V.7 Health and Safety Attachment

Weatherization Grantee Health and Safety Plan *Optional Template*

☑ POLICY SUBMITTED WITH PLAN

1.0 – GENERAL INFORMATION

Grantees are encouraged to enter additional information here 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 2021

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. This average was established in light of the ASHRAE 62.2 implementation. Health and Safety funds will be budgeted in a separate line item.

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 rain water 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.

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 Health & Safety (H&S) costs as a separate category and, thereby, exclude such costs from the average cost per unit cost (ACPU) limitation. This separate category also allows these costs to be isolated from energy efficiency costs in program evaluations. Grantees are reminded that, if H&S costs are budgeted and reported under the program operations category rather than the H&S category, the related H&S costs must be included in the calculation of the ACPU and cost-justified through the approved energy audit.

Select which option is used below.	
Separate Health and Safety Budget ☑	Contained in Program Operations ☐

3.0 – HEALTH AND SAFETY EXPENDITURE LIMITS

Pursuant to 10 CFR 440.16(h), Grantees must set H&S expenditure limits for their Program, providing justification by explaining the basis for setting these limits and providing related historical experience.

Low percentages should include a statement of what other funding is being used to support H&S costs, while larger percentages will require greater justification and relevant historical support. It is possible that these limits may vary depending upon conditions found in different geographical areas. These limits must be expressed as a percentage of the ACPU. For example, if the ACPU is $5,000, then an average expenditure of $750 per dwelling would equal 15 percent expenditures for H&S.

15 percent is not a limit on H&S expenditures but exceeding this amount will require ample justification. These funds are to be expended by the Program in direct weatherization activities. While required as a percentage of the ACPU, if budgeted separately, the H&S costs are not calculated into the per-house limitation. DOE strongly encourages using the table below in developing justification for the requested H&S budget amount. Each H&S measure the Grantee anticipates addressing with H&S funds should be listed along with an associated cost for each measure, and by using historical data the estimated frequency that each measure is installed over the total production for the year.

It is also recommend reviewing recent budget requests, versus expenditures to see if previous budget estimates have been accurate. The resulting "Total Average H&S Cost per Unit" multiplied by the Grantee's production estimate in the Annual File should correlate to the H&S budget amount listed in the Grantee's state plan.

Should a Grantee request to have more than 15 percent of Program Operations used for health and safety purposes, DOE will conduct a secondary level of review. DOE strongly encourages use of this H&S template and matrix to help expedite this process

H&S Measure Matrix - Optional			
Double Click To Open For Editing			
Cells this shade auto calculate			
Enter Measure ↓	**Enter** Cost ↓	**Enter** Frequency % ↓	Auto Calculates
Installation of Smoke Detectors and Carbon Monoxide detectors.	$150.00	76.0%	$114.00
Installation/Repair of exhaust fans in kitchens and bathrooms in accordance with ASHRAE 62.2 protocol.	$660.40	78.0%	$515.11
Correcting/Repairing leaking fuel supply lines.	$90.00	27.0%	$24.30
Correcting/Repairing improper or ineffective HVAC venting (such as installing a chimney liner).	$290.00	40.0%	$116.00
Repairing/Replacing Air Conditioning units in homes where at-risk, medically certified/necessitated occupants dwell.	$645.00	9.5%	$61.28
Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions.	$99.00	19.5%	$19.31
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.	$100.00	24.6%	$24.63
Electrical repairs/upgrades necessary for weatherization measures and where the health and safety of the occupant is at risk.	$290.00	25.5%	$73.95
Gutter or downspout work when necessary to keep rain water out of the dwelling to stop or prevent moisture/mold mildew conditions per DOE Standard Work Specifications.	$60.00	23.5%	$14.10
Combustion zone (depressurization) measures: transfer grilles, return actuators, fresh air intakes, jumper ducts, and door modifications.	$95.00	27.3%	$25.94
Ground Cover Installation at Crawlspac	$460.00	47.5%	$218.50

4.0 – Incidental Repair Measures

If Grantees choose to identify any H&S measures as incidental repair measures (IRMs), they must be implemented as such under the Grantee's weatherization program in all cases – meaning, they can never be applied to the H&S budget category. In order to be considered IRMs, the measure must fit the following definition and be cost justified along with the associated efficiency measure;

Incidental Repairs means those repairs necessary for the effective performance or preservation of weatherization materials. Such repairs include, but are not limited to, framing or repairing windows and doors which could not otherwise be caulked or weather-stripped and providing protective materials, such as paint, used to seal materials installed under this program. (10 CFR 440 "Definitions")

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 – Deferral/Referral Policy

Deferral of services may be necessary if H&S issues cannot be adequately addressed according to WPN 17-07 guidance. The decision to defer work in a dwelling is difficult but necessary in some cases. This does not mean that assistance will never be available, but that work must be postponed until the problems can be resolved and/or alternative sources of help are found. If, in the judgment of the auditor, any conditions exist which may endanger the health and/or safety of the workers or occupants, the unit should be deferred until the conditions are corrected. Deferral may also be necessary where occupants are uncooperative, abusive, or threatening. Grantees must be specific in their approach and provide the process for clients to be notified in writing of the deferral and what conditions must be met for weatherization to continue. Grantees must also provide a process for the client to appeal the deferral decision to a higher level in the organization.

