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Health and Safety Plan 2019

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.

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.

For the U.S. Department of Energy (DOE) Weatherization Assistance Program (WAP), the New Jersey Department of Community Affairs (DCA) budgets Health and Safety (H&S) costs in a separate budget category from Program Operations, removing H&S costs from the SIR and the per unit expenditure limitation of \$7,541. DCA has expended H&S costs of 9% for DOE Annual 2017 and 12% for DOE Annual 2018 (as a percentage of average-per unit costs). This H&S Plan calls for more grantee intervention in addressing H&S issues; therefore, DCA will set an average H&S expenditure limit of 14% of the per unit average for Program Operations. This percent will vary based on actual expenditures and will be averaged across all units. Sub grantees will be required to maintain their budget limitation or face disallowed costs. DCA will require sub grantees to track H&S costs and related measures to support future budget requests.

In order to maintain the primary energy efficiency mission of the program, H&S budgets are limited to 14% of \$ (New Jersey's estimated per unit expenditure for the 2019 Program Year) or an estimated \$1,043 per unit adjusted based on actual Program Operation expenditures. Sub grantees must maintain this H&S expenditure limit of 14%, on average, across all units reported to the DCA or face disallowed costs except that DCA may approve waivers on a case-by-case basis. Waivers must be submitted to DCA State Monitors for approval when the total H&S cost is over \$1,500 up to \$2,500 for an individual unit. H&S estimates over \$2,500 for an individual unit must be approved by the DCA Office of Low-Income Energy Conservation's (OLIEC) Program Supervisor. H&S practices must be performed within the guidance of the NJ WAP H&S Plan, but certain discretion is left to the auditor in estimating costs and making judgments for deferral. Those judgments must be within the limitations outlined herein and detailed justification provided in the client file.

Any WAP job exceeding \$1,499 in total Health and Safety costs will require approval. State Monitors will have authorization to approve the expenditures of \$1,500-\$2,500. The State Monitor's approval indicates that a review of the total cost has been completed and the additional expenditure is justified. Units exceeding H&S costs over \$2,500 must be approved by OLIEC by submitting the approval form to exceed maximum allowable cost per unit.

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")

Incidental Repair Measure (IRM) A full NEAT/MHEA energy audit must be run on the unit to justify IRM cost. Includes incidental repair materials and installation, which are performed because they are deemed necessary for the effectiveness of one or more Energy Conservation Measure (ECM). The ECM(s) that require the installation of an IRM must be documented in the client file. The total cost of the IRM(s) is added into the audit by checking the "Include in SIR" box. The total package of weatherization measures must have a cumulative SIR (Savings to Investment Ratio) of 1.0 or greater to perform the IRM. If the cumulative SIR is below 1.0 the unit will have to be deferred until another funding source can be found to pay for the IRM(s).

5.0 – DEFERRAL/REFERRAL POLICY

Deferral of services may be necessary if H&S issues cannot be adequately addressed according to WPN 17-06 guidance. The decision to defer work in a dwelling is difficult but necessary in some cases. This does not mean that assistance will never be available, but that work must be postponed until the problems can be resolved and/or alternative sources of help are found. If, in the judgment of the auditor, any conditions exist which may endanger the health and/or safety of the workers or occupants, the unit should be deferred until the conditions are corrected. Deferral may also be necessary where occupants are uncooperative, abusive, or threatening. Grantees must be specific in their approach and provide the process for clients to be notified in writing of the deferral and what conditions must be met for weatherization to continue. Grantees must also provide a process for the client to appeal the deferral decision to a higher level in the organization.

Yes No

Where can this deferral/referral policy be accessed?

The deferral/referral policy can be found in the New Jersey Weatherization Assistance Program's Policy and Procedures Manual (NJ WAP Manual) in the following chapters:

The manual can be found on the following link:

<http://www.nj.gov/dca/divisions/dhcr/offices/wap.html>.

- Chapter 3, Health and Safety, Section 1,
- Chapter 6, Heating Systems, Section 8
- Chapter 7, Sub-grantee's Grant Management and Program Operation, Section 3.22 Dual Shell Funding
- Chapter 7, Sub-grantee's Grant Management and Program Operations, Section 3.9
- Chapter 9, Comfort Partners/WAP Partnership
- Policy Manual Appendix Weatherization Forms, Health and Safety Deferral Notice
http://www.state.nj.us/dca/divisions/dhcr/offices/docs/wap/wap_3_deferral_notification.pdf

When a unit is deferred, WAP agency can submit the unit for review and consideration for possible weatherization through the WAP and Comfort Partners Partnership. Chapter 9 in the NJWAP Policy Manual will be dedicated to the Memorandum of Understanding (MOU) and partnership work flow process with Comfort Partners. WAP sub-grantees will seek a possible joint audit with Comfort Partners. If the unit does not meet the eligibility criteria for the Partnership Program, then

the house would be deferred. The joint venture is limited to single-family owner-occupied households with natural gas or electricity utilities.

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 17-06 and how that guidance will be implemented in your Program, if you are proposing an alternative action/allowability, or if the identified category will not be addressed and will always result in deferral. Alternatives must be comprehensively explained and meet the intent of DOE guidance.*
- *Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 17-06, Grantees must concur, or choose to defer all units where the specific category is encountered.*
- *"Allowable" items under WPN 17-06 leave room for Grantees to determine if the category, or testing, will be addressed and in what circumstances.*
- *Declare whether DOE funds or alternate funding source(s) will be used to address the particular category.*
- *Describe the explicit methods to remedy the specific category.*
- *Describe what testing protocols (if any) will be used.*
- *Define minimum thresholds that determine minor and major repairs*
- *Identify minimum documentation requirements for at-risk occupants*
- *Discuss what explicit steps will be taken to educate the client, if any, on the specific category if this is not explained elsewhere in the Plan. Some categories, like mold and moisture, require client education.*
- *Discuss how training and certification requirements will be provided for the specific category. Some categories, like Lead Based Paint, require training.*
- *Describe how occupant health and safety concerns and conditions will be solicited and documented*

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

7.1 – Air Conditioning and Heating Systems

Concurrence, Alternative, or Deferral

Concurrence 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?

Malfunctioning or inoperable heating system replacement, repair, or installation is allowed given the climate conditions of our service area, unless prevented by other guidance herein. Specific guidelines for replacement of heating system can be found in Chapter 6, of the NJ WAP Manual.

Central Air is a permissible weatherization tactic to modify, repair, tune-up, and, in limited and specific circumstances, replace air conditioning systems. Replacement of Central Air

Conditioning systems is permitted using Heating Improvement Program funds, whenever replacement is required to facilitate the authorized replacement of (or other modification to) a heating system. This replacement of air conditioning systems should also, where possible, be supported by documentation which indicates that the air conditioning is medically necessary. All work of any kind involving alterations or replacement of Central Air Conditioning systems must receive prior authorization from the Program State Monitor.

