Weatherization Assistance Program
Procedures Manual

Weatherization Works
in Florida

Version 1.3
September 2019
# Florida Weatherization Assistance Program

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CHAPTER

1
Definitions

**Air infiltration**: the exchange of air through the envelope of the dwelling. Most common air infiltration areas are around doors, windows, heating and cooling units and wall top plates in attics.

**Air Sealing**: activities implemented to reduce the amount of air infiltration in a dwelling.

**ASHRAE**: American Society of the Heating and Refrigerating & Air-Conditioning Engineers. [www.ashrae.org](http://www.ashrae.org)

**Blower door**: an apparatus used to identify the amount of air exchange measured in Cubic Foot per Minute (CFM). This tool draws air in through all openings by depressurizing the dwelling.

**Carbon monoxide (CO)**: an odorless, tasteless, and colorless toxic gas produced when insufficient combustion air is supplied to an appliance, the burner is improperly tuned, and/or the appliance is malfunctioning. Combustion appliances produce exhaust gases that should be directly vented to the outside to avoid introducing combustion byproducts into the dwelling.

**Certified Renovator**: A person qualified to perform lead paint testing.

**Conditioned living space**: the most occupied area to be weatherized, i.e., the exterior and interior door(s), and windows making up the conditioned living space will be weatherized (weather-stripping and threshold). Heating and cooling provided only for this area. An option to consider when the whole dwelling cannot be weatherized due to the envelope condition or the number of measures needed exceed allowable program funding guidelines.

**Coordinator**: the Subrecipient staff responsible for the implementation of the program, i.e., assuring that the diagnostic testing, inspections, work write ups, bidding, and final inspections are performed in accordance to program guidelines. This individual is also required to attend mandatory DEO/WAP meetings and trainings.

**DEO**: The Department of Economic Opportunity is the location of the State office that administers the funding and program guidance of the WAP.

**Dwelling Unit**: a house, a stationary manufactured home, an apartment, a group of rooms, or a single room occupied as separate living quarters.

**Energy Burden**: The homeowner’s monthly utility bill divided by monthly income. If the results are 14% or higher, there is an energy burden to the homeowner.

**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.
Independent Auditor/Quality Control Inspector (IAQ/QCI): An individual who performs the audit or follows the applicable priority list, performs diagnostic testing, creates the work order, and performs the final quality control inspection. The auditor is not involved in any of the actual work on the home.

Independent/Quality Control Inspector (I/QCI): An individual that has no involvement in the prior work on the home either as the auditor or as a member of the crew but performs the final quality control inspection.

Job Task Analysis (JTA): Describes the knowledge, skills, and abilities needed to perform specific functions/services effectively and safely.

Low Income Home Energy Assistance Program (LIHEAP): A supplemental funding source for the Florida Weatherization Assistance Program. Funded by the U.S. Department of Housing and Human Services (HHS).

Measures: generic term used for all physical items to be addressed (repaired, replaced or installed) in a dwelling unit to be weatherized.

MHEA (Manufactured Home Energy Audit): diagnostic software utilized to evaluate the existing central heating & cooling equipment (and refrigerator in approved circumstances) to determine if replacement will be cost effective and appropriate size for dwelling. This software is utilized on manufactured dwellings only.

Minor Repair: non-structural related repairs (walls, floors or ceiling)

Monoxor: a tool for determining CO level of combustible appliances in the dwelling.


National Energy Audit (NEAT): Weatherization Assistant diagnostic software program utilized to identify the most cost-effective weatherization measures to be addressed on site built dwellings.

NEAT (National Energy Audit Tool): diagnostic software utilized to evaluate the existing central heating & cooling equipment (and refrigerator in approved circumstances) to determine if replacement will be cost effective and appropriate size for dwelling. This software is utilized on site built dwellings only.

Priority List: The list of measures in the order of energy efficiency and energy savings to be addressed on single family dwellings to be used that will not need to have the heating and cooling system (HVAC) replaced. A different Priority List is utilized for either a site built or manufactured dwelling.
**Quality Control Inspector (QCI):** An individual who is responsible for assuring that all diagnostic testing procedures, audit interpretation, work-write-ups, measures installation, workmanship quality, and final diagnostic testing meets prescribed Florida WAP procedures and guidelines.

**Savings to Investment Ratio (SIR):** The calculated return in energy savings based upon dollars invested through the installation/replacement of a measure. The SIR rating must exceed 1.0 to be cost effective.

**Standard Work Specifications (SWS):** The minimum requirements to ensure that the work performed during energy upgrades (weatherization work) in dwellings meets the national standards at a minimum.

**Weatherization Assistant (NEAT/MHEA)** An advanced energy audit computer program used to identify the cost-effective energy-efficiency retrofit measures for a dwelling unit after taking into account local weather conditions, retrofit measure costs, fuel costs, and specific construction details of the home. The Weatherization Assistant is designed specifically to help states and local weatherization agencies implement the U.S. Department of Energy (DOE) Weatherization Assistance Program. The two audit programs: the National Energy Audit Tool (NEAT) for site-built single-family homes and the Manufactured Home Energy Audit (MHEA) for mobile homes are utilized in the Florida WAP. The Weatherization Assistant can be obtained for free from the Weatherization Assistance Program Technical Assistance Center [https://nascsp.org/wap/waptac/](https://nascsp.org/wap/waptac/) website. The program was developed and is maintained by Oak Ridge National Laboratory which also provides technical assistance on their website at [https://weatherization.ornl.gov/training-technical-assistance/](https://weatherization.ornl.gov/training-technical-assistance/)
INTRODUCTION AND OVERVIEW

The Weatherization Assistance Program (WAP) is administered through the State of Florida Department of Economic Opportunity (DEO), Bureau of Economic Self-Sufficiency (BESS) Programs. Funding for the Weatherization Assistance Program comes from the U.S. Department of Energy (DOE) and the U.S. Department of Health and Human Services (HHS).

The goal of WAP is to provide energy conservation measures to the low-income population. In order to meet this need, DEO contracts with local Weatherization Subrecipients to administer WAP services. Subrecipients consist of non-profits, local governments, and Community Action Agencies (CAA’s) from around the State. Agencies under contract to provide WAP services may use their own agency crews or private contractors to provide energy conservation measures. The local administrator is ultimately responsible for the quality of workmanship and effectiveness of services provided.

Within the framework of the federal regulations and state codes, Florida has the flexibility to operate the WAP in a manner that is best for the low-income families in Florida.

DEO gives discretion to Subrecipients administering WAP at the local level. Each year, DEO must submit to DOE a State Plan on how the WAP will be administered within Florida. The State Plan directs the adherence to federal regulations; production numbers, statistics for elderly and disabled persons assisted, monitoring plan, budgets, and training and technical assistance dollars.

DEO has the responsibility to ensure that services across Florida have uniformity and that an applicant will be treated equitably in all the service areas of the State. DEO ensures quality of service through an extensive training and monitoring plan. Each individual Subrecipient is regularly monitored for compliance through the evaluation of the agency performance in the implementation of the WAP.
THE MANUAL

The Florida Weatherization Assistance Program (WAP) Policy and Procedures Manual (Manual) was designed as a comprehensive reference on policies and procedures for the administration of the WAP and is incorporated into the subgrant agreement between DEO and subrecipients. Failure to comply with requirements set forth in this manual may result in a default of the agreement, and subrecipients that don’t comply may be subject to sanctions or other penalties. The manual provides:

- Information regarding WAP policies mandated by the State and Federal government
- Required procedures necessary for the operation of the WAP
- Instruction for completion of required forms

The manual is reviewed and revised as needed. Policy changes identified in the annual WAP State Plan are included in the manual. Input from staff and program users is considered when making changes to the manual.
PROGRAM ORGANIZATION

Federal
The United States Department of Energy (DOE) is responsible for the Federal Administration of the Weatherization Assistance Program (WAP). The program is administered in accordance with 10 CFR, Part 440, Subpart D, of the DOE Regulations.