Grantee has developed a comprehensive written deferral/referral policy that covers both H&S, and other deferral reasons?

Yes ☑ No ☐

Where can this deferral/referral policy be accessed?

The Illinois Home Weatherization Assistance Program deferral policy can be found in the Program Operations Manual.

6.0 – Hazard Identification and Notification Form(s)

Documentation forms must be developed that include at a minimum: the client's name and address, dates of the audit/assessment and when the client was informed of a potential H&S issue, a clear description of the problem, a statement indicating if, or when weatherization could continue, and the client(s) signature(s) indicating that they understand and have been informed of their rights and options.

Documentation Form(s) have been developed and comply with guidance?
Yes ☑ No ☐

7.0 – HEALTH AND SAFETY CATEGORIES

For each of the following H&S categories identified by DOE:

- *Explain whether you concur with existing guidance from WPN 17-07 and how that guidance will be implemented in your Program, if you are proposing an alternative action/allowability, or if the identified category will not be addressed and will always result in deferral. Alternatives must be comprehensively explained and meet the intent of DOE guidance.*
- *Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 17-07, Grantees must concur, or choose to defer all units where the specific category is encountered.*
- *"Allowable" items under WPN 17-07 leave room for Grantees to determine if the category, or testing, will be addressed and in what circumstances.*
- *Declare whether DOE funds or alternate funding source(s) will be used to address the particular category.*
- *Describe the explicit methods to remedy the specific category.*
- *Describe what testing protocols (if any) will be used.*
- *Define minimum thresholds that determine minor and major repairs*
- *Identify minimum documentation requirements for at-risk occupants*
- *Discuss what explicit steps will be taken to educate the client, if any, on the specific category if this is not explained elsewhere in the Plan. Some categories, like mold and moisture, require client education.*
- *Discuss how training and certification requirements will be provided for the specific category. Some categories, like Lead Based Paint, require training.*
- *Describe how occupant health and safety concerns and conditions will be solicited and documented*

Grantees may include additional H&S categories for their particular Programs. Additional categories must include, at a minimum, all of the same data fields as the DOE-provided categories. Two additional tables have been created to utilize.

7.1 – Air Conditioning and Heating Systems

Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐		
Air Conditioning Unallowable Measure ☐ Heating Unallowable Measure ☐				
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
How do you address unsafe or non-functioning primary heating/cooling systems?				

General repair and replacement of heating equipment will not be conducted with Health and Safety funding. Repair and replacement of heating systems will only be conducted if there is risk to occupant health and safety. Air conditioning repair or replacement/installation shall be allowed if medically necessitated.

Replacement of nonexistent heating systems is beyond the scope of DOE WAP. Gas lines, sediment traps, flexible connectors, temperature/pressure discharge pipes, temperature/pressure valves, or gas shut off valves are not allowed to be replaced unless they are damaged or leaking. Replacement or installation of secondary units is not allowed.

Air Conditioning Installation

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. 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.

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

Replacement or installation of secondary units is not allowed. Weatherization work cannot be done unless all unvented space heaters are removed from the site by the contractor.

Indicate Documentation Required for At-Risk Occupants

An at-risk client must have a medical professional complete and sign the Medical Condition Verification Form. This form is found in the Intake Attachments of the IHWAP Operations Manual.

Testing Protocols

See testing referenced in Combustion Gases section (7.8).

Client Education

Where new units are installed the final inspector will ensure that the occupants have copies of appliance manuals. Where appropriate the Local Administering Agency staff will discuss and provide information on appropriate use, maintenance, and disposal of appliances/water heaters. If bulk fuel tanks are not removed, Local Administering Agency staff will discuss their proper disposal with occupants.

Training

Local Administering Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program (TCP). TCP curriculum includes awareness of IHWAP policies and procedures for air conditioning and heating system repair or replacement. The TCP curriculum includes the protocols and procedures for gas leak and combustion testing.

IHWAP's five-day certification for HVAC contractors and Mobile Furnace lab training also includes combustion safety training and awareness of relevant guidance.

7.2 - Asbestos - All

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

When asbestos is found in the vermiculite, blower door testing is still permitted but should be done in pressurization mode.

7.2a – Asbestos - in siding, walls, ceilings, etc.

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☐ Results in Deferral ☐

Funding

DOE ☑ LIHEAP ☑ State ☑ Utility ☐ Other ☐

Removal of siding can perform energy conservation measures. Duct or venting containing asbestos should not be disturbed.

How do you address suspected ACM's in siding, walls, or ceilings that will be disturbed through the course of weatherization work?

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.

Testing Protocols

If a local agency chooses to test for asbestos to determine whether insulation or air sealing can be conducted, it must follow the Asbestos Hazard Emergency Response Act of 1986 sample collection method, and testing must be conducted by a certified tester.

Client Education

When suspected asbestos siding is present, the client/owner is informed on how to take precautions. If any testing is done, the Agency will notify the client of the results.

Training and Certification Requirements

Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes asbestos identification and management.

IHWAP's five-day contractor certification curriculum includes asbestos hazard training.