For room air conditioners, if the customer has non-working air conditioner(s) and has an “at-risk” occupant in the household with a medical condition documented by a physician that requires air conditioning, the sub-grantee must request Program State Monitor permission to replace the room air conditioner(s) under LIHEAP or DOE Health and Safety.

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

Maintenance and repair of secondary heating systems is allowed to ensure the safety of the household. For unvented secondary space heaters if the unit doesn’t conform to the American National Standard Institute ANSI Z21.11.2, removal is required. Damaged and hazardous secondary units must also be removed regardless of meeting the ANSI standard.

Deferral will occur when correction of such units is beyond the scope of services or the client doesn’t give consent to remove the secondary unit.

Indicate Documentation Required for At-Risk Occupants

For air conditioning clients, 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. No new installation of room air conditioning systems is permitted where an air conditioning unit did not previously exist. Medical documentation must be no older than 180 days. Air conditioning is to be repaired when practical and costs are less than replacement.

Testing Protocols

Make sure primary systems are present, operable, and performing correctly.

Determine and document presence of “at-risk” current occupants when replacing room air-conditioning as a Health and Safety (H&S) measure.

On combustion equipment, inspect chimney and flue and test for Combustion Appliance Zone (CAZ) depressurization. Combustion equipment will be tested to ensure conformance with ANSI/BPI 1200-S-2017.

For solid fuel appliances look for visual evidence of soot on the walls, mantel or ceiling or creosote staining near the flue pipe.

Client Education

Chapter 6, Heating Systems, NJ WAP Manual provides guidance to sub grantees on client education strategies for recipients of heating system/appliances and Chapters 3 and 4 will address room air conditioners.

Training

Training on the elements of the NJ WAP H&S Plan and combustion safety testing will be provided to Auditors and Crew.

7.2 - Asbestos - All		
What is the blower door testing policy when suspected Asbestos Containing Material (ACM) is identified?		
Blower door testing will not be performed until friable asbestos is encapsulated or abated and air sampling is conducted by an AHERA certified professional.		
7.2a – Asbestos - in siding, walls, ceilings, etc.		
Concurrence, Alternative, or Deferral		
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>
Funding		
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
How do you address suspected ACM’s in siding, walls, or ceilings that will be disturbed through the course of weatherization work?		
Temporary removal and replacement of siding can perform energy conservation measures. All precautions must be taken not to damage siding. Asbestos siding should never be cut or drilled. Recommended, where possible, to insulate through home interior when suspected asbestos siding is present.		
Testing Protocols		
Inspect exterior wall surface and subsurface for asbestos siding prior to drilling or cutting. Remove asbestos or suspected asbestos shingles only as needed to perform the measure installation prior to drilling the sidewall and replace with removed shingles. Temporary removal of shingles is permissible under N.J.A.C. 12:120. Workers should make all attempts to create minimal breakage of shingles. Clients must be removed from the work area. Respirators and full body suits must be used by all workers while asbestos shingles are being removed and replaced.		
If it becomes necessary to remove the siding, it is recommended that it be removed with minimal breakage. To do this it should <u>not</u> be hammered, sawn, or dropped. Siding should be removed in whole pieces and then carried or lowered to the containment area (instead of letting it drop to the ground). Siding will most likely break where it is fastened to the building, these areas should be moistened with water before attempting to remove the fasteners. Often a type of pliers, called “lineman’s pliers” can be used to cut off the heads of the nails. Fasteners may also be cut by inserting a reciprocating saw behind the shingle and carefully cutting it without damaging the shingle. The ground underneath the work area should be protected with heavy plastic (>= 6mil) in order to catch any debris that might inadvertently fall. Debris should be carefully removed from the plastic using a HEPA vacuum for small material at the end of every workday. In NJ it is not required that a NJ licensed asbestos contractor remove this type of material. The only exception is if the building is to be demolished. For more information on this subject, please refer to the Indoor Environments Contacts page for information on how to contact the Department of Health (DOH).		
Client Education		
Clients must be informed that suspected asbestos siding is present and how precautions will be taken for containment and to ensure minimal breakage of siding. Formally notify client in writing of results if testing was performed.		
Training and Certification Requirements		
Sub grantees will be trained in safe practices for siding removal and replacement and how to identify asbestos containing materials.		

7.2b – Asbestos - in vermiculite		
Concurrence, Alternative, or Deferral		
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>
Funding		
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
How do you address suspected ACM's in vermiculite that will be disturbed through the course of weatherization work?		
<p>Testing is allowed with DOE funds. Removal is not allowed with DOE funds. Vermiculite must be assumed to contain asbestos and not disturbed other than testing performed by an Asbestos Hazard Emergency Response Act (AHERA) certified tester. Assess whether suspected vermiculite is present. Do not disturb or reenter the area of the home where suspected asbestos is present unless certified to perform testing. Complete as much of the energy audit as practical without disturbing the vermiculite and estimate the blower door numbers. If ECMs are recommended from the energy audit, have the suspected vermiculite tested in accordance with the Asbestos Hazard Emergency Response Act of 1986 (AHERA) using certified prescriptive sampling performed by a certified tester. Blower door testing will not be done unless vermiculite testing has shown no asbestos is present. If asbestos is present in vermiculite, the unit must be deferred. If tests show that no asbestos is present, perform the blower door tests and complete the energy audit and update estimated numbers to determine the recommended measures.</p>		
Testing Protocols		
<p>AHERA sample collection and testing must be conducted by a certified tester. Baseline environmental asbestos sampling is an allowable cost if authorized in the H&S Plan.</p>		
Client Education		
<p>Clients should be instructed not to disturb suspected asbestos containing material. Sub-grantees provide EPA's <i>Asbestos Safety Information</i> http://www.nj.gov/dca/divisions/dhcr/offices/docs/wap/EPA%20Asbestos%20Safety%20Information.pdf and the client must be notified of the potential observed hazard and informed that testing will be necessary to verify the presence of asbestos. Formally notify the client if test results are positive for asbestos and have notification form signed by the client and a copy kept in the client file. If asbestos is determined to be present inform client that work can only continue if the asbestos is removed by a certified professional and appropriate documentation provided.</p>		
Training and Certification Requirements		
<p>Audit training will be provided to Sub-grantees on how to recognize vermiculite. Testers must be certified through the AHERA course for testing.</p>		

7.2c – Asbestos - on pipes, furnaces, other small covered surfaces		
Concurrence, Alternative, or Deferral		
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>
Funding		
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
How do you address suspected ACM's (e.g., pipes, furnaces, other small surfaces) that will be disturbed through the course of weatherization work?		
<p>Assume asbestos is present in unknown or common asbestos containing covering materials. Encapsulation of friable asbestos is allowed using DOE H&S funds and performed by an AHERA asbestos control professional. Encapsulation and air-sampling must be conducted prior to blower door testing. Removal may be allowed with LIHEAP H&S funds if performed by an AHERA</p>		

asbestos control professional when encapsulation of friable asbestos is not feasible. Justification for removal must be presented to the Program State Monitor for approval. Blower door results can be estimated to complete the audit but must be updated once asbestos work is concluded.