State
The Florida Department of Economic Opportunity (DEO), is the Grantee for the State of Florida and is responsible for statewide coordination of the WAP. Its specific responsibilities are:

- To plan and administer the statewide WAP subject to monitoring by the federal level of DOE.
- To negotiate Subrecipient contracts in order to provide assistance on the local level.
- To transmit program policy and appropriates materials to Subrecipients.
- To provide a monitoring system to regularly evaluate local agency performance.
- To assist local agencies in the development of correction action plans when appropriate.
- To enforce the rules, regulations, and mandates governing the responsibilities of local Subrecipients in the operation of the program.

Note: If a Subrecipient fails to take appropriate corrective action in noted programmatic activities, DEO reserves the right to take appropriate action.

Subrecipients
Subrecipients administer the WAP on the local level. They are the first point of contact for most program participants and are the primary contact for building owners and low-income households that are the intended program recipient. They perform most of the functions that are necessary to meet program goals, and follow procedures to ensure compliance with all program requirements.

Subrecipient specific responsibilities are:
- To ensure the WAP funds are only expended on eligible activities on behalf of eligible households.
- To meet the energy conservation and technical performance goals of the program.
- To foster the technical advancement of the program, such as technical support providers and other program partners.
- To cooperate with DEO in providing information to DOE, other State agencies and to the public.
- To meet all of the terms and conditions of this manual, the DEO contract and other program policy.
**PROGRAM FUNDING**

**Funding**
The Weatherization Assistance Program (WAP) in Florida has two primary funding sources: the U.S. Department of Energy (DOE) and the U.S. Department of Health and Human Services (HHS), of which a portion of the State’s allocation of LIHEAP funds is used. The formula takes into consideration the number of income-eligible persons in each county. All funds are used to weatherize dwellings and must follow the Florida WAP Procedures Manual, the current Agreement, the Standard Work Specification – Field Guide (SWS/FG); State Weatherization Program Notices; and all applicable DOE guidelines. The Low-Income Home Energy Assistance Program (LIHEAP) funds are combined with the WAP DOE funds and are allocated to the network of WAP provider Subrecipients using the DOE approved allocation formula.

Subrecipients provide services in single county or multi county service areas. Funding is provided annually to the same Subrecipients that, based on an annual on-site monitoring and/or monthly desk monitoring by the State office, are successfully administering the WAP in accordance to prescribed guidelines.

All Subrecipients must have an active U.S. Federal Contractor Registration DUNS Number when entering into an agreement with the DEO ‘s WAP. Status of Subrecipients registration will be checked annually by the Department’s Grant Manager through the U.S. System for Award Management website: [https://www.sam.gov/](https://www.sam.gov/)

Reimbursement requests by Subrecipients with an expired registration will not be processed until the registration renewal is confirmed ([https://www.uscontractorregistration.com/](https://www.uscontractorregistration.com/))
POLICY ADVISORY COUNCIL

As required by Federal regulations, a Policy Advisory Council (PAC) assists in the development and implementation of the WAP and advises DEO on a broad range of issues relating to the program. The PAC is broadly representative of organizations that provide services to low-income persons in Florida. PAC meetings are held regularly throughout the contract/budget period. Travel by PAC members to PAC meetings is reimbursable by DEO.

STATE PLAN

A Weatherization Assistance Program State Plan (State Plan) is developed annually by DEO as part of the State's application for Federal WAP funds. The State Plan is used as an overall guide for program operation and outlines the State's objectives for the expenditure of funds received from DOE and DHHS. It identifies the local Subrecipients contracted to carry out the State's WAP activities, projects the allocation to be awarded to each local Subrecipient, and lists the number of units expected to be weatherized during the annual budget period.

Before the State Plan is submitted to the DOE for approval, it is reviewed by the PAC and public hearings are held to obtain comments on the State Plan. These hearings provide an opportunity for local Subrecipients, communities, and residents to have input regarding current program operations, as well as the identification of needs, and potential new WAP service providers. The final State Plan is submitted to DOE for approval after considering the comments received. The approved State Plan is included in the WAP contract.
CHAPTER 2
ADMINISTRATIVE PROCEDURES

Grant Award
All Subrecipients receiving a grant award from Florida Department of Economic Opportunity (DEO) for providing weatherization services are bound by the grant award documents such as the agreement, payments, and financial reporting requirements. Specific procedures must be followed to initiate grant activities, receive payments or reimbursements for expenditures, and to report financial and program activities.

The issuance of all grant awards for the weatherization program shall be governed by:

- 10 CFR 440 - Weatherization Assistance for Low Income Persons/Final Rule

Upon the Subrecipients signing of the contract the terms and conditions of the grant become the agreement between the Subrecipient and DEO, which sets forth the manner that the Subrecipient shall operate the program.

Should a Subrecipient decline a contract or fail to acknowledge acceptance of an award, DEO shall release the funds obligated for that award. If this should occur, DEO shall provide the Subrecipient with written notice of the intent to release funds. "Release of Funds" is defined as de-obligating the funds from the financial system in DEO. After a Subrecipient has been notified and the award is still not accepted, procedures to select a new Subrecipient for that area may be implemented.

Contract Management
The contract between DEO and the Subrecipient is written for three program years, typically beginning July 1, and ending on June 30 of the third year. Annual budgets are based on estimated production of a minimum number of units at the maximum average cost per unit. If the Subrecipient’s average cost per unit is lower than the maximum cost per unit, the Subrecipient must complete additional dwelling units.

Subrecipients are responsible for the completion of the contract/budget goals regardless of participation in any other projects that may be entered into by the Subrecipient.

Subrecipients are required to monitor their expenditures and production throughout each budget period and make any adjustment necessary to complete their production goal and fully expend their budget period allocation.

DOE regulations require that reimbursement cannot exceed actual expenditures on weatherized dwelling units. Therefore, any Subrecipient that completes dwelling units at a cost per unit that is less than the average cost per unit in their last approved budget for that budget period must complete additional dwelling units to fully expend the amount budgeted for materials, labor and
program support and be eligible for full reimbursement of these expenditures for that budget period.

Subrecipients should assess their expenditures and production at the mid-point of each budget period and again 90 days prior to the end date of the budget period. This should include expenditures and production to date as well as any anticipated expenditures and production through the end of the budget period. If as a result of this assessment, it is likely that the budget will not be fully expended or production goals will not be completed by the end of the contract period, DEO should be consulted to determine whether a budget modification or a reduction in allocation for that contract period should be submitted.

Budget Modifications

- **Formal Modifications:**
The budget, budget narrative, and production schedule shall be used as the financial plan to operate the weatherization program. Grant expenditures shall be in accordance with the approved budget and detailed budget narrative. Increases in funding are only valid by formal modifications. Per the WAP subgrant agreement, parties to the agreement (Subrecipient and DEO) may request modification to the provisions of the agreement, and changes can only be valid when reduced to writing and duly signed by the parties.

- **Informal Modifications:**
The Subrecipient shall request a budget modification for any line item changes that does not increase or decrease the budget. Budget changes must be submitted no later than 30 calendar days prior to the anticipated implementation date;
  - Subrecipient must submit to DEO a letter or email of explanation for the modifications requested to be made along with the revised applicable pages to be amended, and each page must be signed and dated by Subrecipient.
  - Prior to the submission of a Financial Activity in which the changes are implemented, Subrecipient must have received DEO’s written or email approval of the proposed modifications.
  - Upon approval by DEO, Subrecipient budget detail will be revised in DEO’s electronic payment system;

  **NOTE:** The administrative budget line item cannot be exceeded. Administrative costs which exceed the approved percentage of expenditures for administration shall be considered “**Unauthorized Costs**”.

Scope Modifications
The Subrecipient shall obtain prior approval for any changes to the scope or objectives of the approved project. If Subrecipients cannot complete minimum production in accordance with the approved production schedule, written communication shall be sent to DEO stating the reason(s) why production goals cannot be met. Failure to comply may result in withholding of payments until the Subrecipient is in compliance with the approved production schedule. The Subrecipient must
complete the minimum total number of homes required on or before the ending date of the project period.

**Grant Award Payments**
Subrecipients will be funded in a timely manner to facilitate the purchase of approved materials and the recruiting or maintenance of qualified labor to weatherize homes. DEO shall use the reimbursement method of payment for costs incurred in providing weatherization services. A request for funds must be limited to the immediate cash needs of the Subrecipient. Payments will be made via Electronic Funds Transfer.