7.2b – Asbestos - in vermiculite

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☐ Results in Deferral ☐

Funding

DOE ☑ LIHEAP ☑ State ☑ Utility ☐ Other ☐

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

Attic Insulation that looks like vermiculite should not be removed or disturbed.

Blower door testing is still permitted and should be done in pressurization mode. Since vermiculite cannot be disturbed, air-sealing cannot be performed in an attic with vermiculite and ventilation may not be installed through an attic.

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 goes through the side wall, the home should be deferred.

Removal of vermiculite attic insulation is not allowed with any IHWAP funding.

Testing Protocols

If a local agency chooses to test for asbestos to determine whether insulation or air sealing can be conducted, it must follow the by Asbestos Hazard Emergency Response Act of 1986 sample collection method, and testing must be conducted by a certified tester.

Client Education

When suspected vermiculite is present in the attic, the client/owner is informed on how to take precautions.

Training and Certification Requirements

Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes asbestos identification and management.

IHWAP's five-day contractor certification curriculum includes asbestos hazard training.

7.2c – Asbestos - on pipes, furnaces, other small covered surfaces

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☐ Results in Deferral ☐

Funding

DOE ☑ LIHEAP ☑ State ☑ Utility ☐ Other ☐

How do you address suspected ACM's (e.g., pipes, furnaces, other small surfaces) that will be disturbed through the course of weatherization work?

In rare cases when asbestos is encapsulating a heating system (usually a boiler), the existing heating system should not be disturbed. The Local Administering 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.

Abatement and replacement of asbestos containing building components is not allowed with any IHWAP funding.

Testing Protocols

If a local agency chooses 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.

Client Education

When suspected asbestos siding is present, the client/owner is informed on how to take precautions.

Training and Certification Requirements

Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes asbestos identification and management.

IHWAP's five-day contractor certification curriculum includes asbestos hazard training.

7.5 – Biologicals and Unsanitary Conditions
(odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.)

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☐ Results in Deferral ☐

Unallowable Measure ☐

Funding

DOE ☑ LIHEAP ☑ State ☑ Utility ☐ Other ☐

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.

Addressing bacteria and viruses is not an allowable cost. Where severe mold and moisture problems are so severe they cannot be resolved under existing health and safety measures and with minor repairs the building is deferred.

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

Sensory and visual inspection for these health and safety issues is part of the assessment protocol.

Deferral may be necessary in cases where a known agent is present in the home that may create a serious risk to occupants or weatherization workers.

Testing Protocols

Mold testing is not an IHWAP allowable cost.

Client Education

Where these problems are identified, clients receive information on the issues and where appropriate information on how to maintain a sanitary home or moisture awareness information. Where a home is deferred for these issues, the Local Administering Agency will inform the client of what steps to take to correct the deferral conditions.

All clients will receive the EPA Lead Booklet (Renovate Right) and the Moisture/Mold Booklet at the time of the assessment/energy audit. The Client must sign a form stating they have received the booklets at the time of assessment. If Local Administering Agencies do not have sufficient copies on hand, they will copy the camera-ready copies of these booklets from the EPA's internet site and print them locally.

All conditions an energy auditor/assessor believes constitute an immediate or potential risk, to an individual or property shall be listed on OCA's Hazardous Condition Form and a copy is given to the client and/or landlord.

Training

Local Administering Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes how to recognize these conditions and when to defer, as well as worker safety when encountering these conditions. The IHWAP's Health and Safety course on Indoor Pollutants will include introduction to mold, moisture and biological hazards as well as basic mitigation strategies.

7.6 – Building Structure and Roofing

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☐ Results in Deferral ☐

Funding

DOE ☐ LIHEAP ☑ State ☑ Utility ☐ Other ☐

Building rehabilitation is beyond the Scope of IHWAP. Homes with conditions that require more than incidental repair should be deferred or addressed with non-DOE funds.

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

Visual inspection for roofing and structural issues is part of the assessment protocol. Evaluation of roofing and overall structure includes ensuring that access necessary for weatherization work is safe for entry and performance of assessment, work and inspection. Limited structural and roof repair to ensure long-term stability and durability of weatherization measures are allowable.

Where the house has been condemned or electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities, the home is deferred.

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

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

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

IHWAP does not use a priority list.

Client Education

Clients are notified of structurally compromised areas and, where the building is deferred for roofing or structural issues, of the necessary steps to correct.

All conditions an energy auditor/assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Training

Local Administering Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes how to identify structural and roofing issues.

Training on how to identify structural issues is included in the Weatherization Training and Certification Program training, incorporated in IHWAP Field Standards and Operations Manual, and reinforced at the time of OCA field contact with Local Administering Agency personnel.

7.7 – Code Compliance

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☐ Results in Deferral ☐

Funding

DOE ☑ LIHEAP ☑ State ☑ Utility ☐ Other ☐

Correction of preexisting code compliance issues is allowable only where weatherization measures are being conducted.

What guidance do you provide Subgrantees for dealing with code compliance issues in homes receiving weatherization measures?

Weatherization work will comply with applicable codes in the jurisdiction where the work is being done. Visual inspection at assessment and local code enforcement inspections are used to establish code compliance issues. When correction of preexisting code compliance issues is paid for with WAP funds, Agency must cite specific code requirements with reference to the weatherization measure(s) that triggered the code compliance issue in the client file.

