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

Illinois Department of Commerce & Economic Opportunity

1.0 – General Information

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

Illinois Home Weatherization Assistance Program

Health and Safety Plan for Federal Fiscal Year 2022

Illinois has developed a Health and Safety Plan using WAP funds to identify and abate specific health and safety hazards that may exist in dwellings weatherized by Local Administering Agencies. The maximum cost for Health and Safety work on a unit is $1,750; this maximum spending limit may be exceeded on a case-by-case basis with written approval from OCA. OCA conducted an analysis to examine the cost of various health and safety measures, frequency of installation, and number of expected units to determine the appropriate health and safety average cost. When there are allowable health and safety measures needed on a home beyond the maximum spending limit, sub-grantees can submit a request to OCA to exceed the spending limit. These requests are reviewed for reasonableness by OCA monitoring staff prior to approval.

Health and Safety Investigation during Weatherization Assessment and Health and Safety Notice and Client Education

At time of application, all weatherization applicants are interviewed about potential health and safety hazards in their home and the results of this health and safety interview are recorded on a form.

Most importantly, at the time of the initial energy audit/assessment, the assessor also asks the client about problems in the home, possible sickness from carbon monoxide poisoning, smell of flue gasses, mold problems, etc. As part of the energy audit the auditor will make important health and safety observations. The WAP client will also receive consumer education on all applicable issues in the latest DOE Health and Safety Guidance.

All precautions are taken to ensure that clients are protected from any potential health and safety risks. Local Administering Agencies have been trained to identify any health and safety hazardous conditions in the home and the use of a Hazardous Condition Reporting form. All applicable homes receive combustion appliance testing with flue gas analyzers, and gas leakage detection equipment and undergo a complete health and safety inspection. All homes are reviewed to ensure proper operation of smoke detectors, and of CO detectors. In addition, Local Administering Agencies provide copies of the EPA pamphlets "Renovate Right", Citizen's Guide to Radon, and "Mold and Moisture" to the owners and occupants at the time of energy audit.

Documentation of receipt is retained in the client file.

During the assessment, the IHWAP assessor may discover a variety of hazardous/health and safety conditions. These hazardous conditions are classified as either "immediate" or "potential" depending on their severity. They are defined as follows:

Immediate Hazard Conditions - Conditions that reasonably constitute an immediate risk of harm to person or property (e.g., gas leaks, severe structural problems, electrical safety problems, severe mold problems, immediate fire hazards, etc.)

Potentially Hazardous Conditions - Conditions that reasonably represent a potential risk of harm to person or property (e.g., items stored in the attic or basement impeding access, leaking water or sewage lines, minor structural problems, etc.)

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property are listed on OCA's Hazardous Condition Form at the time of assessment and a copy is provided to the client and/or landlord. This form includes the client's name, address, assessment date, job number, description of a hazardous condition, time and date, and client and assessor signatures. If an Immediate hazard is discovered, no weatherization work (architectural or mechanical) is to be completed on the home until the immediate hazard has been corrected. If the immediate hazard cannot be corrected, the home is deferred from weatherization work until the appropriate hazardous conditions have been remedied or repaired.

Health & Safety or Energy Conservation Measure (ECM)

There are some instances where, depending on circumstances, the measure can qualify as either an H&S measure or an ECM, such as a heating or cooling system replacement. When the measure has a Savings-Investment Ratio (SIR) >1, the measure will be treated as an ECM. A measure may be considered for H&S repair or replacement only after it is determined that the measure is not cost-effective.

Rationale for Performing H&S Measures

The rationale for performing each H&S measure in an individual home and its relationship to the ECM that necessitated it (if there is one) must be noted in the work order. Some H&S measures (for example, carbon monoxide/fire alarms) will not be associated with a specific ECM.

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.

Health and Safety Expenditure Limits

Recognizing that potential Health and Safety Costs could absorb and exceed WAP resources for any one home weatherization project, OCA has established a Health and Safety Budget which may average $1,000 per unit weatherized but may not exceed $1,750 in any one unit unless a waiver is granted by OCA. Waiver requests to exceed the maximum limit must be well documented and justified and will be reviewed on a case-by-case basis. Furthermore, Local Administrating Agency's Health & Safety budgets are limited to 20% of the material and labor budget. Any request to exceed this limit will require a justification and must be approved by OCA.

Health and Safety costs are allowed cumulatively. A cost which may be paid under Health and Safety includes:

1. Installation of Smoke Detectors and Carbon Monoxide Detectors;
2. Installation/Repair of exhaust fans in kitchens and bathrooms in accordance with ASHRAE 62.2 protocol;
3. Correcting/Repairing leaking fuel supply lines;
4. Correcting/Repairing improper or ineffective HVAC venting (such as installing a chimney liner);
5. Repairing/Replacing Air Conditioning units in homes where at-risk, medically certified/necessitated occupants dwell;
6. Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions;
7. Electrical repairs/upgrades necessary for weatherization measures and where the health and safety of the occupant is at risk;
8. Minor correction of moisture and mold creating conditions when necessary to ensure the long-term stability and durability of the weatherization measures and the clients' long-term health and safety;
9. Gutter or downspout work when necessary to keep rainwater out of the dwelling to stop or prevent moisture/mold mildew conditions;
10. Sump Pump repair, replacement, installation, or covers necessary to keep seepage water out of the dwelling to stop or prevent moisture/mold mildew conditions;
11. Repair of replacement of stairs and railings for worker health and safety;
12. Pest removal as outlined in WPN 17-7;
13. Water heater and gas range repair or replacement;
14. EPA RRP and asbestos testing related activities; and
15. Replacement of furnace for health and safety purposes; a health and safety furnace replacement would only be allowed with OCA approval.

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.

In addition to the Health and Safety Limit, OCA will implement an Incidental Repair Limit of $700; an Incidental Repair is a weatherization measure that is necessary for the effective performance or preservation of weatherization materials. Incidental Repair measures are separate and distinct from Energy Saving Retrofit measures or Health and Safety measures.

Some examples of Incidental Repair measures are:

1. Minor roof repair necessary for the effective performance of weatherization measures;
2. Exterior/interior wall repair or ceiling repair necessary to install insulation;
3. Repair or replacement of heating system ductwork only if associated with a heating system replacement (and documented as such). If no heating system replacement is done, repair or replacement, as well as ductwork sealing, would be justified within the air infiltration reduction Energy Conservation Measure Savings to Investment Ratio because this work is intended to save energy lost through air leakage.