**Advance Payments**
Please refer to the agreement for specific guidance related to the requirements of the advanced funds.

**Monthly Invoicing/Reimbursements**
Subrecipients shall report monthly financial and program data to DEO. Reimbursements may be made for actual expenditures in accordance with the Subrecipient production schedule.

The WAP monthly Financial Activity (FA) must be provided to DEO no later than the twenty-first day of each month following the end of the reporting month in which funds were expended. Subrecipient shall submit the report regardless of whether funds were expended. Reimbursement of expenditures shall be based on this report. Only with prior approval by DEO, will more than one reimbursement be processed for any calendar month. The FA must be submitted in DEO’s Subrecipient Enterprise Resource Application (SERA) and a signed copy submitted via facsimile or electronic mail by the due date. In the event the twenty-first day of the month falls on a weekend day or holiday, the FA shall be due on the next business day. The FA must be signed and dated. Each FA shall contain the following information:

1. All expenditures that occurred during the reporting month;
2. The amount of reimbursement requested;
3. The number of dwellings weatherized; and
4. An attestation, signed by an authorized signatory, that Subrecipient was open and operating during its reported business hours.

Each completed dwelling reported, will have a Building Work Report package consisting of a completed:

1. Building Work Report (BWR);

DEO shall review each FA for compliance with the budget requirements outlined in Attachment A of the Subrecipient WAP Agreement.
**Monthly Expenditure Tracking System (METS) Reports:**
Mid Agreement METS is due to DEO by the 21st day of the 7th month of the WAP Agreement. In the event the twenty-first day of the seventh month falls on a weekend day or holiday, the mid-agreement report shall be due no later than the next business. The Subrecipient will submit:

a. A completed METS to include all PS and Admin line item actual costs incurred by Subrecipient through the 6th month of the WAP Agreement.

b. A Revenue and Expenditure spreadsheet (or applicable fiscal supporting document) that will provide the actual expenditure amounts per month to date that support the METS totals.

Upon DEO receipt of these documents, DEO staff will compare the FA, PS and Admin amounts Subrecipient with the METS PS and Admin amounts and supporting spreadsheets. Subrecipient will be notified if any other supporting documentation is needed based upon the results of this review. If DEO determine an on-site monitoring is warranted to resolve an issue, it will be scheduled.

A Close-out METS with the last FA expending the remaining balance of funding in the Agreement is submitted to DEO. Subrecipient will provide a METS that includes all costs charged in the PS and Admin categories along with the supporting spreadsheet. Subrecipient cannot exceed the percentage caps for either PS or Admin at the end of the Agreement period.

**Audits**

All applicable Subrecipients that expend $750,000 or more in Federal awards in its fiscal year, must have a single or program-specific audit conducted in accordance with the provisions of 2 CFR 200 and 215.97 F.S.

In determining the Federal awards expended in its fiscal year, Subrecipient must consider all sources of Federal awards, including Federal resources received from DEO. The determination of amounts of Federal awards expended should be in accordance with the guidelines established by 2 CFR 200. An audit of Subrecipient conducted by the Auditor General in accordance with the provisions of 2 CFR 200, as revised, will meet this requirement.

If a Subrecipient expends less than $750,000 in Federal awards in its fiscal year, an audit conducted in accordance with the provisions of 2 CFR 200, as revised, is not required. If the Subrecipient expends less than $750,000 in Federal awards in its fiscal year and elects to have an audit conducted in accordance with the provisions of 2 CFR 200, the cost of the audit must be paid from non-Federal resources (i.e., the cost of such an audit must be paid from Recipient resources obtained from other than Federal entities).

All Subrecipients are required to submit a copy of their annual audit to the Department of Economic Opportunity Office of Inspector General (OIG) for review. The OIG performs a preliminary review of the audit and then provides the audit and a technical review questionnaire to the Florida WAP office. WAP staff and management review the audit and complete the accompany questionnaire. If there are findings regarding the Subrecipient’s direct administration of the WAP or indicate an
organizational activity considered to be a material weakness or deficiency finding, WAP management provides comments and drafts a management decision letter for review. Then, upon consultation with the OIG staff, the final management decision letter is provided to the Subrecipient.

WAP staff will follow-up with the Subrecipient to address any questions or provide additional clarification regarding corrective actions required to resolve the issue.
INSURANCE REQUIREMENTS

LIABILITY INSURANCE: Pursuant to 10 C.F.R. § 440.18, Subrecipient and Subrecipient’s subcontractors are required to have sufficient liability insurance coverage for performing weatherization-funded activities. Such insurance will protect the Subrecipient from claims set forth below which may arise out of or result from the Subrecipient’s operations or performance of the work, whether such operations be conducted by the Subrecipient or by a subcontractor or anyone directly or indirectly employed or acting as an agent by either for whose act any may be liable:

- Claims under Worker’s Compensation, disability benefit and other similar employee benefit acts;
- Claims for damages because of bodily injury, occupational sickness or disease, or death of its employees;
- Claims for damages because of bodily injury, sickness or disease, or death of any person other than its employees;
- Claims for damages insured by personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by the Subrecipient, or (b) by any other person;
- Claims for damages, other than to the work itself, because of injury to or destruction of tangible property, including loss of use resulting there from;
- Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle; and
- Claims for damages due to loss of money or other property sustained through any fraudulent or dishonest acts committed by any board members (officers) or employers.

Liability Insurance:
Subrecipients are required to purchase liability insurance in limits of not less than $3,000,000 in the aggregate and $1 million per occurrence, to cover general agency liability requirements for the Weatherization Assistance Program. Any deductibles and self-insurance retention shall not be greater than $25,000. Liability insurance procurement must be in compliance with applicable OMB Circulars. Subcontractors must provide their own coverage or be adequately covered by the Subrecipient’s policy.

Documentation to substantiate all insurance coverage will be reviewed during monitoring visits. Failure to have adequate insurance coverage may result in all reimbursement requests being withheld until compliance is met.

Pollution Occurrence Insurance:
Since regular liability insurance policies do not provide for many health and safety measures such as lead and other pollution occurrence items, DOE strongly recommends Pollution Occurrence
Insurance (POI) as a part of, or an addendum to, general liability insurance. If a Subrecipient chooses NOT to obtain POI coverage and damage occurs because of not following all aspects of Lead Safe Weatherization, or there is a disturbance to any other environmental pollutants (i.e. asbestos), the cost to do remediation, clean up, relocation, medical expenses, or any other resulting costs shall not be charged to the WAP and must be covered by another funding mechanism.

Only those contractors who have been trained on Lead Safe Weatherization techniques and have POI (or are under Subrecipient’s policy) may work on pre-1978 dwellings that Subrecipient has confirmed have lead paint that will be disturbed through weatherization activities.

DEO shall authorize payments for cost incurred by Subrecipients to obtain Pollution Occurrence Insurance for Weatherization projects for personal injury and for property damage. Minimum coverage of Pollution Liability, each Pollution Condition $1,000,000.00, General Aggregate Limit $1,000,000.00. Costs may be charged as a separate line item on the Financial Activity.
WEATHERIZATION DATA COLLECTION
AND REPORTING DATABASE
Subrecipient Enterprise Resource Application (SERA)

SERA is DEO’s Bureau of Economic Self-Sufficiency’s fiscal and programmatic online database system to track contracts, payments, expenditures, modifications, monitoring and federal allocations, and is the Subrecipient’s reporting vehicle and payment mechanism.

Complete and accurate data for all weatherized buildings and dwelling units must be entered into SERA. Before a building or dwelling unit can be presented to DEO for payment, the Subrecipient must enter data that certifies:

- That the building or dwelling unit is eligible to receive assistance;
- That the applicable budget period and contract number is correctly entered;
- That all work performed on the building or dwelling unit has been completed; and,
- That a post inspection of the work has been conducted.

There are security measures in place. Each Subrecipient will also be provided access for users within their agency that need to use the system to input monthly financial status reports.
PROGRAM INCOME

Program Income is gross income earned by the recipient that is directly generated by supported activity or earned as a result of WAP activities. Program Income includes income from fees for services performed, the use or rental or real personal property acquired under the federally-funded project, the sale of commodities or items fabricated under an award, license fees and royalties on patents and copyrights, and from payments of principal and interest on loans made with WAP funds. Interest earned on advances of DOE funds is not Program Income. Program Income does include rebates, credits, discounts, etc., or interest earned on any of them.