When deferral is necessary due to asbestos, occupant must provide documentation that a certified professional performed the remediation before work continues.

Testing Protocols

Auditor will perform visual inspection to identify suspected asbestos containing covering materials. If suspected friable asbestos is present, minor asbestos encapsulation or removal may be performed by a certified asbestos contractor. Complete as much of the energy audit as practical without disturbing the material and estimate the blower door numbers. If the material is intact and will not be disturbed by recommended WAP activity, continue with weatherization work. Testing may be allowed where the material is suspected to contain asbestos and cost estimates for the necessary encapsulation or removal are high and could potentially be avoided. Once the friable material is encapsulated using DOE funding or removed using LIHEAP funding or if tests show that no asbestos is present, perform the blower door tests and complete the energy audit and update estimate numbers to determine the recommended measures.

Client Education

Inform client of any observed suspected asbestos containing material. Clients should be instructed not to disturb suspected asbestos containing material. Sub-grantees provide the client with EPA’s *Asbestos Safety Information*
<http://www.nj.gov/dca/divisions/dhcr/offices/docs/wap/EPA%20Asbestos%20Safety%20Information.pdf>.

If deferral is necessary, inform client that work can only continue if the asbestos is removed by a certified professional and appropriate documentation provided.

Training and Certification Requirements

Training will be provided to Sub-grantees to visually identify suspected asbestos and asbestos containing materials. Anyone disturbing suspected asbestos containing material must be a certified AHERA professional.

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

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

Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowed. Removal of condition is defined as repairing the condition that creates the biological contamination such as repairing leaking or broken waste lines. Addressing or testing for bacteria and viruses is not an allowable cost. 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. Also, see Mold and Moisture guidance.

Testing Protocols
Sensory inspection will be used to identify the biological concerns. The inspection will be conducted by the Sub-grantee representative if he/she is not exposed to hazardous biological contaminants (i.e., raw sewage, animal/human feces, decomposing garbage, and animal carcasses). Cleanup of contaminants such as decomposing garbage and animal/human feces due to the occupant’s neglect are not eligible. Hazardous conditions must be corrected by a certified professional and signed clearance notification must be provided to the Sub-grantee prior to weatherization continuing. Non-hazardous conditions can be corrected by the client, and if performed within 30 days, weatherization can continue.
Client Education
Inform client in writing of observed conditions. Provide information on how to maintain a sanitary home. When deferral is necessary, provide information in writing describing conditions that must be met for weatherization to commence.
Training
Sub-grantee staff is to be trained in how to recognize conditions and when to defer as well as worker safety when encountering these conditions.

7.6 – Building Structure and Roofing				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Sub grantees for dealing with structural issues (e.g., roofing, wall, foundation) in homes slated for weatherization?				
Building rehabilitation and structural corrections are beyond the scope of the NJ WAP. Homes with conditions that require more than incidental repair should be deferred. LIHEAP health and safety funding may be utilized for roof repairs, ideally using the dual funding. The funding limitation for roof repairs is \$2,500. If justifiable, the agency may submit a request to the OLIEC supervisor to exceed, on a case by case basis.				
See Mold and Moisture, Code Compliance, and Pests sections for more information.				
How do you define “minor” or allowable structure and roofing repairs, and at what point are repairs considered beyond the scope of weatherization?				
Auditors will perform visual inspection. Ensure that access to areas necessary for weatherization is safe for entry and performance of assessment, work, and inspection. DOE funds will be utilized to address incidental repairs, which are separate from the H&S funding category and must be included in the package SIR and the average cost per unit for Program Operations.				
If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?				
Only incidental repairs will be considered for funding and must be included in the package SIR and the average cost per unit for Program Operations. The package cumulative SIR must be above 1.0 or greater to perform weatherization work. Incidental repairs are those which are performed because they are deemed necessary for the effective performance or preservation of one or more ECMs. In addition, the incidental repair must be listed as ordinary maintenance or minor work as defined in N.J.A.C. 5:23.				

Determine whether repair work is necessary and meets the definition of incidental repair. The unit must be deferred if the package SIR is below 1.0. If the work requires more than incidental repair, then the client must be deferred.
Client Education
Notify client of any housing deficiencies and/or substandard conditions or compromised areas. When deferral is necessary, provide information in writing describing conditions that must be met for weatherization to commence.
Training
Sub-grantee staff will be trained on how to identify deficiencies and substandard conditions in housing and how to differentiate between incidental and major repair.

7.7 – Code Compliance
Concurrence, Alternative, or Deferral
Concurrence with Guidance <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/>
Funding
DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
What guidance do you provide Sub grantees for dealing with code compliance issues in homes receiving weatherization measures?
Correction of preexisting code compliance issues is not an allowable cost other than where weatherization measures are being conducted or when necessary to perform weatherization work. When correction of preexisting code compliance issues is triggered and paid for with WAP funds, cite specific code requirements with reference to the weatherization measure(s) that triggered the code compliance issue in the client file. State and local (or jurisdiction having authority) codes must be followed while installing weatherization measures. Condemned properties and properties where “red tagged” H&S conditions exist that cannot be corrected under this guidance should be deferred.
What specific situations commonly trigger code compliance work requirements for your network? How are they addressed?
Majority of code compliance issues are commonly triggered by the replacement/installation of heating/hot water equipment and electrical upgrades for ASHRAE 62.2-2016 compliance. All required replacements and installations must comply with the applicable building code(s) in the municipality where the installation is taking place. Required permits must be secured by a licensed contracting service.
Client Education
Inform client in writing of observed code compliance issues when it results in a deferral. When deferral is necessary, provide information in writing describing conditions that must be met for weatherization to commence.
Training
Sub-grantees will be trained on how to determine what code compliance may be required.