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:

1. ***Occupant Pre-existing or Potential Health Condition Screening***
    1. *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:*
        1. *Any known risks associated with the measures and materials being installed*
        2. *Subgrantee point of contact information for occupant(s)*
        3. *Date of screening*
2. ***Hazard Identification Notification***

1. *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:*
    1. *Date(s) of the energy audit/assessment and when the occupant(s) (and landlord, if applicable) was informed of a potential H&S issue*
    2. *A clear description of the problem, including any testing results*
    3. *A statement indicating if, or when weatherization could continue*

Radon Informed Consent Form

1. *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:*
    1. *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)*
    2. *A list of precautionary measures WAP will install based on EPA Healthy Indoor Environment Protocols.*
    3. *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

During the intake process clients are required to complete the IHWAP Applicant Health and Safety Intake Questionnaire which solicits the occupants' health and safety concerns. Clients are also asked home and health related questions during the client interview at assessment.

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

Potential health conditions that can be negatively impacted by weatherization are identified based on the client's response to the questions from the Health & Safety Intake questionnaire.

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

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.

2. 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.
    1. 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.
    2. 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.
3. 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.
4. 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.
5. 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.
6. 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 IHWAP-funded weatherization work is permitted if the completed dwelling unit will be heated with an unvented combustion space heater. 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 and must be removed from the home.
- 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 ☑

<u>Air Conditioning Installation</u>

The assessor will make sure systems are present, operable, and performing. The assessor will also determine the presence of at-risk occupants. An at-risk occupant is a household member with a medical condition documented by a physician that requires air conditioning (must provide IHWAP Air Conditioning/Cooling Medical Condition Verification Form).

In most cases, this would only be limited to the repair of a central AC system or the installation of a window air conditioner.

Since air conditioner work is a Health and Safety measure, a positive SIR is not required, and the measure would not have to be calculated as a Retrofit. The costs of this measure would have to include the labor to repair/install the air conditioning.

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 ☐
1. Verify that primary heating systems are present, operable, and performing correctly. 2. Conduct combustion appliance testing and visual inspection of all combustion appliances and their related venting. 3. 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). 4. CO testing is required for all combustion appliances, regardless of venting type. 5. Verify proper clearances for all combustion venting types 6. 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. 7. 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. 8. 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	
If appliance fails spillage test: • Turn off appliance. • Check personal CO monitor. • Open window in CAZ if possible. • Re-test if CO is below allowable limits. • If appliance passes, spillage was cause by depressurization. • If appliance fails, check for flue or chimney for blockage. If blockage is found and removed, repeat spillage test. Also see section 3124 (Solutions to Combustion Safety Testing Failures) in the IHWAP Field Standards. Appliances with CO emissions higher than the threshold limits should be cleaned and tuned and tested for CO emissions again. Contact the Weatherization Agency if high CO emission problems cannot be corrected. If the CO thresholds are exceeded and ambient CO levels do not exceed 70 ppm, work in the home may continue.	
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 ☐
1. Appropriate use and maintenance of units. 2. Provide all paperwork and manuals for any equipment installed by weatherization. 3. Discuss and provide information on proper disposal of bulk fuel tanks when not removed as part of the weatherization work. 4. 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 ☐	

1. 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.
2. Grantees must have written policy included in their H&S plan for:
    1. Identifying and managing suspected ACM that provides for reasonable and necessary precautions to prevent asbestos contamination in the home.
    2. Addressing blower door testing where suspected friable ACM is present (as defined by EPA), including vermiculite.

Grantee ACM policy

Asbestos is assumed to be present in (white) duct sealing materials and slate siding products. Removal of siding is done to perform energy conservation measures. All precautions must be taken not to damage siding. Asbestos siding should never be cut or drilled. It is recommended, where possible, to insulate through the home interior. Abatement and replacement of asbestos containing building components is not allowed with any IHWAP funding.

Attic insulation that looks like vermiculite should not be removed or disturbed. If there is vermiculite in the attic and it is not possible to comply with ASHRAE ventilation requirements through supply ventilation, balanced ventilation, or exhaust ventilation that exits through the side wall, the home should be deferred. Removal of vermiculite attic insulation is not allowed with any IHWAP funding.

In rare cases when asbestos is encapsulating a heating system (usually a boiler), the existing heating system should not be disturbed. The Local Administrating Agency staff may issue a potential hazard and install a new heating system in an alternate location, leaving the old appliance in place. The gas lines should be disconnected leaving the existing encapsulated heating system out of service.

Grantee Blower Door Testing Policy When Suspected ACM Exists

When asbestos is found in the vermiculite, blower door testing is still permitted but should be done in pressurization mode. If other suspected friable asbestos containing materials (ex.: pipe insulation wrap hanging from a pipe) are discovered during the energy audit or final inspection, a blower door test shall be deferred.

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 ☑

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 ☑	

1. Visually inspect all surfaces (i.e., walls, floors, ceilings, roofs) for suspected ACM prior to drilling or cutting.
2. 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 ☑

If a local agency chooses to test for asbestos to determine whether insulation or air sealing can be conducted, or to test for asbestos in pipes or boilers, it must follow the Asbestos Hazard Emergency Response Act of 1986 sample collection method, and testing must be conducted by a certified tester. If test results are positive, air sealing, insulating, and any other measure that disturbs the ACM cannot be performed.

Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
1. Formally notify the occupant, and landlord if applicable, in writing: 1. of suspected ACMs that are present and what precautions will be taken to ensure the occupants' and workers' safety during weatherization; 2. of results if testing was performed; 3. not to disturb suspected ACM; 4. 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 ☐	
Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowed. Limited water damage repairs that can be addressed by weatherization workers and correction of moisture and mold creating conditions are allowed when necessary to weatherize the home and to ensure the long-term stability and durability of the measures. If removal of biological and unsanitary conditions exceeds the cost limits, the home will be deferred.		
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 ☑
If DOE WAP H&S Funds are used for any "allowable" actions, detail them here.	
Prohibited Actions	
Concur with DOE Guidance ☑	
Using DOE WAP H&S funds for ***major*** repairs as defined by Grantee's H&S Plan. Using DOE WAP H&S funds for building rehabilitation is prohibited	
Define "major" repairs	

Major repairs include structure and roofing repairs that are above the Health & Safety budget limit per housing unit. Repair costs that exceed the H&S budgets are beyond the scope of weatherization.

Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☐	Alternative Funds ☑	
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 ☑
If DOE WAP H&S Funds are used for any "allowable" actions, detail them here.	
Prohibited Actions	
Concur with DOE Guidance ☑	
1. 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. 2. 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 ☑	

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 ☑	Allowed with Alternative Funds ☑

Minor repairs, including upgrades of knob and tube wiring systems, are allowed where health and safety of occupants is at risk. Upgrades and repairs will also be allowed when necessary to perform specific weatherization measures. If inclusion of the cost of re-wiring will be in retrofit package instead of Health & Safety.

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 repairs include electrical repairs that are not within the Health & Safety budget limit per housing unit. Repair costs that exceed the H&S budgets are beyond the scope of weatherization.

Required Testing/Inspection

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

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

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 ☐

1. Provide occupant with written documentation of any electrical hazards identified that will not be addressed by weatherization
2. 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 ☑	

1. 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.
2. Fuel leaks that are the responsibility of the occupant (vs. the utility) must be repaired before installing weatherization measures in the home.

Allowable Actions

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

Replacement of flexible appliance gas connectors that are not compliant with current fuel gas codes.

Prohibited Actions

Concur with DOE Guidance ☑		
1. Using DOE WAP H&S funds to repair leaks that are the responsibility of the utility to correct is prohibited. 2. 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 ☑	
1. Test all exposed gas lines, fittings, valves, and connections for fuel leaks from utility connection to the appliance throughout the home. 2. Test all gas appliances for fuel leaks at all connections, valves, fittings, and burners. 3. 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 ☐	
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 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 ☑	
Contractors may perform maintenance on or repair gas ovens/stovetops/ranges.		
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 ☑	
1. Test gas ovens for CO. 2. Grantee H&S plan must define action levels and resulting actions. 3. Visually inspect cooking burners and ovens for operability and flame quality.		
Define action levels for oven CO testing and resulting actions		
Assessors will test gas ovens/ranges for CO. If CO exceeds 225 ppm as measured, contractors may perform maintenance or repair appliances. Replacement of gas ovens/stovetops/ranges is not allowed with DOE funds but may be purchased with other funding sources.		
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 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 ☑	

1. 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.
2. Subgrantees must document disposal requirements in contract language with the responsible party.
3. ***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.
4. If removal cannot be performed or is not allowed by the occupant, the unit must be deferred.

Define "limited" removal of pollutants

IHWAP policy requires the resident to remove pollutants.

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 ☑

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 ☐

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 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 ☐

1. Inform occupant in writing of hazards associated with hazardous waste materials being generated/handled in the home.
2. Inform occupant in writing of observed hazardous condition and associated risks.
3. 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 and installations (e.g., repairing stairs, handrails, etc.).

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

Major repairs include repairs that have costs above the Health & Safety budget limit per housing unit. Repair costs that exceed the H & S budgets are beyond the scope of weatherization.

Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐

DOE WAP H&S Funds ☑	Alternative Funds ☑

Visually inspect for dangers that would prevent weatherization.

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 ☐

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 ☑

1. 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:
    1. 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.
    2. Certification and training requirements of the RRP rule.
    3. Job site set up and cleaning verification by a Certified Renovator.
2. Only those costs directly associated with lead safe work practices for surfaces directly disturbed during weatherization activities are allowable WAP H&S expenses.

Allowable Actions

Allowed with DOE WAP H&S Funds ☐	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 ☑

3. Using DOE WAP H&S funds for lead abatement is prohibited.
4. 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 ☐

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

Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
Follow pre-renovation education requirements per EPA 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 to weatherize the home and to ensure the long-term stability and durability of the measures.		
Prohibited Actions		
Concur with DOE Guidance ☑		
1. Using DOE WAP H&S funds for mold cleanup is prohibited. 2. 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 ☐	
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 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 ☑	
1. 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. 2. Deferral, if occupant risk cannot be mitigated.		
Allowable Actions		
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☐	
Temporary relocation of at-risk occupants is allowed on a case-by-case basis. If cost of relocation is beyond the scope of the health and safety budget, no IHWAP funds may be used, and the home must be deferred.		
Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
1. Screen occupants for known or suspected health concerns either as part of initial application for weatherization, during the audit, or both. 2. 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 ☐
If DOE WAP H&S Funds are used for any "allowable" testing, detail them here.	
Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
1. Inform occupant in writing of any known risks and provide pre-weatherization screening form. 2. 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.		
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 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 ☑	
1. Cover exposed dirt floors within the pressure/thermal boundary with a sealed soil gas retarder 2. Cover sump well/pits with airtight covers 3. Implement ventilation as required by ASHRAE 62.2-2016		
Allowable Actions		
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑	
Sealing of below grade foundation cracks.		
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 ☐	
If DOE WAP H&S Funds are used for any "allowable" testing, detail them here.		
Required Occupant Education		
Concur with DOE Guidance ☑	Alternative Guidance ☐	
1. Provide all occupants EPA's A Citizen's Guide to Radon and inform them of radon related risks. 2. 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 ☑	

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

Allowable Actions

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

In all houses weatherized at least one operational smoke alarm is installed. Smoke alarms are installed when one is not present or operational. Batteries are installed to make existing smoke alarms operational when necessary. Smoke alarms are installed by the contractor and not left with the client.

One smoke alarm is installed on each level of the home. Additional smoke alarms are installed so that there is one smoke alarm located within 15 feet of every room used for sleeping. When applicable, one additional smoke alarm is installed at the base of the basement stairwell when applicable.

Fire extinguishers may only be provided where solid fuel (wood, coal, etc.) is being used in the home as either the primary or secondary heat source. Fire extinguishers should be labeled as a combination Class A-B-C extinguisher, and must be a minimum of 3 lbs.

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 ☐

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

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 ☐

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

Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐

DOE WAP H&S Funds ☐	Alternative Funds ☐
1. ASHRAE 62.2 evaluation to determine required post-weatherization ventilation. 2. 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 ☐
If DOE WAP H&S Funds are used for any "allowable" testing, detail them here.	
Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
1. Provide occupant with information on function, use, and maintenance (including location of service switch and cleaning instructions) of ventilation system and components. 2. Provide occupant with equipment manuals for installed equipment. 3. 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 ☑	
• Replace, repair, or install primary water heaters when existing primary water heater is unsafe, inoperable, or nonexistent. • The installation of temperature/pressure discharge pipes or temperature/pressure valves is an allowable health and safety expenditure ensuring client and worker health and safety. • Gas lines, sediment traps, flexible connectors, or gas shut off valves are not allowed to be replaced unless they are damaged or leaking. Replacement requires OCA written approval.		
Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
1. Visual inspection of all water heaters and related piping for safety and leaks 2. See Combustion Appliances section for related combustion safety testing requirements.		
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 ☐	
1. Appropriate use and maintenance of units. 2. Provide all paperwork and manuals for any installed equipment. 3. 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 ☑	
Minor repairs and installations (e.g., repairing stairs, handrails, etc.).		
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		
Major repairs include repairs that have costs above the Health & Safety budget limit per housing unit. Repair costs that exceed the H & S budgets are beyond the scope of weatherization.		
Allowable Testing		
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.		