Program Income funds include funds received for coordinated work and funds received from rental of WAP tools and equipment for fee-for-service activities. Before Program Income funds can be expended, a Program Income budget be entered in the SERA data base for DEO approval. The plan must be prepared at the beginning of the annual budget period and may be modified during the budget period.

- Program Income funds must be accounted for separately and expended before any other program funds are spent.
- Up to 10% of the Program Income funds may be used for T&TA.
- A minimum of 80% of the funds received must be used for labor, materials and program support, in compliance with DOE regulations.
- Program Income received within an annual budget period must be entered on the Program Income tab in the Database. These funds must be spent before any other funds are requested from DEO.
- Subrecipients must report on the receipt and expenditure of Program Income on a quarterly basis, using the Database.
- DOE will maintain a reversionary right to all tools and equipment purchased with Program Income.
- All Program Income received during a given budget period must be identified in the Unaudited Financial Statements.
- Interest income earned on Program Income funds may be retained by the subrecipient, and shall be used at the discretion of the subrecipient’s board to further the corporate purposes of the subrecipient organization.
- Property owner (i.e. landlord) contributions and leveraged resources (i.e. utility or Grantee funds) are NOT considered to be “program income” for the purposes of the Weatherization Assistance Program.
LEVERAGED FUNDS

_Leveraged Non-Federal Funds:_ Funds from non-federal sources which are used in weatherizing eligible homes are considered leveraged funds and should be reported separately to the state. Leveraged funds may include landlord or owner donations, volunteer labor, or contributions by other non-federal sources.
TRAINING AND TECHNICAL ASSISTANCE (T&TA)

T&TA activities are intended to maintain or increase the efficiency, quality and effectiveness of the Weatherization Program at all levels.

When the training is regional or otherwise limited to a certain group of Subrecipients, DEO will inform Subrecipients if their attendance is required. If a Subrecipient has any doubt regarding attendance, DEO should be consulted.

T&TA funds may be used to train Subrecipient contractors. In making the determination to pay for contractor training, Subrecipients should secure a retention agreement in exchange for training. The contract agreement should stipulate that contractors will work in the Program, at a minimum, for a specific amount of time and should align with the cost of the T&TA provided. Examples of contractor/Agency agreements can be found at www.waptac.org. A copy of the agreement is provided to the State office.
The activities listed on the following table can be considered eligible T&TA costs, and charged as either administrative costs or, as program support costs as applicable.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conferences</td>
<td>Registration, travel and lodging costs for conferences, seminars, workshops and on-site training.</td>
</tr>
<tr>
<td>Staff Training</td>
<td>Costs incurred to provide training and professional certification for Subrecipient staff.</td>
</tr>
<tr>
<td>Salary</td>
<td>Percentage of salary for Subrecipient staff person responsible for ensuring that training, safety requirements and needs are met and to oversee in-house weatherization training.</td>
</tr>
<tr>
<td>Weatherization Equipment</td>
<td>Purchase of weatherization equipment associated with direct training.</td>
</tr>
<tr>
<td>Membership and Subscriptions</td>
<td>Membership fees for weatherization-related organizations and subscriptions to trade papers and magazines.</td>
</tr>
<tr>
<td>Computer/Electronic Media</td>
<td>Purchase of computer/electronic media equipment, cost of training Subrecipient staff to operate this equipment.</td>
</tr>
<tr>
<td>Energy Data collection and Analysis</td>
<td>Costs directly related to gathering, compiling or copying information to be used in providing fuel usage and savings analysis data, the cost of devices used to calculate fuel usage, and the cost of inputting data for a historical database to track previously weatherized units.</td>
</tr>
<tr>
<td>Applicant/Client Education</td>
<td>Development and distribution of educational materials for applicant education meetings, workshops, presentations, videos, and other client education activities.</td>
</tr>
</tbody>
</table>
PRIOR APPROVALS FOR
CERTAIN EXPENDITURES OR WORK

Prior written approval from the DEO is required for the activities listed below:

- Request to purchase or lease a vehicle;
- Out-of-state travel by Subrecipient;
- Weatherization of a building outside of a Subrecipient’s specified service area in a joint venture to complete a building with another Subrecipient;
- Purchase of capital equipment;
- “Fuel switching” for a heating appliance replacement;
- Participation in fee-for-service/WAP related initiatives;
- Change in multifamily audit priorities;
- Replacement Windows in excess of eight (8);
- Any deviation from approved procedures.
MONITORING

The monitoring process consists of the following activities:

The visit:

- A formal written correspondence is sent to the Subrecipient to schedule the time frame of the visit. The correspondence will include a list of documents to be available for review and other specific programmatic activities relating to the weatherized dwellings.
- An entrance interview will be held with Subrecipient management and weatherization staff to discuss any previous non-compliance issues along with the agenda for the visit.
- During the dwelling inspection process, the applicable number of dwellings will have the Quality Control Inspections (QCI) performed to ensure the Subrecipient coordinated QCI results meet the QCI requirements.
- If any Health and Safety issues are found that present imminent danger to the household, the Subrecipient will be directed to immediately resolve the issues.
- An exit interview is held and issues that will be addressed in the follow-up report are covered.

The report:

- A written report that describes the current monitoring assessment is issued to the Subrecipient within 60 days of the visit.
- The report will identify any existing or potential non-compliance issues found during the visit.
- For non-compliance or workmanship issues found during the dwelling inspection, photo documentation is included.
- Corrective actions are recommended and the appropriate guidance document is referenced, samples of best practices, and any training available to resolve may be provided if applicable.
- Address issues regarding workmanship or measures installed performed on a dwelling that has already been reported as a completed unit. The Subrecipient is responsible for addressing the issue with the subcontractor and corrective actions should be the responsibility of the subcontractor.
- Disallowed costs shall be offset by the Subrecipient on future dwellings or reimbursed to the state.

Subrecipient response:

- Subrecipients will have 30 days after receipt of the monitoring report to respond.
- If the Subrecipient response and/or corrective action to be implemented are not sufficient to assure future compliance, additional clarification may be requested and the Subrecipient will have an additional 30-day time frame to achieve compliance.
- Failure by a Subrecipient to implement acceptable corrective actions or rectify a noncompliance issue at the end of the second response period may result in the Department withholding of reimbursements until compliance is met.
• Follow-up visits may be scheduled as determined by State staff or requested by Subrecipient staff to focus on a specific area of concern or to provide specific oversight or training.

Monitoring schedules may be changed on a quarterly bases based on the results of the desk monitoring results. The monitoring schedules are planned on a quarterly basis and priority selection of Subrecipients to visit is based upon the results of:
  • The DEO Office of Inspector General audit;
  • the last monitoring report;
  • most recent independent audit;
  • monthly fiscal reports;
  • to date production records;
  • a review of applicable board minutes;
  • interactions/communications with the Subrecipients’ coordinator and fiscal staff; and
  • needs or requests submitted by the Subrecipient;
  • deferral units reported to the state office since the last monitoring visit.*

Staff utilizes a Monitoring Instrument that addresses:

<table>
<thead>
<tr>
<th>Financial/Administration</th>
<th>Financial Management/Accounting Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicles and Equipment Inventory</td>
<td>Payroll/Personnel</td>
</tr>
<tr>
<td>Audits</td>
<td>Records Retention</td>
</tr>
<tr>
<td>Invoicing</td>
<td>Contractor Procurement Process</td>
</tr>
<tr>
<td>Client Eligibility (Client File Review)</td>
<td>Contractor Qualifications and Licensing</td>
</tr>
<tr>
<td>Pre and Post Inspections Results</td>
<td>Preparation of Work Orders</td>
</tr>
<tr>
<td>Priority List and Energy Audits</td>
<td>Health &amp; Safety Compliance</td>
</tr>
<tr>
<td>Weatherization Measures Installation</td>
<td>Quality Control Inspection Report</td>
</tr>
<tr>
<td>Qualifications &amp; Training Assessment</td>
<td>Needed Training &amp; Technical Assistance</td>
</tr>
</tbody>
</table>

A minimum of 5% of each Subrecipient’s completed weatherized dwellings reported since the last monitoring visit is inspected and the QCI will be performed on these dwellings and files. During each visit, at least one dwelling “in progress” will be visited in order to assess:

<table>
<thead>
<tr>
<th>Quality and compliance</th>
<th>Appropriate and allowable materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriateness and accuracy of energy audits</td>
<td>Comprehensive final inspections</td>
</tr>
<tr>
<td>Safe work practices</td>
<td>Lead safe weatherization protocols</td>
</tr>
</tbody>
</table>

One dwelling ready for bid (diagnostic tests completed and bid prepared) will be visited to ensure the accuracy of applicable testing that had been performed. During the visit, an agency may also be required to conduct any diagnostic testing procedures on a dwelling if it appears that additional training is needed or to ensure the testing processes and interpretation of the results are performed or followed correctly.
QCI Monitoring:
For any dwellings that fail during the State visit QCI, due to a workmanship issue, the Subrecipient will be required to have corrective action taken and provide photo documentation of the resolved issue. It will also be required to provide the State WAP office with the necessary changes implemented in its policies, procedures guidelines that will ensure the issue is not repeated on future dwellings.