7.8 – Combustion Gases
Concurrence, Alternative, or Deferral
Concurrence with Guidance <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/>
Funding

DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
Testing Protocols				
<p>Combustion safety testing is required when combustion appliances are present. Test naturally drafting appliances for spillage and Carbon Monoxide (CO) during Worst Case Depressurization (WCD) of the Combustion Appliance Zone (CAZ) at pre- and post-weatherization and before leaving the home on any day when work has been done that could affect draft (e.g., tightening the home, adding exhaust). Inspect venting of combustion appliances to ensure proper disposal of combustion gases and confirm adequate clearances to building materials.</p>				
How are crews instructed to handle problems discovered during testing, and what are the specific protocols for addressing hazards that require an immediate response?				
<p>Carbon monoxide is a colorless, odorless, tasteless gas produced by burning gas, oil, wood, propane, charcoal or other fuel. Improperly ventilated appliances, particularly in a tightly sealed or enclosed space, may allow carbon monoxide to accumulate to dangerous levels. If you think you or any household occupant may have carbon monoxide poisoning, get into fresh air immediately and seek emergency medical care.</p> <p>If the CO reading exceeds the allowable ppm for the specific appliance in conformance with ANSI/BPI 1200-S-2017 and or ambient CO reading is in the range of 9 ppm-69 ppm, the auditor shall advise the homeowner/occupant that elevated levels of ambient CO have been detected. Windows and doors shall be opened. The auditor shall recommend that all possible sources of CO be turned off immediately. The auditor shall contact the clients' utility company to request a "carbon monoxide investigation". If the investigation confirms high CO readings, request an "appliance adjustment for emissions". If the appliance cannot be adjusted by the utility and a violation notice is issued due to unsafe conditions, repair or replacement is an allowable H&S measure unless prevented by other guidance herein. If the CO reading indicates an ambient CO level of 70 ppm or greater, the auditor shall immediately terminate the inspection and notify the homeowner/occupant of the need for all building occupants to evacuate the building. The auditor shall immediately leave the building and the appropriate emergency services shall be notified from outside the home.</p> <p>Specific guidelines for replacement of heating systems/water-heaters can be found in WAP Policy Chapter 6 and in the New Jersey Field Guide, Chapter 8 Heating and Cooling and Chapter 10 Baseload Measures.</p>				
Client Education				
<p>Sub-grantees provide the client with the <i>Appliance/Heating System Evaluation</i> form found at http://www.state.nj.us/dca/divisions/dhcr/offices/docs/wap/wap_appliance_heating_sys_evaluation_6.pdf, at the post inspection of WAP services. The form summarizes the CO test results of their dryer, gas range/oven, heater, and water heater. Also, information on new combustion appliances, excluding gas dryers, is provided including client education on regular maintenance and warranty information.</p>				
Training				
<p>Sub-grantees will be trained on how to perform appropriate testing, determine when a building is excessively depressurized, and the difference between air free and as-measured.</p>				

7.9 – Electrical				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>

What guidance do you provide Sub grantees for dealing with electrical hazards, including knob & tube wiring, in homes slated for weatherization?
<p>Auditors will perform visual inspection. Voltage drop, and voltage detection testing should be performed as necessary. Electrical issues should be determined if correction is necessary to safely perform weatherization activity. Electrical upgrades necessary for a specific ECM can be included in the cost of the measure. Sub-grantees will seek the approval of the State when electrical overloads are likely to result from installing new appliances. The NJWAP Field Guide Chapter 1, 1.7 Electrical Safety, provides guidance on overloads.</p> <p>When inspecting for the presence and condition of knob-and-tube wiring, check for alterations that may create an electrical hazard. Voltage drop, and voltage detection testing are allowed. Knob and tube wiring can be removed to perform weatherization measures if within the cost limitation identified in the NJ H&S Plan. Damming around the wire with proper clearance or skipping wall cavities where knob-and-tube is present can also be performed unless the area not being insulated is greater than 25% of the total attic/floor area or wall area respectively as called for in the energy audit. Chapter 1, 1.7.1 and 1.7.2 of the New Jersey Weatherization Field Guide provides policy and guidance on knob and tube wiring.</p>
How do you define “minor” or allowable electrical repairs, and at what point are repairs considered beyond the scope of weatherization?
<p>Deferral will occur when corrections are beyond the scope of the NJ H&S Plan. The primary mechanism for determining deferral of a unit is based on costs associated with correcting the H&S condition necessary to perform audit recommended weatherization work as defined in the DCA Deferral & Referral Policy above.</p>
If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?
<p>NJWAP sub grantees are required to perform a site-specific audit on all building types for WAP services.</p>
Client Education
<p>Sub-grantees provide client with the Electrical Safety Foundation International (ESFI) <i>Electrical Safety Workbook</i> http://www.nj.gov/dca/divisions/dhcr/offices/docs/wap/Electrical%20Safety%20Foundation%20International%20(ESFi)%20Electrical%20Safety%20Workbook.pdf.</p> <p>Observed hazards including any existing overloads discovered at the time of the audit will be discussed with the owner and noted in the client folder.</p>
Training
<p>Sub-grantees will be trained on how to identify electrical hazards and local code compliance.</p>

7.10 – Formaldehyde, Volatile Organic Compounds (VOCs), Flammable Liquids, and other Air Pollutants
Concurrence, Alternative, or Deferral
<p>Concurrence with Guidance <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/></p>
Funding
<p>DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/></p>
What guidance do you provide Sub grantees for dealing with formaldehyde, VOCs, flammable liquids, and other air pollutants identified in homes slated for weatherization?
<p>Removal of pollutants is allowed and is required if they pose a risk to workers. If pollutants pose a</p>

risk to workers and removal cannot be performed or is not allowed by the client, the unit must be deferred.

Refer to *Hazardous Materials Disposal* section for more information.

Testing Protocols

Auditors will perform sensory inspection. Suspected pollutants beyond small amounts of normal household cleaners must be removed from the envelope prior to weatherization and the client informed of risks associated with keeping pollutants indoors, even when ventilation is present. Permanent location of suspected pollutants should be considered in defining the envelope.

Formaldehyde vapors are emitted by pressed wood products, hardwood, plywood, wall paneling, particleboard, wafer board, environmental tobacco smoke, durable press drapes, glues, some new carpets, urea-formaldehyde foam insulation, etc. VOCs are emitted by some household cleaning products like cleansers and disinfectants; paints, paint strippers, and other solvents; preservatives; stored fuels, and automotive products; moth repellents and air fresheners; etc.

ASHRAE 62.2 addresses normal household conditions and does not account for high polluting sources. The Sub-grantees will consider additional ventilation in homes with suspected VOC problems that are not easily removed.

Client Education

Inform client in writing of observed condition and associated risks. Sub-grantees provide client with EPA’s *Sure, Your Home is Clean but is it Safe for Your Family*

http://www.nj.gov/dca/divisions/dhcr/offices/docs/wap/epa_sure_your_home_is_clean_but.pdf.

