited to $1,000

Allowable Actions		
Allowed with DOE WAP H&S Funds ☐		Allowed with Alternative Funds ☑
No additional allowable actions		
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 ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑		Alternative Funds ☑
Sensory inspection.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds ☐		Allowed with Alternative Funds ☑
No additional allowable testing		
Prohibited Testing/Inspection		
Concur with DOE Guidance ☑		
Using DOE WAP H&S funds for any testing for hazardous materials other than that specifically permitted in the asbestos, lead, and radon sections of this document is prohibited.		
Required Occupant Education		
Concur with DOE Guidance ☑		Alternative Guidance ☐
• Inform occupant in writing of hazards associated with hazardous waste materials being generated/handled in the home. • Inform occupant in writing of observed hazardous condition and associated risks. • Provide occupant written materials on safety issues and proper disposal of household pollutants.		

6.10 - Injury Prevention of Occupants

Allowable Actions		
Allowed with DOE WAP H&S Funds ☐		Allowed with Alternative Funds ☑
Minor repairs to stairs, steps, railings, etc., are allowed incidental repairs under the program if necessary to complete the weatherization work. For example, broken steps to the basement where the furnace is located may be repaired if necessary in order to complete furnace work. Items not necessary for the installation of a weatherization measure are not allowed. Minor repairs made to remedy the issues must meet the definition of incidental repairs and will be charged as incidental repairs rather than H&S. Necessary repairs beyond the scope of the program will result in a deferral. When deferral is necessary, the client will be informed in writing of the observed condition triggering the deferral and the actions necessary in order for weatherization to commence.		
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		
No H&S repairs allowed.		
Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑		Alternative Funds ☑
Visually inspect for dangers that would prevent weatherization.		

Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☑
No additional allowable inspection allowed	
Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
If identified hazardous conditions will not be corrected during weatherization, inform occupant in writing of observed hazards and associated risks utilizing the "Hazard Identification Notification Form" required by WPN 22-7.	

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

Required Actions		
Concur with DOE Guidance ☐	Alternative Guidance ☑	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

Weatherization work must follow KDHE's Renovation, Repair, and Painting Program (RRP) when working in pre-1978 housing unless KHDE approved testing confirms the work area to be lead free.

All weatherization auditors, inspectors, field monitors, and agency crew members must attend and successfully complete a Kansas Department of Health and Environment (KDHE) approved Lead Safe Work Practice Training course and fulfill KDHE requirements to become Certified Renovators.

All general weatherization contractors and agency crews will be responsible for complying with the Lead Based Paint Renovation, Repair, and Painting Rule (RRP) as enforced by KDHE in Kansas. Weatherization contractors and agencies with crews must be KDHE Licensed Renovation Firms.

RRP and Kansas weatherization requires all licensed firms to employ a Certified Renovator who is registered with the KDHE. Weatherization jobs will have a designated Certified Renovator on each job site at all times during weatherization activities. The Certified Renovator will document that RRP requirements were followed. Agency crews will include this documentation in the client file. Contractors are responsible to KDHE for completing and retaining proper documentation. Contractors, and agency crews, will provide a signed Lead Safe Work Practices Declaration form with the certified renovator's signature for the client file for all weatherization jobs. A copy of this documentation is required in the client file.

Only those costs directly associated with the lead safe practices for surfaces directly disturbed during weatherization activities are allowable H&S expenditures.

Allowable Actions	
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑
See above	
Prohibited Actions	
Concur with DOE Guidance ☑	
• Using DOE WAP H&S funds for lead abatement is prohibited. • Using DOE WAP H&S funds for purchase, resourcing, or maintenance of X-ray Fluorescence (XRF) devices is prohibited.	
Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☑
See above.	
Required Occupant Education	
Concur with DOE Guidance ☐	Alternative Guidance ☑
Follow pre-renovation education requirements per KDHE RRP rules.	