Correction of preexisting code compliance issues is not allowable except where weatherization measures are being conducted.

Condemned properties and those with "red tagged" health and safety conditions are deferred.

What specific situations commonly trigger code compliance work requirements for your network? How are they addressed?

Since WPN 11-6 did not allow for H & S funds to be used for code compliance, IHWAP has not done any work with H & S funds related to code compliance and we will handle code compliance on a case-by-case basis moving forward.

Client Education

Clients are informed of code compliance issues where they are identified in the assessment, and when deferral is necessary, provide information in writing describing the conditions that must be met for weatherization to commence.

All conditions an energy auditor/assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Training

Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP Curriculum includes relevant code compliance policy and how to determine what code compliance may be required.

IHWAP's five-day contractor certification curriculum includes overview of code compliance policy.

7.8 – Combustion Gases

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☐ Results in Deferral ☐

Funding

DOE ☑ LIHEAP ☑ State ☑ Utility ☐ Other ☐

Proper venting of combustion appliances is an IHWAP requirement. Correction of venting is allowed when visual inspection or testing indicates a problem.

Replacement, repair or modification of combustion venting that is not related to solving health and safety problems indicated by visual inspection or testing is beyond the scope of IHWAP weatherization funding.

Testing Protocols

Combustion safety testing will occur wherever combustion appliances are present. The assessor shall inspect venting of combustion appliances and confirm adequate clearances. Naturally drafting appliances are tested for spillage under worst case conditions before and after air sealing. Ovens may be tested for CO; cook stove burners may be inspected for operability and flame quality.
How are crews instructed to handle problems discovered during testing, and what are the specific protocols for addressing hazards that require an immediate response?
If there is replacement of a combustion appliance due to health and safety problems, the Agency must maintain documentation justifying the replacement of combustion appliance with a cost comparison between replacement and repair in the client file.
Client Education
All conditions an energy auditor/assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.
Training

How to perform appropriate testing, determine when a building is excessively depressurized, and the difference between air free and as-measured is part of the IHWAP TCP curriculum. In addition, combustion safety field training is offered or required whenever monitoring indicates that it is not being done correctly.

IHWAP's five-day contractor certification curriculum includes awareness of combustion safety issues and how to perform combustion safety testing.

IHWAP monitoring of assessor skills will focus on combustion safety testing and where inadequate skills are noted.

All conditions an energy auditor/assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Combustion Gas Problem Discovery on all Natural Draft & Power Vented Appliances the following procedures are followed:

The following inspection procedures and maintenance practices are performed on all gas-fired furnaces, boilers, water heaters and space heaters. The IHWAP Weatherization Field Standards Manual provides the acceptable combustion test analysis values.

1. Inspect the burners for dust, debris, misalignment and other flame-interference problems. Look for soot, burned wires, and other evidence of flame roll-out. Clean, vacuum and adjust burners.
2. Clean and adjust thermostat and check anticipator setting.
3. Determine that pilot is burning (if equipped) and that main burner ignition is satisfactory.
4. Test pilot-safety control for complete gas valve shutoff when pilot is extinguished.
5. Install new thermocouple (if an intermittent ignition device, or lID, is being installed).
6. Adjust pilot flame so that the hot tip of the thermocouple is enveloped by the flame.
7. Test for CO with flue gas analyzer. (See SWS for appliance CO Levels)
8. Observe flame characteristics if soot, CO, or other combustion problems are evident.
9. Remove causes of CO and soot, such as closed or blocked primary air intake, over- firing and flame impingement.
10. Check venting system for proper size and pitch.
11. Check venting system for obstructions, blockages or condensation.
12. Set up and operate house under worst-case depressurization when applicable.
13. Act to improve draft, if inadequate because of improper venting, leaky venting, obstructed chimney or lack of combustion/dilution air.
14. Seal leaks in vent connectors and chimneys with high temperature sealant.
15. Determine steady-state efficiency (SSE) using flue gas analyzer.
16. Check high limit control for proper operation
17. Measure O2 level and stack temperature.

18. Measure gas input. (Heating System)
19. Adjust gas input if burners are over-fired or under-fired.
20. Testing of naturally drafting appliances for and spillage under worst case depressurization.

The following inspection procedures and maintenance practices are required for all direct vent sealed combustion furnaces.

1. Inspect the burners for dust, debris, misalignment and other flame-interference problems. Look for soot, burned wires, and other evidence of flame roll-out.
2. Clean, vacuum and adjust when needed.
3. Inspect the secondary heat exchanger and clean as needed. Inspect and clean combustion blower wheel and motor as needed. Clean and adjust thermostat and check anticipator setting.
4. Test for CO with flue gas analyzer. (See SWS for appliance CO Levels)
5. Observe flame characteristics if soot, CO, or other combustion problems are evident.
6. Remove causes of CO and soot, such as closed primary air intake, over-firing, and flame impingement. Check venting system for proper size and pitch.
7. Determine steady-state efficiency (SSE) using flue gas analyzer.
8. Check high limit control for proper operation.
9. Measure O2 level and stack temperature.
10. Measure gas input.
11. Adjust gas input if burners are over-fired or under-fired.