Sub-grantee must also inform clients of household hazardous waste collection day programs in their county.

Training

Sub-grantees will be trained on how to recognize potential hazards and when removal is necessary.

7.11 – Fuel Leaks

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

Remediation Protocols

Fuel leaks found during testing will be addressed immediately. Testing procedures must conform with ANSI/BPI 1200-S-2017 Standards. When a gas leak is found on the utility side of service the utility must be notified, and a temporary halt work will be issued. The leak must be repaired by the utility before weatherization can commence. If a fuel leak is found after the utility side of service, the utility must still be contacted to confirm the leak. If the leak is confirmed and cannot be repaired by the utility, repairing fuel leaks is an allowable H&S measure. Oil fuel lines and above ground tanks must be visibly inspected for leaks. If leaks are found repair/replacement of fuel lines or above ground tank is an allowable H&S measure. For testing and evaluating fuel leaks see NJ Field Guide, Chapter 8 Heating and Cooling Systems.

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

Allowable fuel leak repairs consist of replacement of propane and natural gas pipe sections, joints, fittings and shut off valves. Fuel leak repairs for oil lines and above-ground oil tank repair/or replacement is allowable. Leaking under-ground storage tank must be deferred. Deferral will occur when corrections are beyond the scope of the NJ H&S Plan. The primary mechanism for

determining deferral of a unit is based on costs associated with correcting the H&S condition necessary to perform audit recommended weatherization work as defined in the DCA Deferral & Referral Policy above.
Client Education
Inform clients in writing if fuel leaks are detected.
Training
Sub-grantees will be trained on how to properly test and visually inspect for fuel leaks.

7.12 – Gas Ovens / Stovetops / Ranges
Concurrence, Alternative, or Deferral
Concurrence with Guidance <input type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/>
Funding
DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
What guidance do you provide Sub grantees for addressing unsafe gas ovens/stoves/ranges in homes slated for weatherization?
LIHEAP Health and Safety funding can be used to replace ranges and ovens that are dangerous and cannot be repaired. Replacement ranges and or ovens are applicable to single-family owner-occupied units. For tenant occupied units, leveraging applies. Landlords must pay 50% of the cost for replacement. Gas ranges and ovens will be tested for CO levels and where CO levels exceed the ANSI/BPI 1200-S-2017 threshold of 225 ppm as measured, an attempt will be made to correct said levels. If CO levels cannot be corrected, the appliance will be replaced or if the range and or oven has been issued a safety violation by the utility company this can be used to justify replacement. Electric ranges and ovens will only be replaced if there is imminent danger of fire or electrocution due to the condition of the unit. The sub-grantee must request Program State Monitor permission to replace the oven/stovetop/range under LIHEAP Health and Safety.
DOE health and safety funding can be used to perform standard maintenance or repair to gas ovens and ranges. Replacement is not an allowable DOE H&S measure.
Testing Protocols
Test gas range burners and ovens for CO. Visibly inspect gas range burners and ovens for operability and flame quality.
Client Education
Clients will be informed of the importance of using exhaust ventilation when cooking and the importance of keeping burners and ovens clean to limit the production of CO. The client will receive all instructional and warranty information if the appliance is replaced.
Training
Sub-grantees will be trained on testing techniques and the required CO action levels.

7.13 – Hazardous Materials Disposal
[Lead, Refrigerant, Asbestos, Mercury (including CFLs/fluorescents), etc.]
<i>(please indicate material where policy differs by material)</i>
Concurrence, Alternative, or Deferral
Concurrence with Guidance <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/>
Funding
DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
Client Education

<p>Sub-grantees provide the client with EPA’s <i>Sure, Your Home is Clean but is it Safe for Your Family</i> http://www.nj.gov/dca/divisions/dhcr/offices/docs/wap/epa_sure_your_home_is_clean_but.pdf . Clients are informed of hazards associated with hazardous waste materials being generated/handled in the home. The EPA recommends that consumers take advantage of available local options for recycling CFL’s, fluorescents bulbs and other bulbs that contain mercury, and all other household hazardous wastes, rather than disposing of them in regular household trash.</p>
Training
Not applicable.
Disposal Procedures and Documentation Requirements
<p>Hazardous Waste Materials generated during weatherization work shall be disposed of according to all local laws, regulations and/or Federal guidelines, as applicable. Document proper disposal requirements in contract language with responsible party.</p> <p><u>Refrigerant disposal-</u> (refrigerators, central air units and room air conditioning units) Contracted appliance providers that provide replacement of refrigerant containing appliances are required to dispose of the old appliance in accordance with Section 608 of the Clean Air Act (CAA), EPA has established regulations (40 CFR Part 82, Subparts A and F) that are relevant to the disposal of refrigeration/AC equipment. Small appliances are subject to special safe disposal requirements (§ 82.156[f]).</p> <p><u>Lead paint disposal-</u> Construction and lead waste shall be disposed in accordance with EPA guidance, which states that “EPA’s policy statement allows contractor-generated LBP waste to be disposed of as household waste”.</p> <p><u>Asbestos disposal-</u> Disposal of asbestos containing materials shall be included in the contract with the AHERA certified contractor. All asbestos containing materials must be disposed of in accordance with federal and state regulation N.J.A.C 7:26.</p> <p><u>Mercury disposal-</u> (includes CFLs, fluorescents bulbs and mercury thermostats) EPA’s universal waste regulations includes Mercury-Containing Equipment. Title 40 of the Code of Federal Regulations (CFR) in part 273. For free recycling collection sites for disposing mercury thermostats visit the following link https://www.thermostat-recycle.org/statelaws/new_jersey.</p>

7.14 – Injury Prevention of Occupants and Weatherization Workers (Measures such as repairing stairs and replacing handrails)
Concurrence, Alternative, or Deferral
Concurrence with Guidance <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/>
Funding
DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
What guidance do you provide Sub grantees regarding allowable injury-related repairs (e.g., stairs, handrails, porch deck board)?
Workers must take all reasonable precautions against performing work on homes that will subject workers or occupants to H&S risks. Minor repairs and installation may be conducted only when necessary to effectively weatherize the home; otherwise these measures are not allowed.

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.
Observe if dangers are present that would prevent weatherization. If weatherization cannot be safely performed, the hazards must be corrected by WAP if within reasonable costs or by the client prior to weatherization or the unit deferred.
Deferral will occur when correction is beyond the scope of this Plan. The primary mechanism for determining deferral of a unit is based on costs associated with correcting the H&S condition necessary to perform audit recommended weatherization work as defined in the DCA Deferral & Referral Policy.
Training
Staff awareness of potential hazards.