6.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		

V.8.4 Training and Technical Assistance Attachment

TRAINING AND TECHNICAL ASSISTANCE (T&TA) PLAN TEMPLATE

1.0 – GENERAL INFORMATION

COMMENTS THAT DO NOT GENERALLY FIT INTO THE AVAILABLE TABLES BELOW

Local Administering Agency training and technical assistance (T&TA) needs are determined by training assessment surveys, analysis of findings identified during on-site monitoring by the Weatherization Technical Services Unit (trend tracking analysis of deficiencies), requests for T&TA made by the Local Administering Agencies, and by the changes in of the IHWAP program requiring additional training for weatherization staff. The Local Administering Agency T&TA budget is calculated based on the amount of training that will be provided by OCA during the program year and the costs associated with travel, lodging, etc.

Additionally, OCA staff will conduct an annual risk assessment of the Local Administering Agency's weatherization program. Based on the results of the assessment, OCA staff will work with the Agency to identify training needs and available resources. When the Local Administering Agency is required to develop and implement a Corrective Action Plan as a result of OCA monitoring, the plan may also identify training needs of the Local Administering Agency. OCA regularly solicits input from the Local Administering Agencies to assess training needs of the network.

The biggest current challenge for the IHWAP program is a lack of qualified contractors and field staff personnel. IHWAP plans to promote workforce development and attract new contractors statewide with the use of T&TA funding. The main avenue IHWAP is pursuing to expand contractor pool is allowing Local Administering Agencies to use T&TA funds to train IHWAP contractors who attend training at the request of the local agency or as required by IHWAP. Reasonable stipends to cover labor time and travel cost may be included as part of the training expense. Based on the Agencies response to a question on the use of stipends in our annual weatherization plan, only 2 agencies have offered stipends to contractors, 2 have offered partial stipends (cover travel cost), and 16 agencies have not provided stipends but will consider or plan to offer them in the future. OCA will continue to analyze the number of contractors receiving stipends and the adequacy of the stipend amounts.

Based on our analysis of labor cost for HVAC and insulation installers from U.S. Bureau of Labor Statistics (Illinois specific data) and IHWAP's wage data from crew-based agencies, these workers typically earn $50,000-$75,000 per year ($75,000 annual salary = $300 for an 8-hr workday). Consequently, the stipend will be limited to $300 per day for labor cost, in addition to the travel cost for the training.

IHWAP has created a retention agreement template that the local agency will use to specify what cost will be covered by the stipend and what the contractor agrees to in exchange for the training. The retention agreement requires contractors work in the program for a specific amount of time (the length of their agreement with the local agency which is typically 1 year, with 1 year extension), to be determined by the local agency, and must align with the cost of the T&TA provided.

IHWAP will review retention agreements and review stipends to ensure the labor cost and travel cost reimbursed are consistent with this policy during programmatic monitoring.

OCA is also planning to use T&TA funds to expand the weatherization workforce. IHWAP will use T&TA funds to support the development of an apprenticeship program. The apprenticeship program will provide individuals technical skills in the building science profession and will provide the opportunities to earn up to six BPI credentials related to home performance. We are exploring options for an apprenticeship program with all funding sources and our utility partners. At the end of the apprenticeship, it is our goal to place the interns at one of our local agencies, or with a contractor that works within the program. The apprenticeship program will grow interest in the building science industry and expand potential workforce options for the IHWAP network.

2.0 – Overall T&TA Plan

YOUR OVERALL T&TA PLAN MUST INCORPORATE SUGGESTIONS AND FEEDBACK THE FOLLOWING ELEMENTS.

Feedback from internal and external reviews, examples include:

- Feedback from Department of Energy (DOE) Project Officer (PO) monitoring visits
- Internal state audits
- Grantee monitoring of the Subgrantees
- Office of Inspector General (OIG) reports
- American Customer Satisfaction Index feedback, and
- Other. Examples include:
    - Training Feedback
    - Training Retention Activities

At this time, IHWAP is not including feedback from DOE Monitoring Visits, internal state audits, OIG reports, ACSI feedback. We have not received feedback in the last year from any of these sources. IHWAP is including suggestions from training assessment surveys, analysis of findings identified during on-site monitoring by the Weatherization Technical Services Unit (trend tracking analysis of deficiencies), local agency callback data, air sealing reports by agency, and requests for T&TA made by the Local Administering Agencies.

Existing or planned Accredited Training Center partnership or working relationship.

IHWAP partners with the University of Illinois, Indoor Climate Research & Training Center (ICRT) through an inter-governmental agreement. ICRT is an IREC-accredited training center. ICRT provides all technical training as well as training for weatherization coordinator, and administrative training for the IHWAP network.

Preparations for future/upcoming program requirements, examples include:

- **Updated Standard Work Specifications (SWS)**
- **Migration to online Weatherization Assistant**

- **INCLUSION OF SPECIFIC LANGUAGE FROM WEATHERIZATION PROGRAM NOTICES (WPN)**

IHWAP has updated the field standards to ensure alignment with the Standard Work Specifications. IHWAP is also going to include the QCI mentorship approach to reflect WPN 22-4. OCA will provide training on the mentorship approach at our Policy and Procedure workshop in June, 2022. Additionally, IHWAP will update its Operations Manual for the next program year.

WHAT PROTOCOLS ARE IN PLACE WHICH ENSURE UNTRAINED STAFF ARE NOT LEFT WITHOUT SUPERVISIONS DURING FIELD OPERATIONS?

Weatherization Coordinators, Assessors, and Final Inspectors must be TCP certified within one year of their employment unless written approval is granted by DCEO/OCA for an extension. This certification ensures that weatherization staff understand the policies and technical requirements necessary to complete the home weatherization process successfully. Staff that do not meet the requirements of certification do not have signature authority on assessments or final inspections.

Per our Operations Manual, all DOE final units must receive a final inspection by a BPI-certified Quality Control Inspector. Individuals that do not hold BPI-certified QCI are prohibited from conducting final inspections.