If the issue(s) is an insufficient QCI having been performed, the issue will be addressed with the QCI individual and Subrecipient management to determine the best course of action to ensure that inspection area will not be repeated on future dwellings. The Subrecipient may be required to submit copies of all QCI related documentation to the State WAP office for review and approval prior to processing any payment for dwellings completed and submitted on a monthly Financial Status Report (FSR).

In either QCI non-compliance situation, if there is a second repeat occurrence, the issue will be discussed with all parties (Subrecipient management, QCI individual and State WAP staff) to determine the best course of action. If it is determined that a QCI individual is not performing the task as required, that QCI individual may not be allowed to perform the QCI activity for Florida WAP Subrecipients or the State WAP office.

Risk Assessment:
Annually a risk analysis assessment of each Subrecipient’s past performance will be conducted after the program year to summarize the financial reviews, monitoring report(s), and any outstanding issues. From this assessment, each Subrecipient’s needs, strengths, and weaknesses may be determined and plans made to follow-up on providing the necessary T&TA to ensure future compliance. Subrecipients determined to be at risk may be placed in a probationary status for a period of time.

Upon being classified as “at risk” Subrecipient and being placed on a probationary status, the Subrecipient will be required to submit a detailed Corrective Action Plan (CAP) that will outline the processes to be implemented to address the issue(s) along with a timeline to achieve resolution. The DEO Government Operations Consultant II will monitor the progress of the Subrecipient to determine the status of the resolution and that the submitted CAP is being implemented. If a site visit to the Subrecipient is warranted, it will be prioritized to be performed. Failure by a Subrecipient to rectify the situation within the prescribed probationary time frame may result in the termination of the Subrecipient agreement.

Quality Assurance Activities:
Based upon the review of the weekly, monthly and quarterly desktop reviews of program and fiscal reports, and in conjunction with performing the DOE required annual monitoring visit, State staff are available to conduct additional on-site Quality Assurance (QA) visits if a situation warrants it. For any Subrecipient that is considered at risk, QA visits will become part of the state oversight activity to ensure the CAP is being implemented.

Subrecipient Audit Reviews:
All Subrecipients are required to submit a copy of their annual audit to the Department of Economic Opportunity (DEO) Office of Inspector General (OIG) for review. The OIG performs a preliminary
review of the audit and then provides the audit and a technical review questionnaire to the Florida WAP office. WAP staff and management review the audit and complete the accompany questionnaire. If there are findings regarding the Subrecipient’s direct administration of the WAP or indicate an organizational activity considered to be a material weakness or deficiency finding, WAP management provides comments and drafts a management decision letter for review. Then, upon consultation with the OIG staff, the final management decision letter is provided to the Subrecipient.

WAP staff will follow-up with the Subrecipient to address any questions or provide additional clarification in regard to corrective actions required to resolve the issue. As indicated in the QA section, additional onsite visits as applicable may be coordinated to ensure applicable corrective actions are being implemented to ensure resolution in a timely manner.
CERTIFICATION REQUIREMENTS

DEO requires that certain Subrecipient personnel be certified by the Building Performance Institute (BPI) in certain professional positions. Subrecipients are advised to take steps during the program year to set aside resources and arrange for staff training to ensure that staff will be prepared to meet all BPI certification requirements.

*The cost to Subrecipients for certification may be charged to either, training and technical assistance, or to program support.*

DEO, in collaboration with the Florida Association of Community Action (FACA) and the Florida Weatherization Network (FWN), will conduct Energy Auditor training to meet current U.S. Department of Energy (DOE) requirements prior to Quality Control Inspector (QCI) certification.
REQUIRED FILE DOCUMENTATION

All client files presented to the DEO monitor for review must include the following documentation.

1. **Client Intake Form**: completed; signed and dated by the client
2. **Income documentation** (for past twelve months): Total for all household members
3. **Documentation of ownership or signed Landlord Agreement Form**
4. **Copies of Social Security Documentation** for all household members with all but last four digits covered up
5. **Copy of photo ID for applicant: drivers license or State ID card** (State ID cards may be obtained at any Driver License office. Waiver for a client without a photo ID may be obtained by contacting your grant manager.)
6. **Copy of client utility bill** at the time of intake and for first 60 days after work has been completed
7. **Client Selection (Priority) Criteria Form, including documentation of Disability if used in determining priority points**
8. **Copy of the Complaint/Appeal Procedures** Form signed and dated by the client
9. **Inspection Data and Results**
   a. Photographs **(before and after)** printed in file – not on a digital media
   b. Copy of NEAT or MHEA page one (date on audit follows date on Client Intake Form)
   c. Priority List Assessment and Testing
      i. Household Pollution Survey Data Sheet and House site plan
10. **Copy of Pre-Work Order Agreement**: signed and dated by client and inspector
    a. Include all required measures or document in file
    b. Include all Priority List or audit measures to be addressed
11. **Building Work Report (BWR)**
    a. Signed and dated by Client
    b. Signed and dated by Inspector
    c. All required measures addressed (notation whether completed or not)
    d. Blower door dates and readings
    e. Pre and Post monoxor readings (or “No Gas” in comments section)
12. **Copy of bid package(s), invoices, receipts and payment vouchers**;
13. **Pre-1978 dwellings – copies of all Certified Renovator Documentation or Clearance Testing**
14. **Copies of any approved waivers** from the Department
15. **Copies of the applicable Pre and Final permits** issued for the weatherization work
16. **The Client File Checklist** signed by a Subrecipient staff.
17. **RED Calculator printouts** for initial and final inspections.
18. **Refrigerator Metering Record**
19. **QCI inspector Sheet**
20. **Infrared pictures**
21. **ASHRAE Checklist**
Each subrecipient must maintain written standards of conduct governing the performance of its employees engaged in the award and administration of contracts (2 CFR 200.112). No subrecipient employee, officer, or agent shall participate in the selection, award, or administration of a contract supported by federal funds if a real or apparent conflict of interest would be involved. Such a conflict would arise when the employee, officer, or agent, any member of his/her immediate family, his/her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in the firm selected for an award. The officers, employees, and agents of the subrecipient shall neither solicit nor accept gratuities, favors, or anything of monetary value from subcontractors or parties to sub-agreements (e.g., agreements governing procurement of materials). The standards of conduct shall provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the subrecipient.

Subrecipient staff that act in a decision-making capacity with respect to WAP funds or are in a position to influence a decision (such as staff that determines the work scope on an assisted building) may not directly benefit from the investment of WAP funds. WAP funds may not be invested in buildings owned by officers, employees, or agents of the subrecipient, including investment in rental property owned by officers, employees, or agents, except as described in the following paragraph.

Assistance may be provided for residential units occupied by employees of the subrecipient who qualify as low-income and are not employed in a decision-making position provided that:
- all other program rules and guidance are adhered to.
- the subrecipient can demonstrate that the employee was not provided with greater opportunity to learn about the program or apply for assistance than other members of the community.
- prior approval is granted by DEO

Subrecipient staff acting either as individuals or on behalf of an outside contracting firm may not solicit or provide contractor services to low-income clients who have received or been deemed eligible for WAP services. Low-income clients seeking work from private contractors should be advised to consult with other sources. Any Subrecipient staff who offer other energy or building repair services for a fee to the general public may not also perform these same services for the Subrecipient. However, it should not be during the weatherization process.