7.15 – Lead Based Paint				
Concurrence, Alternative, or Deferral				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input checked="" type="checkbox"/>	Utility <input type="checkbox"/>	Other <input checked="" type="checkbox"/>
Safe Work Protocols				
Follow EPA's Lead; Renovation, Repair and Painting Program (RRP). In addition to RRP, Weatherization requires all weatherization crews working in pre-1978 housing to be trained in Lead Safe Weatherization (LSW). Lead-based paint should be assumed in pre-1978 housing unless testing negative.				
Deferral is required when the extent and condition of lead-based paint in the house would potentially create further H&S hazards. 1 to 4 family households occupied by known lead poisoned children (blood lead level of 5ug/dL or higher with or without an Order to Abatement) shall be referred to the DCA Lead Safe Home Remediation Grant Program, local health departments or publicly assisted housing rehabilitation programs.				
Testing Protocols				
Testing to determine the presence of lead in paint that will be disturbed by WAP measure installation is allowed with EPA-approved testing methods. Testing methods must be economically feasible and justified.				
A determination must be made for all units including the year built of the home, suspected presence of lead, and any necessary actions taken and signed and kept in the client file. A minimum of 3 inspections per Sub-grantee per year shall be conducted by the State Monitor during the performance of weatherization activities to ensure that proper containment is established, occupants and their belongings are being protected, and egress routes which avoid the work area are established. The State Monitor shall stop work if the crew has failed to implement the RRP and LSW practices.				
Client Education				
The Sub-grantee is required to give a copy of the EPA’s <i>The Lead-Safe Certified Guide to Renovate Right</i> http://www.nj.gov/dca/divisions/dhcr/offices/docs/wap/EPA%20Lead%20Safe%20Certified%20Guide%20to%20Renovate%20Right%20for%20pre-1978%20homes.pdf to the client at least seven (7) days prior to the start of work.				

Training and Certification Requirements
<p>All Sub-grantee employees and contractors working on pre-1978 homes must receive training to install measures in a lead-safe manner in accordance with the SWS and EPA protocols, and installation must be overseen by an EPA Certified Renovator. Grantee State Monitors and Sub-grantee inspectors must be Certified Renovators. Sub grantee must be certified as an RRP Firm with the U.S. Department of Environmental Protection.</p>
Documentation Requirements
<p>Renovate Right Pamphlet Receipt signed by client or Lead-Free Certificate. All testing results and post weatherization cleaning Verification Records shall be maintained in the client file such as photographs of pre-and post LSW practices and photographs of LSW setup, a Certified Renovator acknowledgement that lead-based paint is not present. Training records for all individuals working on weatherization projects will be maintained at the Sub-grantee level and shall be verified by State Monitors on a bi-annual basis. Testing certification forms for each unit must be completed by the Certified Renovator and maintained with the client file. Testing certification forms must include the specific location of the test by room and component and result.</p> <p>The following forms shall be maintained in the client file: <i>Determination of Lead Safe Weatherization (LSW) Form</i> http://www.state.nj.us/dca/divisions/dhcr/offices/docs/wap/wap_3_lead_before_1978.pdf</p> <p><i>Lead Safety Test Kit Documentation Form</i> http://www.state.nj.us/dca/divisions/dhcr/offices/docs/wap/Lead_Safety_Test_Kit_Documentation_Form.pdf</p> <p><i>Checklist for Performing Renovation, Repair and Painting (RRP)</i> http://www.state.nj.us/dca/divisions/dhcr/offices/docs/wap/wap_3_checklist.pdf</p>

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 <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Funding				
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
What guidance do you provide Sub grantees 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?				
<p>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. Where moderate to severe moisture or suspected mold issues cannot be addressed, deferral is required. Minor suspected mold or moisture conditions will be addressed through providing adequate ventilation by meeting ASHRAE 62.2-2016 standards. Mold testing and cleaning are not allowable DOE H&S costs.</p> <p>Surface preparation where weatherization measures are being installed (e.g., cleaning mold off window trim to apply caulk) must be charged as part of the ECM, not to the H&S budget category.</p>				

How do you define “minor” or allowable moisture-related measures, and at what point is work considered beyond the scope of weatherization?
<p>Visual assessment is required and diagnostics such as moisture meters are recommended pre-weatherization and prior to final inspection. Suspected mold of individual areas less than or equal to 10 square feet are considered minor and weatherization can continue if adequate ventilation or dehumidification can be provided and the homeowner instructed in cleaning the area. For moderate to severe mold conditions, if the home has more than 10 square feet in any one area (conditioned or unconditioned) or more than 20 square feet in total of all areas of the home (either conditioned or unconditioned) of suspected mold it must be deferred under DOE rule. LIHEAP health and safety funding may be utilized for mold remediation, which may consist of cleaning, removal of damaged material, sealant, and if necessary, replacement of the material removed, ideally using the dual funding. The funding limitation for mold remediation is \$2,500. If justifiable, the agency may submit a request to the OLIEC supervisor to exceed, on a case by case basis.</p> <p>Identifiable moisture creating conditions must be corrected prior to weatherization or the unit deferred. High humidity, general mustiness, or sensory observed moisture where a source cannot be pinpointed must be addressed with adequate ventilation or dehumidification prior to weatherization or the unit deferred.</p>
Client Education
<p>Sub-grantees provide the client with EPA’s <i>A Brief Guide to Mold, Moisture and Your Home</i> http://www.nj.gov/dca/divisions/dhcr/offices/docs/wap/Environmental%20Protection%20Agency%20(EPA)%20A%20Brief%20Guide%20to%20Mold,%20Moisture,%20and%20Your%20Home.pdf</p> <p>Discuss the importance of cleaning and maintaining drainage systems and proper landscape design. Instruct client in cleanup of small suspected mold covered surfaces and that large covered surfaces should be remediated by a professional.</p>
Training
<p>Sub-grantees will be trained using the national curriculum on mold and moisture or equivalent. NJ WAP will provide training to State Monitors and Sub-grantees’ field staff on identifying mold and moisture problems including drainage issues. The training will ensure that staff can identify suspected mold and provide the client with information on remediation.</p>

7.17 – Pests
Concurrence, Alternative, or Deferral
<p>Concurrence with Guidance <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/></p>
Funding
<p>DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/></p>
What guidance do you provide Sub grantees for dealing with pests and pest intrusion prevention in homes slated for weatherization?
<p>Pest removal is allowed only where infestation would prevent weatherization. Infestation of pests may be cause for deferral where it cannot be reasonably removed or poses H&S concern for workers. Screening of windows and points of access is allowed to prevent intrusion.</p>
Define Pest Infestation Thresholds, Beyond Which Weatherization Is Deferred
<p>The primary mechanism for determining deferral of a unit is based on costs associated with correcting the H&S condition necessary in order to perform audit-recommended weatherization work as defined in the DCA Deferral & Referral Policy.</p>
Testing Protocols
<p>Auditors will assess the presence and degree of infestation and risk to worker. Pest infestation that may prevent weatherization activity or potentially lead to the degradation of weatherization</p>

materials must be corrected prior to weatherization or the unit deferred. Care should be taken that installed materials are protected from pest intrusion.
Client Education
Inform client in writing of observed condition and associated risks as well as methods for pest management and removal.
Training
Sub-grantees will be trained in how to assess presence and degree of infestation, associated risks, removal, pest management, and need for deferral. Training for Sub-grantees at: www.epa.gov/pesticides/factsheets/ipm.htm .