PARTNERSHIPS WITH THE STATEWIDE HOME PERFORMANCE INDUSTRY ON TRAINING ISSUES; IF APPLICABLE.

Not applicable.

HOW DOES ANALYSIS CONDUCTED, AS DETAILED IN SECTION V.6 OF THE ANNUAL APPLICATION, INFLUENCE THE DEVELOPMENT OF T&TA ACTIVITIES AND PRIORITIES?

IHWAP utilizes training assessment surveys, analysis of findings identified during on-site monitoring by the Weatherization Technical Services Unit (trend tracking analysis of deficiencies), local agency callback data, air sealing reports by agency, and requests for T&TA made by the Local Administering Agencies.

3.0 – WORKFORCE CREDENTIALS

DESCRIBE THE FOLLOWING ASPECTS OF YOUR T&TA PLAN RELATED TO WORKFORCE CREDENTIALS.

FEDERALLY REQUIRED CREDENTIALS. EXAMPLES INCLUDE:

- **ENVIRONMENTAL PROTECTION AGENCY LEAD RENOVATION, REPAIR, AND PAINTING PROGRAM**
- **HOME ENERGY PROFESSIONALS QUALITY CONTROL INSPECTOR CERTIFICATION**

IHWAP provides training to the network for all federally required credentials through the University of Illinois ICRT.

GRANTEE/STATE REQUIRED CREDENTIALS. EXAMPLES INCLUDE:

- **BUILDING PERFORMANCE INSTITUTE BUILDING ANALYST**
- **GRANTEE-DEVELOPED CERTIFICATIONS**

In addition to federally required credentials, IHWAP requires all field staff and agency coordinators to complete the 10-week Training and Certification Program (TCP). Before beginning TCP, all staff must first obtain the BPI Building Science Principles certification. Furthermore, crews and architectural/ mechanical contractors are required to obtain IHWAP certification.

SUBGRANTEE/LOCAL REQUIRED CREDENTIALS. EXAMPLES INCLUDE:

- **CONTRACTOR LICENSING**

Subgrantees are responsible for ensuring their contractors hold the necessary licensure to conduct business in local government regions.
INDUSTRY REQUIRED CREDENTIALS. EXAMPLES INCLUDE: • **EQUIPMENT/MATERIAL MANUFACTURE CERTIFICATION** • **VENDOR CERTIFICATION** **(E.G. EQUIPMENT/MATERIAL MANUFACTURE CERTIFICATION, VENDOR CERTIFICATION)**
Not applicable.
PROCESS FOR MAINTAINING WORKFORCE CREDENTIALS
Not applicable.
HOW CREDENTIALS ARE TRACKED
Not applicable.

4.0 – TRAINING

GRANTEES HAVE TWO OPTIONS TO DESCRIBE THEIR TRAINING.

A) USE THE EMBEDDED SPREADSHEET* TO IDENTIFY AND DESCRIBE THE TRAINING SCHEDULE FOR GRANTEE AND SUBGRANTEE STAFF. INCLUDE TECHNICAL AND NON-TECHNICAL TRAINING.
B) OR USE THE FIELDS BELOW TO IDENTIFY AND DESCRIBE THE TRAINING SCHEDULE FOR GRANTEE AND SUBGRANTEE STAFF. INCLUDE TECHNICAL AND NON-TECHNICAL TRAINING.

GRANTEE'S ARE TO INCLUDE THE FOLLOWING IN THEIR DESCRIPTIONS REGARDLESS OF WHAT OPTION IS BEING USED TO DESCRIBE THEIR TRAINING PLAN:

- SPECIFY WHETHER ATTENDANCE IS MANDATORY, AND THE RAMIFICATIONS FOR NON-COMPLIANCE.
- SPECIFY IF THE T&TA PLAN SPANS MULTIPLE PROGRAM YEARS (PY), INDICATE WHICH TRAININGS ARE INTENDED IN THE CURRENT PY AND WHICH ARE PLANNED FOR FUTURE PYS.

* THE EMBEDDED SPREADSHEET, IF COMPLETED AT THE END OF THE YEAR TO RECORD DELIVERED TRAINING, CAN BE USED AS DOCUMENTATION FOR THE REQUIRED ANNUAL T&TA REPORT. DOUBLE CLICK TO OPEN SPREADSHEET. ENTER INFORMATION AND CLOSE. IT WILL AUTOMATICALLY SAVE YOUR INFORMATION

Indoor Climate Research & Training, a unit of the Illinois Applied Research Institute, will provide the administration of the IHWAP Training and Certification program. This will include the provision of qualified trainers and facilities for each scheduled class. Classes planned for the 2022 program year include:

A. Classes for Certification Rounds

1. Weatherization Basics	4 classes
2. Heat Transfer	4 classes
3. Building Fundamentals	4 classes
4. Building Diagnostics	4 classes
5. Infrared Thermography	3 classes
6. Mid-Course Field Session	4 classes
7. Heating Systems Basics	5 classes
8. Heating Systems Advanced	5 classes

9. Air Conditioning/Heat Pumps	5 classes
10. Health and Safety	5 classes
11. Building Assessment	5 classes
12. Certification Exam	5 classes
13. Architectural Contractor Curriculum	4 classes
14. HVAC Contractor Curriculum	4 classes
15. BPI Quality Control Inspector	3 classes
16. Energy Auditor Training	6 classes
17. Healthy Home Evaluator	4 classes

B. <u>Other Classes Related to IHWAP</u>

1.	Air Sealing Workshops	6 classes
2.	Basic Electricity Workshop	3 classes
3.	ASHRAE 62.2 Workshop	2 classes
4.	Multifamily QCI Training	4 classes
5.	Confined Space Training	As needed
6.	In-field Training (DCEO and Local Administering Agencies' staff)	As needed
7.	Solar Photovoltaic Training	2 classes
8.	Weatherization Coordinator Training	2 classes
9.	Executive Director Training Workshop	4 classes

Illinois Weatherization Certification Workshops
Course Descriptions
July 1, 2022 to June 30, 2023

atherization Certification Course Descriptions

Note: Weatherization Coordinators, Assessors, and Final Inspectors must be TCP certified (completion of courses 1-12) within one year of their employment unless written approval is granted by DCEO/OCA for an extension. This certification ensures that weatherization staff understand the policies and technical requirements necessary to complete the home weatherization process successfully. Staff that do not meet the requirements of certification cannot sign-off on assessments or final inspections.