Subrecipient staff, who originally establish a relationship with the client as a representative of the WAP, must not transition that relationship to one where they subsequently become a private contractor for the client. Subrecipient staff engaged in private contractor work outside of Subrecipient operations are also prohibited from using Subrecipient tools, vehicles, and equipment to perform this work. They must have their own privately-owned tools, vehicles and any other equipment when doing any contractor work not otherwise prohibited.

Subrecipients set up to perform services through a fee-for-service arrangement are not prohibited from providing such services as long as the Subrecipient, and not an employee acting as an
independent contractor, is paid for the service in accordance with all appropriate requirements related to this type of arrangement.

The following examples illustrate work that shall not be undertaken by Subrecipient staff:

**Example A**
The auditor from Subrecipient A goes to the home of a client to perform an inspection before the WAP work is begun. While explaining to the client about what the WAP will provide the auditor indicates that new prime windows will not be included in the scope of work in response to questions by the client. The auditor remarks that he could install new windows but the cost would have to be paid by the client.

The client states they would be willing to pay for new windows. The auditor responds that he could do this work for the client. The client agrees, and the auditor returns at a later date and completes this installation as a private contractor.

*When a Subrecipient operates a fee-for-service component to their program in accordance with the guidance provided elsewhere in this chapter, they may install windows through a separate agreement, with notification provided to DEO, but an auditor operating his own business may not contract separately with a client.*

**Example B**
An ad is placed in a newspaper advertising contractor services. The person providing these services is the director of the local WAP Subrecipient and performs other contracting services on a part-time basis. The ad does not mention the local WAP program. A homeowner seeing the ad is interested in having their roof replaced and calls the contractor. A price is agreed, and while replacing the roof the contractor mentions that he is also the director of the local WAP.

The homeowner has never heard of the program but applies and is deemed eligible and is placed on the waiting list. Now that this homeowner has become a WAP client, the WAP director can no longer engage in any private contractor work for the homeowner.

*The initial agreement to install the roof was not a conflict of interest. However, once the homeowner becomes a WAP client he should be referred to other contractors for any subsequent service.*

**Example C**
An employee of the Subrecipient also has an automotive repair business. This employee cannot perform automotive repair work for the Subrecipient on WAP vehicles.
Excerpt from DOE Weatherization Program Notice (WPN) 10-08
February 1, 2010

U.S. Department of Energy (DOE) adheres to the transparency requirements placed on these and other government financial assistance programs instituted by the Administration. DOE will work diligently with any state WAP or local service provider to gather the required information and provide it to the requestor. However, the DOE must comply with all requirements on the Government to protect the privacy interests of individuals who participate in these financial assistance programs.

In accordance with 10 CFR 600.153(f), Retention and access requirements for records, “Unless required by statute, DOE shall place no restrictions on recipients that limit public access to the records of recipients that are pertinent to an award, except when DOE can demonstrate that such records shall be kept confidential and would have been exempted from disclosure pursuant to the Freedom of Information Act (5 U.S.C. 552) if the records had belonged to DOE.” DOE would be legally required, pursuant to 5 U.S.C. 552(b)(6), of the Freedom of Information Act, to keep confidential any specifically identifying information related to an individual’s eligibility application for WAP, or the individual’s participation in WAP, such as name, address, or income information. Weatherization Program Notice 10-08.

Thus, states and Subrecipients should extend that same protection to their client records for WAP. States may release information about recipients in the aggregate and which does not identify specific individuals. For example, information on the number of recipients in a county, city or a zip code does not compromise the privacy of the recipients.
SUBRECIPIENT TERMINATION

Department of Economic Opportunity (DEO) may terminate a Subrecipient for cause with thirty (30) calendar day’s written notice. Cause includes the following:

- Misuse of funds;
- Refusal to proceed with work;
- Fraud, lack of compliance with applicable rules, laws and regulations;
- Failure to perform in a timely manner;
- Failure to cure an Event of Default within thirty (30) calendar days from receipt of the notice; -or-
- Refusal by Subrecipient to permit public access to any document, paper, letter, or other material subject to disclosure under chapter 119, Florida Statutes, as amended.
- Disregard for competitive bidding; or other cases of severe conflict of interest.

Whenever a DEO representative uncovers significant problem areas with the work or actions of a Subrecipient, DEO will provide written notice to the Subrecipient. If the problems can be resolved immediately at the local level within 30 calendar days or an acceptable corrective plan is submitted then no further penalty actions will be taken by DEO.

When the problems are of such a nature that they cannot be resolved immediately at the local level or they are not resolved within 30 calendar days, DEO will transmit a “Subrecipient Warning Notice” to the Subrecipient board chairperson, weatherization director, and executive director. The Subrecipient Warning Notice will cite specific section(s) of the WAP agreement where compliance is in question with a requirement that the Subrecipient provide a written plan within 15 calendar days for curing the alleged non-compliance.

If no response is received within 20 calendar days, the plan for resolving the alleged noncompliance is unacceptable to DEO, or if subsequently the plan is not followed, a “Notice of Default and Intention to Terminate” the agreement will be transmitted to the Subrecipient board chairperson, weatherization coordinator, and executive director. Failure by the Subrecipient to respond to the Notice of Default and Intention to Terminate within 20 calendar days will result in the issuance of a “Notice of Termination” of the WAP agreement. With the Notice of Termination, a public review will be scheduled to inform the public of the termination of the Subrecipient and to identify a new Subrecipient to provide local service. Notwithstanding any of the above, DEO may suspend or terminate a contract without prior written notice upon a finding of substantial noncompliance or substantial breach of contract.

Appeals Process
A Subrecipient that receives a Notice of Default and Intention to Terminate may request for DEO to reconsider its finding of default and decision to terminate the contract. The Request for Reconsideration must be in writing and submitted within twenty (20) calendar days of the date of the Notice of Default and Intention to Terminate. The Request for Reconsideration shall include factual and legal arguments in support of reconsideration, any supporting documentation, and express consent for a neutral to be selected to review its Request. The Request must be submitted to the attention of the DEO.
Community Assistance Bureau Chief. If a request for reconsideration is not received by DEO within twenty (20) calendar days, DEO shall issue a Notice of Termination to the Subrecipient.

Upon receipt of a timely Request, DEO will select a neutral to conduct an administrative hearing. The neutral may not be a person who generated the notice to terminate or participated in the decision to terminate. DEO will provide the neutral with a copy of the Request for Reconsideration and Notice of Default and Intention to Terminate. Upon receipt of the foregoing materials, the neutral shall notify DEO and the Subrecipient in writing of the date, time, and place of the hearing. The neutral will establish a schedule for the exchange of any evidence. Evidence that is not submitted in accordance with the schedule and in advance of the hearing may not be used at the hearing. At the hearing, each party will be afforded the opportunity to present its arguments and evidence in support of its respective position. The neutral shall set time limits and procedural guidelines for the presentation. The hearing shall be informal in nature, with no formal examination or cross-examination of witnesses. However, the presentation may be recorded at the request of DEO. Each party has the right to be represented by legal counsel at its own expense.

At the conclusion of the hearing, the neutral will issue a written evaluation. No later than fifteen (15) calendar days following the date of issuance of the neutral’s evaluation, DEO’s Executive Director will review the opinions and recommendations expressed in the evaluation and make a final determination regarding contract termination. The final determination issued by DEO’s Executive Director constitutes the final step in the administrative appeals process.
CHAPTER 3
OUTREACH & PROMOTION

When promoting the Weatherization Assistance Program (WAP), Subrecipient publications and advertisements must include statements and/or information that DEO is the funding agency.

All Subrecipients must conduct outreach during the contract year. Outreach efforts must be made to provide information regarding the nature and existence of the program, eligibility requirements, making application and accessing the program.

Subrecipients must have written protocols describing their outreach efforts and client selection process that addresses the demographics of their service area with specific reference to how they identify and serve owners and renters and other populations with special needs.