7.9 – Electrical

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐

Funding

DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐

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 as part of an insulation retrofit can still provide an SIR > 1, then the cost of re-wiring will be in retrofit package instead of Health & Safety.

What guidance do you provide Subgrantees for dealing with electrical hazards, including knob & tube wiring, in homes slated for weatherization?

The Assessor will inspect for electrical safety issues at assessment. Evaluate and if necessary provide sufficient over-current protection and damming (if required) prior to insulating building components containing know and tube wiring, as required by the AHJ.

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

Minor includes electrical repairs that are within the Health & Safety budget limit per housing unit. Repair costs that exceed the H & S budgets are beyond the scope of weatherization.

If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?
Client Education
All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.
Training
Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program on how to identify electrical hazards. IHWAP's training curriculum will offer a continuing education class in basic electricity and electrical issues.

7.10 – Formaldehyde, Volatile Organic Compounds (VOCs), Flammable Liquids, and other Air Pollutants

Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑		Alternative Guidance ☐		Results in Deferral ☐
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
Removal of pollutants is allowed and is required if they pose a risk to workers.				
What guidance do you provide Subgrantees for dealing with formaldehyde, VOCs, flammable liquids, and other air pollutants identified in homes slated for weatherization?				
Sensory inspection is part of the inspection process. Removal of pollutants is allowed and is required if they pose a risk to workers.				
Testing Protocols				
If pollutants pose such a risk and they cannot be removed or the client will not allow removal, the property is deferred. When deferral is necessary, provide information in writing describing conditions that must be met for weatherization to commence.				
Client Education				
Clients are advised where there is an observed risk. All conditions an energy auditor/assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.				
Training				
Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes how to recognize potential hazardous and when removal is necessary.				

7.11 – Fuel Leaks

(please indicate specific fuel type if policy differs by type)

Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑		Alternative Guidance ☐		Results in Deferral ☐
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐

Assessors, contractors, and inspectors must test appliances and accessible gas lines in the home for gas leaks. All gas leaks and damaged gas lines must be repaired.
Remediation Protocols
When a minor gas leak is found on the utility side of service, the utility must be contacted before work may proceed. Fuel leaks that are the responsibility of the client must be repaired before weatherizing the unit. Health & Safety funds may be used to remedy gas leaks.
How do you define allowable fuel leak repairs, and at what point are repairs considered beyond the scope of weatherization?
Assessors use a gas leak detection solution to determine if there are gas leaks in need of repair; if the application of the solution creates bubbles, then there is a gas leak. Repair costs that exceed the H & S budgets are beyond the scope of weatherization.
Client Education
Clients are informed in writing of any gas leaks detected.
Training
Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes how to test for gas leaks.

7.12 – Gas Ovens / Stovetops / Ranges				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐		
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
Contractors may perform maintenance on or repair gas ovens/stovetops/ranges.				
What guidance do you provide Subgrantees for addressing unsafe gas ovens/stoves/ranges in homes slated for weatherization?				
Assessors will test has ovens/stovetops/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.				
Testing Protocols				
Conduct combustion analyzer test on ovens in alignment with SWS for carbon monoxide.				
Client Education				
If CO exceed 225 ppm as measured, a Potential Hazardous Condition form shall be completed and given to the client.				
Training				
Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes how to test natural gas appliances for carbon monoxide.				

7.13 – Hazardous Materials Disposal [Lead, Refrigerant, Asbestos, Mercury (including CFLs/fluorescents), etc.] *(please indicate material where policy differs by material)*				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐		
Funding				

DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
All refrigerators, freezers, and air conditioning units that are replaced must be removed from clients' homes upon delivery of the replacement units and properly disposed of in accordance with The Clean Air Act, USC Title 42, Section 7671g. Refrigerant is reclaimed per the Clean Air Act 1990, section 608, as amended by 40 CFR82, 5/14/93. Any item replaced that contain mercury must be disposed in accordance with Environmental Protection Agency guidance				
Client Education				
Clients are advised to not disturb refrigerants.				
Training				
Workers handling refrigerants are required to have EPA approved section 608 type I or universal certification. Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes information on the requirements for disposal of appliances with refrigerants and disposal of items with mercury.				
Disposal Procedures and Documentation Requirements				
Refrigeration appliances that are replaced are disposed of according to the environmental standards in the Clean Air Act (1990), Section 608, as amended by the Final Rule, 40 CFR 82, May 14, 1993. The party recovering the refrigerant must possess an EPA-approved Section 608 Type II license or an approved universal certification. All refrigerators, freezers, and window air conditioning units being replace must be taken to a recycling facility. Contractors must obtain a certificate or receipt indicating the appliance has been accepted by the recycling facility and provided to the local agency to include in the client file.				

7.14 – Injury Prevention of Occupants and Weatherization Workers
(Measures such as repairing stairs and replacing handrails)

Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑		Alternative Guidance ☐		Results in Deferral ☐
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
Minor repairs and installation is allowed only when necessary to effectively weatherize a home.				
What guidance do you provide Subgrantees regarding allowable injury-related repairs (e.g., stairs, handrails, porch deck board)?				
Assessor observation at assessment is the primary means of identification of injury risks to workers such as repairing stairs or replacing handrails. All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord. Repairs for injury prevention, other than when necessary to effectively weatherize a home, are not allowed to be funded with IHWAP funds from any source.				