7.18 – Radon
Concurrence, Alternative, or Deferral
Concurrence with Guidance <input type="checkbox"/> Alternative Guidance <input checked="" type="checkbox"/> Results in Deferral <input type="checkbox"/>
Funding
DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
What guidance do you provide Sub grantees around radon?
<p>Whenever site conditions permit, exposed dirt must be covered with a sealed vapor barrier except for mobile homes. Other precautions may include, but are not limited to, sealing any observed floor and/or foundation penetrations, including open sump pits, isolating the basement from the conditioned space, and ensuring crawl space venting is installed. In homes where radon may be present, work scope should include precautionary measures based on EPA Healthy Indoor Environment Protocols for Home Energy Upgrades, to reduce the possibility of making radon issues worse. Radon testing is an allowable H&S charge with DOE funds, but radon mitigation is not allowed. Properties with radon levels of 4 pC/l and above or where testing is refused in Tier 1 municipalities will be deferred under the DOE grant. Sub-grantees will be allowed to install a Radon Mitigation system in homes with radon levels of 4 pC/l and above. Radon Mitigation systems to be installed are to be charged to the Sub-grantees’ LIHEAP grant.</p> <p>Radon mitigation system cannot be installed if no weatherization work is to be completed on the home/unit. Failure to weatherize the home may result in disallowed costs for the radon mitigation system. Installing a radon mitigation system only is considered partial weatherization which is not allowed.</p>
Testing Protocols
Pre-weatherization radon testing is allowed and required in Tier 1 municipalities and highly recommended for Tier 2 unless the property owner has tested for radon in the previous 5 years and has written evidence that radon levels are below 4 Pico-Curies per liter (pC/l). In the event that a radon test is conducted resulting in radon levels above 3.5 Pico-Curies per liter (pC/l) yet below 4 Pico-Curies per liter (pC/l), OLIEC requires agencies to perform a post weatherization radon test. The purpose of the post weatherization radon test is to ensure that radon levels were not elevated beyond 4 Pico-Curies per liter (pC/l), during the installation of energy conservation measures. If post weatherization radon levels exceed 4 Pico-Curies per liter (pC/l), Agencies are required to install a radon mitigation system. NJ DEP testing protocols will be used.
Client Education
Sub-grantees will provide the client with EPA’s <i>A Citizen’s Guide to Radon</i> http://www.state.nj.us/dca/divisions/dhcr/offices/docs/wap/2016_a_citizens_guide_to_radon.pdf , and inform them of radon related risks.

<p>Sub-grantees will review the <i>Radon Informed Consent Form</i> with the client. The form will include: Information from the results of the IAQ Study that there is a 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; The benefits of Weatherization including energy savings, energy cost savings, improved home comfort, and increased safety; and Confirmation that EPA’s <i>A Citizen’s Guide to Radon</i> was received.</p>
<p>Training and Certification Requirements</p>
<p>Sub-grantees will be trained on what radon is, how it occurs, what factors may make radon worse, weatherization measures that may be helpful, and vapor barrier installation.</p>
<p>Documentation Requirements</p>
<p>All clients must complete the <i>Radon Informed Consent Form</i>, with confirmation that EPA’s <i>A Citizen’s Guide to Radon</i> was received. Clients located in Tier 1 must sign the <i>Radon Testing Waiver</i> http://www.state.nj.us/dca/divisions/dhcr/offices/docs/wap/wap_3_radon_waiver.pdf. The client file must have pre/post EPA Approved Lab Results if a radon mitigation system was installed using LIHEAP funding.</p> <p>After a radon mitigation system is installed the auditor must complete the <i>Radon Mitigation Checklist</i> http://www.state.nj.us/dca/divisions/dhcr/offices/docs/wap/Radon_Mitigation_Checklist-Agency.pdf.</p>

<p>7.19 – Safety Devices: Smoke and Carbon Monoxide Alarms, Fire Extinguishers</p>
<p>Concurrence, Alternative, or Deferral</p>
<p>Concurrence with Guidance <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/></p>
<p>Funding</p>
<p>DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/></p>
<p>What is your policy for installation or replacement of the following:</p>
<p>Smoke Alarms: Every home should have smoke alarm(s) installed on each floor, near bedroom(s) per local code or manufacturers specification where ones are not present, functioning, or within their useful life span.</p> <p>Carbon Monoxide Alarms: All homes must have CO detector(s). Install these detector(s) on each floor, near bedrooms per local code or manufacturers specification where ones are not present, functioning, or within their useful life span.</p> <p>Fire Extinguishers: Providing fire extinguishers is allowed only when solid fuel is present. Installation is not allowed unless audit-approved weatherization measures are installed.</p>
<p>Testing Protocols</p>
<p>Check for operation of existing smoke and CO detectors.</p>
<p>Client Education</p>
<p>Provide client with verbal and written information on use of smoke/CO detectors and fire extinguishers where allowed. Inform the client to replace the batteries in smoke/CO detectors at least once a year.</p>
<p>Training</p>
<p>Sub-grantees will be trained on where to install detectors and local code compliance.</p>