It is essential that Subrecipients provide outreach so that all eligible households in their service area, including those with concentrations of minority groups or others that are not likely to apply without targeting outreach, are aware of the program. This may include outreach to neighborhoods or areas other than the one in which the Subrecipient is located.

Outreach efforts should be aimed at other public and private organizations providing similar services as well as directly to the public through various types of public service announcements.

The WAP Subrecipients are required to:

- Document annually its client outreach activities throughout its entire service area.
- Establish a written memorandum of understanding (MOU) with the local LIHEAP Subrecipient (s) for referring LIHEAP recipients who reside within the WAP Subrecipients designated services area/counties.

The LIHEAP Subrecipient will refer clients that meet the following criteria:

- Repeat recipients of LIHEAP services - households that receive LIHEAP assistance three times within the previous twelve (12) month period.
- Households with a high energy burden - expend more than 14% of annual household income on utility bills in the past twelve (12) month period.

Referral of a LIHEAP client to the WAP is not an automatic qualification for services. The client must complete a WAP application to determine if the total annual income of the household does not exceed the federal income guideline threshold of 200%. If the household meets the DOE income guidelines, the position of the client on a waiting list is determined (prioritized) by awarding an equal number of points for each of the following eligibility criteria of households meets:

i. Elderly occupants
ii. Disabled occupants
iii. Children under twelve (12)
iv. Recurring high utility bills
v. Calculated high energy burden

Preference is not given to LIHEAP referred clients. All applicants’ eligibility is determined utilizing the same criteria. If a WAP Subrecipient has non-LIHEAP referral clients who outscore LIHEAP referral clients, then the Subrecipient will document each situation and provide to the State Grant Manager when requested.

Referral Goal

The goal for providing weatherization services to LIHEAP referred clients is ten percent (10%) of all clients served statewide during an agreement period. Each Subrecipient should develop a process for coordinating with the LIHEAP Subrecipient on the number of projected dwellings to be weatherized to estimate the number LIHEAP referrals it could possibly serve.

An example of this communication/coordination is:

i. After the WAP agreement begins, the WAP Subrecipient will notify the LIHEAP Subrecipient (s) of the number of clients (10% of each county’s projected production) it will target to provide WAP services.

ii. Then the LIHEAP Subrecipient will provide a list of LIHEAP clients that meet the referral criteria to the WAP Subrecipient.

iii. If LIHEAP and WAP are administered by the same Subrecipient, a copy of the LIHEAP application along with supporting documentation can be provided to the WAP office.

NOTE: (The WAP application guidelines should be shared with the LIHEAP intake staff for better coordination of a cross intake process.)
APPLICATION PROCESS

The Department of Economic Opportunity recommends the following application process:

1. Although the Client Intake Form (CIF) is available on line or can be mailed out to an interested person, no application can be accepted and considered as complete if mailed or emailed to the Subrecipient.

2. Clients should not be directed to “send in” the supporting documentation.

3. The client can be put on a waiting list based on the information provided on the CIF, but when their name comes up, the information must be updated, verified with supporting documentation and signed again during an appointment with the Subrecipient’s intake staff.

4. Each area of the form should be discussed with the client.

5. All elements must have supporting documentation as applicable and allowable.

6. The six (6) items in the Client Agreement section at the bottom of the form should be explained to the client.

7. If the client indicates there is an existing health situation of a household occupant, that condition should be noted in detail on the CIF or accompanying page.

8. Verification of a health condition may be visibly confirmed – either during the intake process or when the inspector visits the dwelling (before beginning the diagnostic testing to determine what should not be performed, i.e., blower door is the most likely test that would affect an occupant’s health condition.).

9. Subrecipient cannot request a doctor’s script for documentation but one can be accepted if offered.

10. The CIF must be signed and dated by the client in the presence of the Subrecipient intake staff.
State of Florida Weatherization Assistance Program
Application Waiting List Priority Ranking Process

Service to eligible clients must be provided on a first-come, first-serve basis in all cases. However, applications that fall on a waiting list should be assessed with several priorities based on information taken from the application. As defined in the Code of Federal Regulations, Title 10, Part 400.3, priority must be given to the following groups:

- Disabled,
- Elderly,
- Elderly disabled,
- Households with children, and
- Households with high energy burdens,

Using the chart below, awarded points for these categories should establish a high enough ranking to position applicants from these groups to the top of any Subrecipient waiting list. Once the priority is determined, the Subrecipient should proceed with the priority points system to determine client position on the waiting list. The applicant with the most points will be placed at the top of the waiting list.

<table>
<thead>
<tr>
<th>Category</th>
<th>Priority Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>4 points per household will be awarded if the household contains any members age 0 to 12 and/or over 60 years of age.</td>
</tr>
<tr>
<td>Disability</td>
<td>5 points per member will be awarded if the household contains any members who are “Person(s) with Disabilities” as defined in the Code of Federal Regulations, Title 10, Part 440.3, Weatherization for Low-Income Persons.</td>
</tr>
<tr>
<td>Occupants</td>
<td>1 point will be awarded per household member, up to a maximum of 5 points total.</td>
</tr>
<tr>
<td>Waiting time</td>
<td>Up to 5 points based on the total time that the client has been waiting for service.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Waiting Months</th>
<th>Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 to 12</td>
<td>1</td>
</tr>
<tr>
<td>13 to 24</td>
<td>2</td>
</tr>
<tr>
<td>25 to 36</td>
<td>3</td>
</tr>
<tr>
<td>37 to 49</td>
<td>4</td>
</tr>
<tr>
<td>50+</td>
<td>5</td>
</tr>
</tbody>
</table>

High Energy Use/High Energy Burden

The following mathematical calculation will be used to determine the energy burden of a household:

\[
\text{Current Monthly Household Energy cost} = \% \text{ of Energy Burden} \\
\text{Current Monthly Household Income}
\]

After the household’s energy burden has been calculated, the household is categorized using the priority group chart listed below:

<table>
<thead>
<tr>
<th>Priority Group</th>
<th>Energy Burden</th>
<th>Points Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35.1 - 50%</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>25.1 – 35%</td>
<td>5</td>
</tr>
</tbody>
</table>
State of Florida Weatherization Assistance Program
Application Waiting List Priority Ranking Process

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>15.1% - 25%</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>10.1% - 15%</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>5.1% - 10%</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>0 - 5%</td>
<td>1</td>
</tr>
</tbody>
</table>

For Example: If the energy burden is 10%, the priority group is 5 – **points 2**.
If the energy burden is 19%, the priority group is 3 – **points 4**.
If the energy burden is 3%, the priority group is 6 – **points 1**

**Poverty level**

0 to 8 points will be awarded, based on the percent of the federal poverty level represented by the household’s annual income, as follows:
- **8 points:** Under 75%
- **6 points:** 75%-100%
- **4 points:** 101%-125%
- **2 points:** 126%-150%
- **0 points:** Above 150%

**Waiting List**

Since there is a 180-day time frame between the complete verification of income and the work order being signed, initially completing the verification process on all applicants could be a timely and costly activity that would most likely need to be repeated during the agreement period. Therefore, Subrecipients should consider the following recommended process:

1. As initial applications are completed, prioritize by points and place on a back-up waiting list.
2. Estimate the number of clients to be served during the program year.
3. Divide into quarterly production quotas.
4. Perform the full application/qualification process on enough clients to receive weatherization for two quarters (six months). This is considered the active waiting list.
5. As those clients are served, higher priority point clients from the back-up list will have the full application process performed and placed on the waiting list to be served.

**NOTE:** Subrecipients should re-evaluate the back-up list semi-annually by mailing or contacting the clients on the back-up list to request an update of the household status; occupants, characteristics and income.

**Additional Priority Groups (when applicable):** Subrecipients may give priority to clients who fall into the following categories:

- **Emergency:** When an emergency exists which poses an imminent threat to the life, health or property of the client, and when that emergency situation can be corrected by WAP services, and when other options to correct or alleviate the threat are unavailable or impractical.

- **State or Federal declaration of a disaster:** In such instances that warrant a designation of an area or areas as a disaster area, clients identified in these areas may be offered general or specific services on a priority basis.