How do you define "minor" or allowable injury prevention measures, and at what point are repairs considered beyond the scope of weatherization? Quantify "minor" or allowable injury prevention measures.
Minor includes repairs that are within the Health & Safety budget limit per housing unit. Repair costs that exceed the H & S budgets are beyond the scope of weatherization.
Training
Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes injury prevention identification and management. IHWAP's five-day contractor certification curriculum includes injury prevention awareness.

7.15 – Lead Based Paint

Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐		
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
Where lead safe work practices are required, their costs may be funded as a health and safety measure.				
Safe Work Protocols				
Testing for lead based paint hazards is allowed. All homes built prior to 1978 are treated as if they have lead-based paint and all work follows the requirements of the United States Environmental Protection Agency's "Renovation, Repair, and Painting" (RRP) program employing lead-safe methods while working on painted surfaces that are being repaired or retrofitted for energy efficiency. Inspectors will also conduct in-progress monitoring at some job sites to verify that lead safe work practices are being conducted by contractors. An RRP Certified Renovator performs job site set up and cleaning verification. Deferral is required when the extent and condition of lead-based paint in the house would potentially create further H&S hazards. Lead based paint hazard abatement is not allowed with IHWAP Weatherization funding.				
Testing Protocols				
Testing protocols are in alignment with RRP standards, using one of three methods: EPA recognized test kit, XRF instruments, or paint chip sampling.				
Client Education				
All conditions an energy auditor/assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy of the Renovate Right (EPA pamphlet) is given to the client and/or landlord.				
Training and Certification Requirements				

All contractor weatherization crews have at least one supervisory worker who has been trained and certified in lead-safe renovation practices under the United States Environmental Protection Agency's "Renovation, Repair, and Painting" (RRP) program.

All weatherization workers and Local Administering Agency coordinators, assessors and final inspectors have EPA Lead Safe Renovator training.

All Local Administering Agencies and building shell contractors are required to have the EPA Certified Lead Renovator training. The Local Administering Agencies and building shell contractors will obtain this training on their own. DCEO will monitor for Local Administering Agency and building shell contractor firm and individual RRP certification as part of our Programmatic Monitoring process. Documentation of Lead Safe Work Practices is required in all applicable Client Files. DCEO monitors 10% of Local Administering Agency client files for compliance with LSW and RRP compliance.

Documentation Requirements

7.16 – Mold and Moisture

(Including but not limited to: drainage, gutters, down spouts, extensions, flashing, sump pumps, dehumidifiers, landscape, vapor retarders, moisture barriers, etc.)

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☑ Results in Deferral ☑

Funding

DOE ☑ LIHEAP ☑ State ☑ Utility ☐ Other ☐

Limited water damage repairs that can be addressed by weatherization workers and correction of moisture and mold creating conditions are all allowed when necessary to weatherize the home and to ensure the long-term stability and durability of the measures. Gutter or downspout work when necessary to promote proper site drainage or prevent moisture/mold mildew conditions; Sump Pump repair, replacement, installation or covers necessary to keep seepage water out of the dwelling to stop or prevent moisture/mold mildew conditions in accordance with the DOE Standard Work Specifications.

What guidance do you provide Subgrantees for dealing with moisture related issues (e.g., drainage, gutters, down spouts, moisture barriers, dehumidifiers, vapor barrier on bare earth floors) in homes slated for weatherization?

The sub grantee's assessor shall visually inspect at the time of the audit to determine potential drainage or mold issues. IHWAP funding cannot be used to address severe mold and moisture issues nor can it be used for mold testing. Where there is evidence of severe mold and moisture (area of mold greater than 10 ft^2), deferral is required until the condition is corrected. Addressing major drainage issues is beyond the scope of IHWAP weatherization. Homes with drainage problems that may create a serious health concern are deferred.

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

Minor includes work that is within the Health & Safety budget limit per housing unit. Costs that exceed the H & S budgets are beyond the scope of weatherization.

Client Education

Where assessment detects evidence of this health and safety hazard, Local Administering Agencies, at assessment or at final inspection, will counsel the client. All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

The EPA publication "A Brief Guide to Mold, Moisture, and Your Home" is distributed to all WAP clients.

Training

Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program (TCP). The TCP curriculum includes awareness and identification of drainage issues and inspection procedures for them.

IHWAP's five-day architectural contractor certification curriculum includes awareness of drainage issues. Awareness of moisture and mold hazards for the weatherization program is detailed in the IHWAP Field Standards Manual.

7.17 – Pests

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☐ Results in Deferral ☐

Funding

DOE ☑ LIHEAP ☑ State ☑ Utility ☐ Other ☐

Pest removal is allowed only where infestation would prevent weatherization.

What guidance do you provide Subgrantees for dealing with pests and pest intrusion prevention in homes slated for weatherization?

At assessment, the assessor will determine the presence and degree of infestation and risk to workers. Infestation of pests may be cause for deferral where the infestation cannot be reasonably removed or poses health and safety concern for workers.