6.12 – Mold and Moisture

Allowable Actions	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☑

Limited water damage repairs that can be addressed by weatherization workers are allowed when necessary in order to weatherize the home and to ensure the long-term stability and durability of the measure. Repairs not directly necessary for the installation of an ECM or H&S item are not allowed. Repair costs must be included with the associated weatherization measure.

Source control (i.e. correction of moisture and mold creating conditions) is allowed when necessary in order to weatherization the home and to ensure the long-term stability and durability of the measure. Source control is independent of latent damage and related repairs. Source control includes but is not limited to: gutters, down spouts, extensions, flashing, sump pumps, minor dirt work for drainage, and landscaping. The installation of dehumidifiers is typically beyond the scope of weatherization and requires a field waiver from the grantee. Major drainage issues are beyond the scope of the program. Source control is allowable only as they relate to mold and moisture creating conditions.

Ground moisture barriers will be installed in accordance with the approved Kansas SWS Field Guide. Ground moisture barriers will be installed over exposed soil in crawl spaces and basement where 2/3 or more of the area is accessible AND the installed portion can be adequately sealed to the adjacent foundation walls. Accessibility is to be determined by the initial auditor. Ground moisture barriers will not be installed where bulk water intrusion/standing water is a concern.

Mold cleanup or testing is not an allowable Health and Safety 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 and cannot be charged to the H&S budget category.

Where severe mold and moisture issues cannot be addressed, deferral is required.

Prohibited Actions
Concur with DOE Guidance ☑
• Using DOE WAP H&S funds for mold cleanup is prohibited. • Using DOE WAP H&S funds for window and door replacements is prohibited

Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
Visual assessment for moisture or mold damage including exterior drainage.		

Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑
Allowable, but not required activities include diagnostics such as material moisture content, ore relative humidity measurements at the audit and/or final inspection.	

Prohibited Testing/Inspection
Concur with DOE Guidance ☑
Using DOE WAP H&S funds for mold testing of any type is prohibited.

Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
Provide occupant written notification of identified mold/moisture hazards and information regarding the associated hazard.	

6.13 - Occupant Pre-existing or Potential Health Conditions

Required Actions

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

- 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 ☐	Allowed with Alternative Funds ☑

No additional allowable action with DOE H&S funds.

Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

- Screen occupants for known or suspected health concerns either as part of initial application for weatherization, during the audit, or both.
- This is done utilizing the "Occupant Pre-existing or Potential Health Condition Screening Form" required by WPN 22-7.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☑

No additional allowable action with DOE H&S funds.

Required Occupant Education

Concur with DOE Guidance ☑	Alternative Guidance ☐

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

6.14 – Pests

Required Actions

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

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

Allowable Actions

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☐

Limited pest removal is allowed only where infestation would prevent weatherization. Limited is defined as one or two treatments and recurring treatment plans are not allowed. Infestation of pests may be cause for deferral where it cannot be reasonably removed or poses health and safety concern for workers. Discretion to defer homes based on pests is left up to the individual auditor and work crews. Unsafe or unsanitary conditions are allowable deferral conditions.

Screening of windows and points of access is allowed to prevent intrusion. Incorporating pest exclusion into air sealing practices to prevent intrusion is allowed as part of the air sealing ECM.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☐

Visual assessment of presence and degree of infestation and risk to workers.

Required Occupant Education

Concur with DOE Guidance ☑	Alternative Guidance ☐

Inform occupant in writing of observed conditions and associated risks.

6.15 – Radon

Required Actions

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

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

Allowable Actions

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☐

Radon testing and mitigation is not an allowable activity under the weatherization program. However, since radon may be present in all Kansas homes, precautionary measures to reduce the possibility of making radon issues worse are allowable H&S expenditures. Whenever site conditions permit (e.g., no flooding), exposed dirt floors within the pressure/thermal boundary must be covered with an appropriately installed and sealed soil gas/vapor retarder (aka ground moisture barrier). Sump pump wells/pits must also be covered with airtight covers if within the pressure/thermal boundary. ASHRAE 62.2-2016 will also be applied, as required. Other precautions may include, but are not limited to, sealing any observed floor and/or foundation penetrations, isolating the basement from the conditioned space, or air sealing unconditioned cellars or crude basements to minimize connection with the living space.