1. Weatherization Basics – 24 Hours (required training for IHWAP field staff and Coordinators)

This five-day course provides the basic overview of the Illinois Home Weatherization Assistance Program. The course covers the history of weatherization in Illinois, budgets and life cycles of the three major funding sources. It also covers what will be expected of the trainees throughout the 10-week training cycle. A special emphasis will be placed on rules and policies associated with the program.

2. Heat Transfer – 24 Hours (required training for IHWAP field staff and Coordinators)

This five-day course provides the basic principles and characteristics of energy and the way energy is used. The course focus is on the variety of ways heat transfers through the building envelope of a home. The course provides underlying principles used to determine how and where energy can be used more efficiently in buildings, and strategies to pinpoint energy conservation are outlined in this course. Additionally, this class outlines the basics of energy modeling and Manual J Furnace sizing.

3. **Building Fundamentals – 24 Hours (required training for IHWAP field staff and Coordinators)**

The Building Fundamentals course concentrates on fundamentals of building construction. Explanations of building components such as windows, doors, roof, walls, attic, floors and foundation systems are provided. Basic construction measuring and estimating methods are introduced and explained.

4. **Introduction to Building Diagnostics – 24 Hours (required training for IHWAP field staff and Coordinators)**

This five-day course explains the use of building diagnostic tools and test methods, including:

- blower door testing
- zone pressure diagnostic testing
- duct leakage testing
- combustion safety testing
- ventilation based on the ASHRAE 62.2 Ventilation Standard

The dynamics of how the building components interact such as the furnace and attic systems are defined. The information gained from the diagnostic tools is used to determine opportunities to save energy. Explanations of how to balance air sealing with ventilation and improve thermal performance of a home will be covered. This course includes visual and hands on training using various props including the house of pressure and the combustion safety testing home.

5. **Infrared Thermography – 12 Hours (required training for IHWAP field staff and Coordinators)**

This course covers the utilization of infrared thermography in the field of weatherization. Usage of infrared thermal imaging in tandem with diagnostic tools will be covered, demonstrating how best to determine temperature differences through infrared thermography and how to read those images accurately to assist in the determination of proper weatherization measures to be applied. All types of infrared thermography equipment will be discussed, and trainees are encouraged to bring equipment from their Local Administering Agency for discussion on the proper use of the equipment.

6. **Mid-Course Field Assessment – 24 Hours (required training for IHWAP field staff and Coordinators)**

The Mid-Course Field session was designed to allow trainees advanced hands on experience working through a mock architectural assessment utilizing those standard practices and principles learned through the previous Training & Certification Program (TCP) trainings. Each student is evaluated for their individual strengths and weaknesses and will gain training to improve the weaknesses observed. This class also advances the student knowledge on energy modeling.

7. **Introduction to Heating Systems – 24 Hours (required training for IHWAP field staff and Coordinators)**

The Introduction to Heating Systems course teaches the basic combustion principles for primary heating systems. Instructions on how to analyze the operation of each heating system are provided. Instruction on the proper installation of the gas supply system is provided. The course will include classroom learning and hands-on laboratory sessions dealing with different types of furnaces.

8. **Advanced Heating Systems – 24 Hours (required training for IHWAP field staff and Coordinators)**

The Advanced Heating Systems course builds upon the knowledge from students' field experience and the introduction to heating systems course. Participants will be taught how to determine the effectiveness of the distribution system. Understanding how the furnace controls affect the efficiency and comfort in the home will also be taught. Using the furnace audit tools to trouble shoot equipment problems is included in the course.

9. **Air Conditioning and Heat Pumps – 24 Hours, 12 Building Performance Institute Continuing Education Units (BPI CEUs) (required training for IHWAP field staff and Coordinators)**

This course will expand on the Advanced Heating Systems course. It will explore the differences between conventional heating systems versus heat pumps, all types of air conditioning systems and their components. It will explore energy savings and efficiencies as well as determining what type of systems each may encounter while in the field during the weatherization assessment process.

10. Health & Safety, Indoor Pollutants, Lead-safe Weatherization – 18 Hours (required training for IHWAP and Coordinators)

The Health and Safety of Indoor Pollutants is a basic introduction to common hazards in the home. The primary objective of this two-day course is to provide the participant with an understanding of these hazards and some simple strategies to mitigate pollutants. The course will cover the following topics: a) mold and biological contaminants, b) moisture assessment in housing, c) combustion safety, d) asbestos in housing, e) volatile organic compounds (VOC's) and other chemicals, f) pests and pesticides, g) review of ventilation, h) air exchange rates, and i) lead-safe weatherization practices.

11. Weatherization Building Assessment Follow-up – In Field – 12 Hours (required training for IHWAP field staff and Coordinators)

Weatherization Building Assessment Follow-Up is a class that is scheduled from two to eight weeks to two months after certification has been completed. This follow-up class is designed to provide feedback to the assessor/final inspector and weatherization coordinator, who have recently been certified. The class will provide an opportunity for the student to perform a building energy audit using the WeatherWorks system with the instructor, individually and as a class. The objective of the class is to share best practices and techniques/technologies among the students from individual agencies and encourage field efficiencies in the building assessment process and energy modeling process.

12. Proficiency Test – 6 Hours (required training for IHWAP field staff and Coordinators)

Once the nine core certification classes have been successfully completed, the students will be required to complete a proficiency test that covers elements from each class. The instructors provide an overview of the subjects, and then the students are given a comprehensive exam on the following courses: Weatherization Basics, Health & Safety, Indoor Pollutants and Lead-safe Weatherization, Building Fundamentals, Heat Transfer, Introduction to Heating Systems, Advanced Heating Systems, Air Conditioning and Heat Pumps, Introduction to Diagnostics and Infrared Thermography.

13. Quality Control Inspector ("QCI") Class – 24 Hours, 10 BPI CEUs (best practice for staff preparing to challenge the BPI QCI)

This five-day course is to teach the basic principles and techniques of proper weatherization quality control inspections. This course will cover the quality control inspection process as a checks and balance system in the areas of in-progress inspections, and final quality control inspections of weatherization work. This is a preparatory course for the IHWAP workforce who will be challenging the Department of Energy ("DOE") mandated QCI Certification Exam.

14. Energy Auditor Class – 32 Hours, 32 BPI CEUs (best practice for staff preparing to challenge the BPI EA)

This five-day course is to teach the basic principles and techniques of proper weatherization energy auditing. This course will cover the energy auditing process. This is a preparatory course for the IHWAP workforce who will be challenging the soon-to-be DOE mandated "EA Certification".