Define Pest Infestation Thresholds, Beyond Which Weatherization Is Deferred

Testing Protocols

N/A

Client Education

Clients are informed of observed conditions constituting pest related health risks. When deferral is necessary, the assessor will provide information in writing describing conditions that must be met for weatherization to commence.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Training

Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes how to assess the presence and degree of infestation associated risk and need for deferral.

7.18 – Radon

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☐ Results in Deferral ☐

Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
Funding to minimize radon through measures such as vapor barrier to cover exposed dirt, sump pit covers, and sealing below grade foundation cracks.				
What guidance do you provide Subgrantees around radon?				
Whenever site conditions permit, exposed dirt must be covered with a vapor barrier (6 mil polyethylene sheeting) except for mobile homes, covers installed on open sump pits, and sealing of below grade foundations cracks. In homes where radon may be present, precautions should be taken to reduce the likeliness of making radon issues worse. Other than covering exposed dirt with vapor barriers, the costs of radon mitigation cannot be funded with DOE WAP funds.				
Testing Protocols				
N/A				
Client Education				
All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord. Will provide all client's EPA's *A Citizen's Guide to Radon* and inform them of radon related risks and must have clients sign an informed consent form. The form must include information on the small risk of increasing radon levels when building tightness is improved, a list of precautionary measures WAP will install based on EPA Healthy Indoor Environment protocols, list some of the benefits of weatherization, and confirm receipt of EPA's *A Citizen's Guide to Radon*.				
Training and Certification Requirements				
Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes radon awareness: what it is, how it occurs, what factors may make it worse and what weatherization measures may be helpful.				
Documentation Requirements				
Clients must sign an informed consent form.				

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

Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐		
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
Installation of smoke/CO alarm is allowed where alarms are not present or are inoperable.				
What is your policy for installation or replacement of the following:				

Smoke Alarms: 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.

Smoke alarms will not be installed near kitchen stoves or bathroom showers, within 12 inches of exterior windows and door, in front of supply air registers or in unoccupied attics.

Existing smoke alarms are relocated as necessary.

When smoke alarms/CO alarms are installed, the installer will test them for proper performance to assure that they contain new batteries or, in the case of hard-wired smoke alarms or CO alarms, are wired to a circuit that is energized at all times and not wired to a ground-fault circuit interrupter (GFCI).

Smoke alarms that are powered by a battery will emit a signal when the battery is losing power. All installation hardware, including a screw mounting bracket, should be included with the alarm. Smoke alarms installed are approved by Underwriters Laboratories (UL).

Absence or condition of smoke alarms will not be reason for deferral: Smoke alarms are installed when one is not present or operational.

Carbon Monoxide Alarms: CO alarms will not be installed in the following areas: near bathrooms or in shower areas, in closets, crawl spaces or unheated areas where extreme hot or cold temperatures occur, within 5 feet of fuel burning appliances, close to adjacent walls or in comers, near bathtubs or basins, directly above or below return air grilles or supply registers, and behind drapes, furniture, or other objects that could block air flow to the CO alarm.

CO alarms must meet or exceed UL2034-98 and/or IAS696 standards. Plug-in models with separate battery backup will have a manual test and reset button, and a five-year warranty on the alarm and sensor. The expiration date, as warranted by the manufacturer, is written on the front of the alarm in permanent ink.

Fire Extinguishers: 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.

Testing Protocols

Contractors shall test all smoke/Co alarms after installation.

Client Education

Local Administering Agency personnel review smoke alarm testing procedures with clients following alarm installation and advise them regarding battery replacement as appropriate. Clients are informed about the purpose and features of the CO alarms and informed on what to do if the alarm sounds. In situations where a fire extinguisher is provided, the client is instructed on how to use it.

Training

Local Administering Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes awareness of the need for smoke alarms / CO alarms and their proper installation.

7.20 – Occupant Health and Safety Concerns and Conditions

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐		
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
Temporary relocation of at-risk occupants is allowed on a case by case basis.				
What guidance do you provide Subgrantees for soliciting the occupants' health and safety concerns related to components of their homes?				
Initial client interview will include questions on known or suspected health concerns. Clients are screened again during audit.				
What guidance do you provide Subgrantees for determining whether occupants suffer from health conditions that may be negatively affected by the act of weatherizing their home?				
What guidance do you provide Subgrantees for dealing with potential health concerns when they are identified?				
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.				
Client Education				
All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord. When deferral is necessary, the assessor will provide information in writing describing conditions that must be met for weatherization to commence.				
Documentation Form(s) have been developed and comply with guidance?	Yes ☑	No ☐		

7.21 – Ventilation and Indoor Air Quality				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐		
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
When mechanical ventilation systems are required to meet the ASHRAE 62.2 (2016) requirements, costs are allowable health and safety expenses.				
Identify the Most Recent Version of ASHRAE 62.2 Implemented (optional: identify Addenda used)				
ASHRAE 62.2 (2016) ventilation compliance				
Testing and Final Verification Protocols				
Client Education				
Clients are provided with information on function, use and maintenance of ventilation system and components when ventilation fans are installed. Clients are provided a disclaimer that ASHRAE 62.2 does not account for high polluting sources or guarantee indoor air quality.				
Training				

Local Administering Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes ASHRAE 62.2 training including proper sizing, evaluation of existing and new systems, depressurization tightness limits, critical air zones, etc.