7.20 – Occupant Health and Safety Concerns and Conditions		
Concurrence, Alternative, or Deferral		
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>
Funding		
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
What guidance do you provide Sub grantees for soliciting the occupants' health and safety concerns related to components of their homes?		
<p>Explaining to the occupants the necessary of ensuring their health and safety, and that of the NJWAP staff and contractors are a critical component of the NJWAP and that all weatherization activities cannot be delivered to the residence unless the occupant discloses existing health and safety concerns.</p>		
What guidance do you provide Sub grantees for determining whether occupants suffer from health conditions that may be negatively affected by the act of weatherizing their home?		
<p>Require occupant to reveal known or suspected health concerns as part of initial application for weatherization. Screen occupants again during audit to verify earlier concerns and/or to determine if additional concerns exist that may not have been included at the time of application. Sub-grantee staff as early as the intake stage should be alert to situations that could negatively affect the H&S of clients. Question clients about allergies or diseases that are traceable to materials used in weatherization. The client will complete the <i>Health and Safety Client Intake Survey</i> http://www.state.nj.us/dca/divisions/dhcr/offices/docs/wap/wap_3_client_intake_survey.pdf. Later, a decision can be made about proceeding with weatherization work or postponing work because of a major problem.</p> <p>Sub-grantees will become aware of clients' health problems that could be exacerbated by weatherization activities at the intake stage.</p>		
What guidance do you provide Sub grantees for dealing with potential health concerns when they are identified?		
<p>When a person's health may be at risk and/or WAP work activities could constitute a health or safety hazard, the occupant at risk will be required to take appropriate action based on severity of risk. Temporary relocation of at-risk occupants may be allowed on a case by case basis as approved by DCA. Failure or the inability to take appropriate actions must result in deferral.</p>		
Client Education		
Provide client information of any known risks. Provide Sub-grantee contact information, so client can inform of any issues.		
Documentation Form(s) have been developed and comply with guidance?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
The <i>Health and Safety Client Intake Survey</i> must be completed at client intake and confirmed with follow up during the home assessment.		

7.21 – Ventilation and Indoor Air Quality		
Concurrence, Alternative, or Deferral		
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>
Funding		
DOE <input checked="" type="checkbox"/>	LIHEAP <input checked="" type="checkbox"/>	State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
Identify the Most Recent Version of ASHRAE 62.2 Implemented (optional: identify Addenda used)		
<p>The NJ WAP requires the installation of ventilation as prescribed by the most recent version of ASHRAE 62.2 - 2016. The NJWAP Monitors and Auditors have been trained using the Residential Energy Dynamics (RED) calculation http://www.residentialenergydynamics.com/ for determining required ventilation.</p>		

Testing and Final Verification Protocols
Implementation of ASHRAE 62.2-2016 is required. Client refusal of mechanical ventilation, when evaluated and called for pursuant to the Standard, must result in deferral. Conduct ASHRAE 62.2-2016 evaluation, measure fan flows, estimate costs needed to meet compliance and determine if deferral is necessary, install ventilation as necessary to meet the ASHRAE 62.2-2016 calculated CFM requirements and perform follow up testing to ensure compliance and adjust as needed to meet the standard. Post weatherization blower door numbers can be assumed to calculate required CFM, but ventilation must be adjusted once final blower door numbers are performed. ASHRAE 62.2-2016 is a minimum standard and additional ventilation may be necessary and is allowed to address higher concentrations of humidity or pollutants.
Client Education
Provide client with information on function, use, and maintenance this will include location of service switch and cleaning instructions of the ventilation system and components. The client will be provided with the equipment manual for installed equipment. Include disclaimer that ASHRAE 62.2 does not account for high polluting sources or guarantee indoor air quality.
Training
ASHRAE 62.2-2016 training will be provided including proper sizing, evaluation of existing and new systems, depressurization tightness limits, critical air zones, etc.

7.22 – Window and Door Replacement, Window Guards
Concurrence, Alternative, or Deferral
Concurrence with Guidance <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/>
Funding
DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
What guidance do you provide to Sub grantees regarding window and door replacement and window guards?
Replacement, repair, or installation is not an allowable H&S cost. DOE funds under the weatherization portion of the program will be utilized to replace, repair, or install windows and doors provided the measure is recommended on the energy audit software with an SIR of 1.0 or greater DOE rule, whereas an SIR of .5 to 1.0 can be utilized with LIHEAP funds. Specific treatments not recommended on the energy audit are not allowed H&S costs.
Testing Protocols
Not applicable
Client Education
Provide information on the generation of lead household dust by friction and impact surfaces such as windows and doors.
Training
Sub-grantees will be trained on awareness of this guidance.

7.23 – Worker Safety (OSHA, etc.)
Concurrence, Alternative, or Deferral
Concurrence with Guidance <input checked="" type="checkbox"/> Alternative Guidance <input type="checkbox"/> Results in Deferral <input type="checkbox"/>
Funding
DOE <input checked="" type="checkbox"/> LIHEAP <input checked="" type="checkbox"/> State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
How do you verify safe work practices? What is your policy for in-progress monitoring?
Workers must follow OSHA standards and Safety Data Sheets (SDS) and take precautions to ensure the H&S of themselves and other workers. SDS must be posted wherever workers may be

exposed to hazardous materials. DCA will perform random onsite assessments to determine if crews are utilizing safe work practices. State Monitors may stop work for observed unsafe work practices.

Sub-grantees will be trained in use and importance of personal protection equipment (PPE). OSHA 10-hour training is recommended for all workers. OSHA 30-hour training is recommended for crew leaders.

Training and Certification Requirements

Training will be provided for State Monitors, Sub-grantee Field Technicians, and Contractors from among these topics offered by the New Jersey Department of Labor's Occupational Safety & Health Training Unit:

- Electrical Safe Work Practices
- Ergonomics for the Offices
- First Aid for Bystanders
- Hand and Portable Power Tool Safety
- Hand Injury Prevention
- Hazard Awareness
- Hazard Communication
- Heat and Cold Stress and Carbon Monoxide Poisoning
- Hearing Conservation
- Ladder Safety
- Material Handling, Back Safety & Lifting Techniques
- OSHA Record Keeping
- Personal Protective Equipment
- Respiratory Protection
- Safety Audit
- Safety Program Development
- Safety Scanning
- The Supervisor and Safety
- Walking and Working Surfaces
- Permit Required Confined Space Training

7.24 – Water Heaters

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

Remediation Protocols

Determine whether the appliances/water heaters are operating safely. Issues related to leaking units, combustion safety, electrical concerns, and other conditions leading to water heater failure will be assessed.

Primary funding source for repair/replacement will be LIHEAP WAP/HIP. Repair and Replacement Water Heater Protocols Chapter 6, Section 2 of the NJWAP Manual.

Testing Protocols

Combustion safety testing is required when combustion appliances are present. Test naturally drafting appliances for spillage and CO during CAZ depressurization testing pre- and post-weatherization and before leaving the home on any day when work has been done that could affect draft. Testing Protocols Chapter 6, section 3.4 of the NJWAP Manual.

Client Education

Sub-grantees provide the client with the *Appliance/Heating System Evaluation* form http://www.state.nj.us/dca/divisions/dhcr/offices/docs/wap/wap_appliance_heating_sys_evaluation_6.pdf, at the post inspection of WAP services. The form summarizes the carbon monoxide test results of their dryer, gas range/oven, heater, and water heater. Also, information on new combustion appliances, excluding gas dryers, is provided including client education on regular maintenance and warranty information.

Training

Training on the elements of the NJ WAP H&S Plan and combustion safety testing will be provided to Auditors and Crew.