15. Architectural/Crew Leader Certification Training – 32 Hours, 16 BPI CEUs (required for all architectural firms completing homes in IHWAP)

This one-week class leads to crew leader certification for work in the IHWAP. Skills needed for effective crew leadership are presented. Fundamentals of heat transfer and material estimation are reviewed. IHWAP Field Standards are discussed. Dense-pack sidewall insulation, air sealing and diagnostics tests are reviewed with a focus on the crew leader becoming the instructor in the field. The crew leader, as the first person conducting quality assurance on a job, is emphasized.

16. HVAC Certification Training – 24 Hours (required for all HVAC firms completing homes in IHWAP)

This five-day course covers the following topics: weatherization program overview and process, residential energy use and energy measurements, basic heat loss and heat transfer, weatherization safety testing procedures and protocols, basic and advanced heating systems standards, optional heating and air conditioning systems, and venting standards.

17. Healthy Home Evaluator – 24 Hours (not currently mandatory)

In this one-week class, students learn how to conduct an in-depth home audit and environmental risk analysis. They will learn how to assess the risk of key home-based health hazards including asthma triggers from dust, moisture and mold, volatile organic compounds (VOCs), lead-based paint, asbestos, radon, carbon monoxide leaks, as well as potential fire hazards, trip and fall hazards, and pest management issues.

Other Courses Related to the Weatherization Program (the following courses are not required)

1. Housing Types and Air Sealing for Contractors and Assessors/Final Inspectors – 6 Hours

The audience for this course is assessors, final inspectors and contractors. This workshop will provide a hands-on approach to air sealing using weatherization diagnostics tools (blower door, manometer, and pressure pans). "Typical Energy Profiles" will be used to identify building faults in construction, e.g., the workshop will demonstrate a variety of methods and techniques for air sealing. Demonstrations on the appropriate air sealing materials to provide the most efficient installation for a variety of building sections will be provided.

2. Basic Introduction to Electricity for Weatherization – 6 Hours, 6 BPI CEUs

The audience for this course is assessors and final inspectors. This workshop will provide the basics for understanding electricity in residential housing and is an introductory class to electricity. The course will provide participants with fundamentals of electricity and an introduction in how to recognize questionable and dangerous systems or system elements in low-income housing stock. The course will describe the basics of how electricity works and the types of systems that are deployed, e.g., knob and tube wiring, etc.

3. American Society of Heating Refrigeration & Air Conditioning Engineers (ASHRAE) 62.2 Workshop – 6 Hours

This one-day course will provide participants with an understanding of the new policies mandated by IHWAP funding sources. This will include intent and overview of the policy, current versus new mandated guidelines as well as a question and answer period. Logical applications and associated hardware will be discussed.

4. Multi-Family Quality Control Inspector (QCI) – 24 Hours

This 5-day course is to teach the basic principles and techniques of proper weatherization quality control inspections for multi-family structures. This course will cover the quality control inspection process as a checks and balances system in the areas of in-progress inspections and final quality control inspections of weatherization work.

5. In-field Training

This one-day hands-on training is provided annually to IHWAP State Technicians. The morning will be spent in the HVAC lab and the afternoon will be spent in the field using diagnostic equipment. Local Administering Agencies' staff will also have hands-on training available that will occur in the field for any staff member that is found in need of technical assistance in such areas as the proper use of diagnostic equipment or interpretation of test results.

6. Confined Spaces Training

This one-day workshop will define the term confined spaces, determining whether they may pose a hazard, and how to work safely following OSHA guidelines in such spaces.

7. Introduction to Solar Energy and Solar Assessments

This two-day course will provide a basic understanding on how solar photovoltaics (PV) works, teach participants how to perform a solar site assessment, and identify how to inspect a solar PV system. The first day will use a combination of lecture and classroom activities to teach the fundamentals of solar electric systems including diagraming the four types of PV, describe and identify the various components of solar, understanding the best application and limitations of each system type, and defining the solar window and understanding the impacts of shading on solar energy output. The second day will cover site assessment tools, load analysis, array placement options, basic system sizing, evaluating the existing infrastructure on site, and the key criteria to consider when inspecting a solar PV system.

8. Weatherization Coordinator Training

This 4-day course will provide a basic understanding of IHWAP policy and procedure and provide an overview of the administrative requirements of the IHWAP Program. Students will learn about the accountability aspects of the program and leave the class with administrative best practices to help them better administer the IHWAP grants locally.

9. Executive Director Training

This 2-day course will provide a high-level overview of the IHWAP Program. Executive Directors will learn the technical nature of the IHWAP Program. Learn the importance of staffing the program properly and be provided with salary comparisons for fields comparable to weatherization. Students will also learn about the accountability and technical requirements that make the IHWAP Program unique as compared to other social service programs.

The class schedule is not yet finalized for IHWAP Program Year 2022.

PROGRAMMATIC/ADMINISTRATION TRAINING

- FINANCIAL (I.E. 2 CFR 200)
- MANAGEMENT (I.E. 10 CFR 440)

IHWAP provides programmatic and administrative training through Weatherization Coordinator training and Executive Director training courses. Fiscal training is provided to agency through the Office of Community Assistance fiscal office through the Grant Application Workshop, as well as on-site fiscal training. IHWAP also provides onsite consulting services for local agencies to assist weatherization coordinators and fiscal managers on programmatic, fiscal, and administrative tasks. IHWAP conducts a policy and procedures workshop before each program year to update the network on any policy changes incorporated into the program for the upcoming program year.

We are also adding soft skills training this year for all IHWAP field staff. This will include a poverty simulation, conflict resolution, mandated-reporter training, and simulated client interview.

COMPREHENSIVE TECHNICAL TRAINING ALIGNED TO THE JOB TASK ANALYSIS (IDENTIFY AT WHAT INTERVALS WORKERS WILL RECEIVE REGULAR, COMPREHENSIVE TRAINING AS REQUIRED BY WEATHERIZATION PROGRAM NOTICE (WPN) 15-4)

- QUALITY CONTROL INSPECTOR
- ENERGY AUDITOR
- CREW LEAD
- RETROFIT INSTALLER/TECHNICIAN

ICRT provides technical refresher course work annually to the IHWAP network. For example, this year ICRT plans to train the network on measuring external static pressure in duct systems, and how to correct improperly sized duct systems.