IHWAP has provided and continues to provide ASHRAE 62.2 basic training to all Local Administering Agency weatherization field staff.

IHWAP's five-day contractor certification curriculum includes ASHRAE 62.2 training.

7.22 – Window and Door Replacement, Window Guards

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐

Funding

DOE ☑	LIHEAP ☑	State ☐	Utility ☐	Other ☐

Replacement, repair, or installation is not an allowed health and safety cost.

What guidance do you provide to Subgrantees regarding window and door replacement and window guards?

Testing Protocols

Client Education

Training

7.23 – Worker Safety (OSHA, etc.)

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐

Funding

DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐

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

Weatherization workers will follow OSHA Material Safety Data Sheets (SDS) pursuant to the revised Hazard Communications Standard 29 Code of Federal Regulations 1910.1200, and will take precautions to ensure the health and safety of themselves and other workers.

When workers or clients may be exposed to hazardous materials, Local Administering Agencies and their sub-contractors will develop and maintain a written hazard communication program conforming to the revised Hazard Communications Standard 29 Code of Federal Regulations 1910.1200 that at least describes sub grantees and/or their subcontractors program for:

1. Labeling of hazardous chemicals and other forms of warning, safety data sheets, and employee information and training, and
2. Maintaining a list of the hazardous chemicals known to be present on the jobsite using a product identifier that is referenced on the appropriate safety data sheet (the list may be compiled for the workplace as a whole or for individual work areas); and,
3. Methods used to inform employees of other employers and, when appropriate residents, of hazardous chemicals in use on the jobsite.

Inspectors will also conduct in-progress monitoring at some jobs to verify that OSHA Construction regulations are being followed by contractors.

Training and Certification Requirements

DCEO provides Health and Safety training to all WAP crews, contractors and Local Administering Agency field staff. WAP agencies will comply with OSHA requirements and will ensure that training includes hazards of chemicals and protective measures for handling them.

Training also includes the requirement and use of Safety Data Sheets (SDS), first aid techniques, and related safety equipment like ladders and respirator protection and proper worker safety techniques. DCEO will periodically monitor weatherization jobs in progress to ensure that contractors /crews are utilizing safe work practices according to all program requirements.

OSHA and SDS Compliance: OCA's Weatherization Monitoring Unit performs periodic work site assessments to determine if crews are utilizing safe work practices and an appropriate hazard communications program is in place in conformance with revised Hazard Communications Standard 29 Code of Federal Regulations 1910.1200.

7.24 – Water Heater

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐

Funding

DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐

Replacing/Repairing improper or ineffective water heater is an allowable health and safety measure. 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.

Remediation Protocols

Water heaters are visually inspected as part of the assessment process to determine if they are performing safely. Combustion testing is performed on each combustion appliance at assessment, the end of each day,

and at the time of the final inspection. Copies of test results are placed in the job file and are subject to OCA's monitoring protocol.

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.

Testing Protocols

Combustion testing is performed on each combustion appliance at assessment, the end of each day, and at the time of the final inspection.

Client Education

Where assessment detects evidence of this health and safety hazard, Local Administering Agency staff, at assessment or final inspection, counsel the client and provide information on appropriate use, and maintenance of appliances/water heaters.

Training

Local Administering Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes conducting diagnostic testing on appliances as well as combustion safety training.

IHWAP's five-day contractor certification for HVAC contractors' curriculum includes combustion safety training and awareness of relevant guidance.

7.25 – Solid Fuel Heating (Wood stoves, etc.)

Concurrence, Alternative, or Deferral

Concurrence with Guidance ☑ Alternative Guidance ☑ Results in Deferral ☑

Funding

DOE ☑ LIHEAP ☑ State ☑ Utility ☐ Other ☐

Maintenance, repair, and replacement of primary indoor heating units is allowed where occupant health and safety is a concern. Maintenance and repair of secondary heating units is allowed. Repair of flues and proper installation is required for both primary and secondary solid fuel heating appliances.

Remediation Protocols

Local Administering Agency inspectors inspect chimney and flue of all wood stoves and conduct combustion appliance zone depressurization testing.

Testing Protocols

Client Education

Where assessment detects evidence of this health and safety hazard, sub grantee staff at assessment or at final inspection will counsel the client on wood stove safety.

All conditions an energy auditor/assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Training

Local Administering Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes how to perform CAZ depressurization testing, proper inspection of flue and general safety issues of wood stoves and fireplaces.

7.26 – Space Heaters Unvented Combustion				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance ☑	Alternative Guidance ☐	Results in Deferral ☐		
Funding				
DOE ☑	LIHEAP ☑	State ☑	Utility ☐	Other ☐
Removal of unvented combustion space heaters is required and is an allowable expense to IHWAP grants.				
Remediation Protocols				
IHWAP weatherization contractors are required to remove unvented space heater even if used as a secondary heat source and the unit conforms to ANSI Z21.11.2. The unit may remain until a replacement heating system is in place.				
Testing Protocols				
Client Education				
Clients are informed of the dangers of unvented space heaters All conditions an energy auditor/assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.				
Training				
Local Administering Agency weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten-week Training Certification Program. TCP curriculum includes understanding the dangers of unvented space heaters.				