Prohibited Actions

Concur with DOE Guidance ☑

Using DOE WAP H&S funds for radon mitigation is prohibited.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Radon testing is not allowed with DOE H&S funds.

Required Occupant Education

Concur with DOE Guidance ☑	Alternative Guidance ☐

- 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 ☐	Alternative Guidance ☑	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

Smoke Alarms: Where alarms are not present or are inoperable, one UL-217 listed smoke alarm will be installed outside sleeping areas and on each habitable floor within every weatherized home. Alarms shall have non-removable, non-replaceable 10-year lithium batteries.

Carbon Monoxide Alarms: Where alarms are not present or are inoperable, one CO alarm will be installed outside the primary sleeping area and on each habitable floor within every weatherized home. Alarms shall be sealed lithium battery unit.

Fire Extinguishers: Fire extinguishers are not an allowable H&S measure.

Allowable Actions

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☐

See above

Prohibited Actions

Concur with DOE Guidance ☑

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 ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
Verify operation and age of installed alarms.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
No additional allowable testing.		
Required Occupant Education		
Concur with DOE Guidance ☑	Alternative Guidance ☐	
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 ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☐	Alternative Funds ☑	
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 ☐	Allowed with Alternative Funds ☐	
For all DOE funded homes, ASHRAE 62.2-2016 minimum ventilation standards are required to be met to the fullest extent possible and are allowable H&S costs. Additional ventilation will be added, or existing ventilation modified, where required. When installing a new fan to meet whole-house ventilation requirements, actions will be taken to minimize zonal pressure differences greater than 3 pascals across the closed door. The KHRC provided ASHRAE 62.2-2016 spreadsheet or the ASHRAE 62.2-2016 calculator from the Residential Energy Dynamics (RED) website will be utilized.		
Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
• ASHRAE 62.2 evaluation to determine required post-weatherization ventilation. • Measure fan flow of existing fans and of installed equipment to verify performance.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
No additional actions		
Required Occupant Education		
Concur with DOE Guidance ☑	Alternative Guidance ☐	
• Provide occupant with information on function, use, and maintenance (including location of service switch and cleaning instructions) of ventilation system and components. • Provide occupant with equipment manuals for installed equipment. • Include disclaimer that ASHRAE 62.2 does not account for high polluting sources or guarantee indoor air quality.		

6.18 – Water Heaters
(see Combustion Appliances for combustion related requirements)

Allowable Actions

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑

Water heating systems, i.e., water heaters, can be replaced using H&S funding if one of the following circumstances exists:
• Leaking AND would prohibit the installation of an approved measure or for the protection of a weatherization measure.
• Producing a high concentration of CO
• Installation of an on demand, direct vent, or fan assisted water heater is allowed if the required draft cannot be established after all other considerations. Fuel switching to an electric tank may also be considered but requires a field waiver from KHRC.

Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

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

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☐
Visual and combustion testing as required per KWAP mechanical inspection forms.	

Required Occupant Education

Concur with DOE Guidance ☑	Alternative Guidance ☐

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

6.19 – Worker Safety

Required Actions

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
Adherence to all federal, state, and local worker safety regulations (e.g., OSHA, EPA).		

Allowable Actions

Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☑
Costs for subrecipients to comply with general OSHA requirements may be charged to program support as tools and equipment.	

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

Not applicable

Allowable Testing

Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐
Not applicable	

X – (Insert Additional H&S Items for Use of DOE WAP H&S funds)		
Required Actions		
Concur with DOE Guidance ☐	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☐	Alternative Funds ☐	
Insert required item text		
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.		
Prohibited Actions		
Concur with DOE Guidance ☐		
What is prohibited		
Required Testing/Inspection		
Concur with DOE Guidance ☐	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☐	Alternative Funds ☐	
Insert required item text		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
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 ☐	Alternative Guidance ☐	
Insert required item text		