SPECIFIC TECHNICAL TRAINING

- TOPICS IDENTIFIED DURING MONITORING VISIT(S)
- ENERGY MODELING
- HEALTH & SAFETY. ALL H&S TOPICS IN WPN 17-7 REQUIRE SOME LEVEL OF TRAINING FOR ALL AFFECTED WORKERS, THE FREQUENCY OF THIS TRAINING IS A GRANTEE DECISION. EXAMPLES INCLUDE:
  - AIR CONDITIONING AND HEATING SYSTEMS
  - ASBESTOS
  - BIOLOGICALS AND UNSANITARY CONDITIONS
  - BUILDING STRUCTURE AND ROOFING
  - CODE COMPLIANCE
  - COMBUSTION GASES
  - ELECTRICAL
  - FORMALDEHYDE, VOLATILE ORGANIC COMPOUNDS (VOCS), FLAMMABLE LIQUIDS, AND OTHER AIR POLLUTANTS
  - FUEL LEAKS
  - GAS RANGE/OVENS
  - HAZARDOUS MATERIALS DISPOSAL
  - INJURY PREVENTION OF OCCUPANTS AND WEATHERIZATION WORKERS
  - LEAD BASED PAINT
  - EPA'S LEAD RENOVATION, REPAIR & PAINTING PROGRAM (RRP)MOLD/MOISTURE
  - PESTS
  - RADON
  - SAFETY DEVICES
  - VENTILATION AND INDOOR AIR QUALITY
    - AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR-CONDITIONING ENGINEERS (ASHRAE)
  - WINDOW REPAIR, DOOR REPAIR
  - WORKER SAFETY
    - OSHA
  - ADDITIONAL TOPICS AS DESCRIBED IN HEALTH & SAFETY PLAN
- CLIENT EDUCATION (TRAINING WORKERS TO CONDUCT CLIENT EDUCATION). EXAMPLES INCLUDE:
  - ENERGY SAVINGS STRATEGIES
  - PROGRAM-SPECIFIC INFORMATION. EXAMPLES INCLUDE:
    - WHAT TO EXPECT
    - ADDITIONAL RESOURCES
  - HEALTH & SAFETY ISSUES

IHWAP provides training on all these topics during the 10-week Training and Certification Program. Course descriptions are included in the response to Section 4.0 Training above.

CONFERENCES. EXAMPLES INCLUDE:

- **ENERGY OUTWEST**
- **BUILDING PERFORMANCE ASSOCIATION**
- **NATIONAL ASSOCIATION FOR STATE AND COMMUNITY SERVICE PROVIDERS**
- **COMMUNITY ACTION PARTNERSHIP**

IHWAP provides funding and encourages our subgrantees to attend technical and programmatic conferences either in person or virtual.

OTHER, PLEASE SPECIFY:

DESCRIBE OTHER TRAINING ACTIVITIES HERE

5.0 – TECHNICAL ASSISTANCE

DESCRIBE THE TECHNICAL ASSISTANCE ACTIVITIES INCLUDED IN THE T&TA BUDGET CATEGORY.

PROGRAMMATIC/ADMINISTRATION SUPPORT

IHWAP provides onsite consulting services for local agencies to assist weatherization coordinators and fiscal managers on programmatic, fiscal, and administrative tasks.

TECHNICAL SUPPORT

IHWAP provides a multitude of technical support services to our subgrantees. IHWAP has resources at the ICRT Training Center that provide in-field assessment/final inspection technical support and mentoring, contractor technical support. IHWAP also employs 8 weatherization specialists who provide training and technical assistance on all programmatic and technical aspects of the program.

HEALTH & SAFETY SUPPORT ACTIVITIES

THE IHWAP network is assisted on health and safety issues by the ICRT training staff and IHWAP weatherization specialists.

MONITORING

WHAT PERCENTAGE OF T&TA FUNDING IS ALLOCATED TO MONITORING? (IF DEFINED IN SECTION B OF THE BUDGET DETAILS WITHIN THE ANNUAL APPLICATION, INCLUDE THAT WITHIN YOUR DESCRIPTION BELOW.)

IHWAP does not use T&TA funds for monitoring.

OTHER, PLEASE SPECIFY

DESCRIBE OTHER TECHNICAL ASSISTANCE ACTIVITIES HERE

6.0 CLIENT EDUCATION

DESCRIBE WHAT CURRENT AND PLANNED CLIENT EDUCATION MATERIALS AND/OR ACTIVITIES ARE INCLUDED IN THE T&TA BUDGET CATEGORY. ONLY THOSE PAID FOR WITH T&TA FUNDS NEED TO BE MENTIONED.

NOTE: THIS DOES NOT INCLUDE TRAINING WORKERS TO DELIVER CLIENT EDUCATION. THIS SHOULD BE DESCRIBED IN THE TRAINING SECTION, ABOVE.

CLIENT EDUCATION ACTIVITIES PRIOR TO, DURING AND AFTER WEATHERIZATION WHICH ADDRESS THE WEATHERIZATION PROCESS AND ENERGY SAVINGS DETAILS

IHWAP PROVIDES CLIENT EDUCATION DURING THE ENERGY AUDIT. CONTRACTORS ARE ALSO REQUIRED TO EDUCATE CLIENTS ON THE EFFICIENCY MEASURES INSTALLED IN THE HOME. FINAL INSPECTORS ALSO CONDUCT CLIENT EDUCATION AS PART OF THEIR QCI AND FINAL INSPECTION. IHWAP DOES NOT PAY FOR ANY OF THESE ACTIVITIES WITH THE T&TA ALLOCATION.

CLIENT EDUCATION ACTIVITIES REGARDING H&S ISSUES AS INDICATED IN WPN 17-7

- AIR CONDITIONING AND HEATING SYSTEMS
- ASBESTOS
- BIOLOGICALS AND UNSANITARY CONDITIONS

- Building Structure and Roofing
- Code Compliance
- Combustion Gases
- Electrical
- Formaldehyde, Volatile Organic Compounds (VOCs), Flammable Liquids, and other Air Pollutants
- Fuel Leaks
- Gas Range/Ovens
- Hazardous Materials Disposal
- Injury Prevention of Occupants and Weatherization Workers
- Lead Based Paint
- EPA's Lead Renovation, Repair & Painting Program (RRP)Mold/Moisture
- Pests
- Radon
- Safety Devices
- Ventilation and Indoor Air Quality
  - American Society of Heating Refrigeration and Air-Conditioning Engineers (ASHRAE)
- Window Repair, Door Repair
- Worker Safety
  - OSHA
- Additional topics as described in Health & Safety Plan

Describe H&S Client Education Activities/Resources Here