*In any situation where the Subrecipient is aware of an emergency of an unusual nature not covered above, the Subrecipient should call DEO for a case-by-case status determination.*
**Subrecipients should be aware that service to employees and relatives of employees may appear as a conflict of interest. As such, Subrecipients must obtain prior approval from DEO. Subrecipients should have written policies outlining how they prioritize and select employees and relatives of employees for service. Board members and senior Subrecipient staff may not receive WAP assistance.**
ELIGIBILITY – GENERAL

WAP is designed to benefit low-income persons, particularly the elderly, disabled, and families with young children. Under the DOE regulations, states must set eligibility for participation in the WAP at 200% of the Federal Office of Management and Budget poverty level.

Some households are considered categorically eligible due to eligibility determinations made by another governmental entity, or through participation in another program that has, by definition, eligibility requirements that are as or more restrictive than the eligibility requirements for WAP.

Any individual or household that is not considered categorically eligible, based on proof that the client meets the eligibility criteria described in the following section, must meet the income eligibility criteria for WAP, based on proof that the household income is at or below the level set for WAP eligibility.

A determination of client eligibility will remain in effect and no new documentation will be required for one year from the initial date of determination, unless the Subrecipient receives information that the client is no longer eligible. If it is established that the client intentionally provided false information regarding eligibility, all WAP work must be stopped and administratively closed out at the cost incurred.
INCOME ELIGIBILITY & CRITERIA

Dwelling units may be determined to be eligible for weatherization assistance based on either the amount of household income (income eligibility) or the source of household income (categorical eligibility).

Income Guidelines:
Eligibility guidelines are based on the Federal Poverty Guidelines. Per the U.S. Department of Energy (DOE) regulations, the State of Florida computes income eligibility at gross annual household income equal to or less than 200% of Federal Poverty Guidelines. “Household” is defined as “all persons living together in a dwelling unit” (10 CFR § 440.3).

Definition of Income:
Federal poverty levels and definition of income is provided annually by DOE. Determination of income eligibility shall be based on the total income of all adult members residing in a dwelling unit. **Income is to be verified for a period of 12 months preceding the date of application.**

1. Income Includes:
Money, wages and salaries earned or received by the applicant before taxes during the applicable tax year(s) or before any deductions; net receipts from non-farm or farm self-employment (receipts from a person's own business or from an owned or rented farm after deductions for business or farm expenses); Income also includes regular payments from Social Security, railroad retirement, unemployment compensation, strike benefits from union funds, worker’s compensation, veteran's payments, training stipends, alimony, military family allotments, private pensions, government employee pensions (including military retirement pay) and regular insurance or annuity payments; dividends, interest, net rental income, net royalties, periodic receipts from estates or trusts, net gambling or lottery winnings.

2. Income Excludes:
The following are not considered sources of income for the purpose of determining an applicant’s eligibility; capital gains; any assets drawn down as withdrawals from a bank; money from the sale of a property, house or car; one-time payments from a welfare agency to a family or person who is in temporary financial difficulty; tax refunds, gifts, loans or lump-sum inheritances; one-time insurance payments, or compensation for injury; non-cash benefits, such as the employer-paid or union-paid portion of health insurance; employee fringe benefits, food or housing received in lieu of wages; the value of food and fuel produced and consumed on farms; the imputed value of rent from owner-occupied nonfarm or farm housing; depreciation for farm or business assets; Federal noncash benefit programs as Medicare, Medicaid, Food Stamps, school lunches and housing assistance; combat zone pay to the military; child support; reverse mortgages; payment for care of foster children and college scholarships are also excluded.

Categorical Eligibility:
Categorical eligibility means that households are determined to be eligible despite a total household income which may exceed the income guidelines. Categorical eligibility exits when a member of the household receives cash assistance payments from any of the following programs under Title IV or Title XVI of the Social Security Act, or applicable state or local law during the 12-month period preceding the determination of eligibility:

- Temporary Assistance to Needy Families (TANF)
- Food Stamps
- Adoption Subsidy
Supplemental Security Income (SSI)

A complete application is required for all categorically eligible households. Income verification documentation is not required for households that are determined to be categorically eligible.

Supplemental Security Income (SSI):
“SSI” refers to payments issued by authority of Title XVI of the Social Security Act for retirement or disability purposes. The Social Security system provides disability and retirement benefits based on two criteria: economic contribution and economic need. When individuals apply for Social Security benefits, an analysis of their contributions into the system determines their benefit level. If this benefit level is sufficiently low, a second analysis of their entire economic situation is conducted (including consideration of all income sources, personal assets, net worth, etc.) and a second benefit, SSI, is also issued. SSI benefits may also be issued to an individual who never worked for wages and therefore receives no regular Social Security benefits. Recipients of SSI payments are categorically eligible, though recipients of regular social security payments are not automatically categorically eligible.

Proof of Eligibility:
Proof of income eligibility and associated documentation should be included in the client file. Each client file must contain an application from the client that contains the required demographics and income for the entire family living in the residence. The file must also contain evidence provided by the subrecipient that the client is eligible to receive WAP services.

1. **Eligibility Determined by Outside Agency/Program:** If income eligibility is determined by an outside agency or program, i.e. Low-Income Home Energy Assistance Program (LIHEAP) or the U.S. Department of Housing and Urban Development (HUD), then copies of the eligibility documentation (can be a statement of LIHEAP eligibility or a copy of the HUD building list) are to be included in the client file.

2. **Self-Certification:** After all avenues of documenting income eligibility are exhausted, self-certification is allowable, but evidence of the various attempts at proving eligibility must be contained in the client file, including a notarized statement signed by the potential applicant indicating that he or she has no other proof of income.

Child Support:
Child support payments received or paid out are not considered sources of income for determining eligibility. Where an applicant receives support from any state program or individual during an applicable tax year, it is not considered income for the purpose of determining eligibility. Where an applicant pays child support through a state program and/or to an individual, it cannot be deducted from the calculation for determining eligibility.

Annualization of Income:
Where an applicant receives income for a part of the applicable tax year, their partial income may be annualized to determine eligibility. Example: an applicant receives the following income: January ($1,200), February ($1,200) and March ($1,200). The method of applying annualizing income to determine eligibility here would be to multiply the total earnings for those months by four (3x4=12; 12 months/yr.). This would be the annualized income for the year. $1,200 + $1,200 + $1,200 = $3,600. $3,600 x 4 = $14,400. The annualized income would be $14,400 for the year.

Limitations on Dwelling Eligibility:
A dwelling unit is not eligible for weatherization, even if occupied by an eligible household, if the dwelling was previously weatherized with Weatherization Assistance Program funds, unless:

- The dwelling has been damaged by fire, flood or natural disaster and repair of the damage to weatherization materials is not covered by insurance;
- The dwelling is eligible for re-weatherization because the original work was prior to September 30, 1994.

A dwelling does not become eligible for additional weatherization if the occupancy of the dwelling unit changes to another low-income family.

A dwelling is not eligible for weatherization, even if occupied by an eligible household, if a federal, state or local program has designated the dwelling for acquisition or clearance within 12 months from the date weatherization of the dwelling unit would be scheduled to be completed.

**Limitation on Multifamily Unit Eligibility:**
*For information on limitations on eligibility of multifamily rental units, see pending guidance on Multifamily Unit Weatherization.*

**Limitation on Single Family Rental Unit Eligibility:**
In order to be weatherized, a single-family rental unit must:

- Be occupied by an eligible household **prior** to the start of any weatherization activities.
- Have not been previously weatherized.
- Have written permission from the owner/landlord prior to the start of any weatherization activities, including the energy audit or initial assessment.

**Recertification of Eligibility:**
If there is reason to believe the eligibility of a household has changed since the Weatherization Services Application form was completed, re-certify the household.

For households that have applied for weatherization services, work must be completed within six months (180 days) of the date of application. If weatherization work is not completed within six months (180 days), the household must be re-certified.

**Client Files and Records:**
The applicant must provide the necessary evidence and income documentation to the intake worker to prove that the household meets the eligibility requirements. The documentation must be maintained in the client file and made available for inspection when being monitored. The following client eligibility documentation shall be included in the client file:

- The 12-month period that was considered.
- A list of all sources of client income for each household member who received income during the year prior to the certification month.
- Documentation of income from each source for the period(s) being considered.
- The date and initials of agency employee verifying income.
- The date and initials of agency employee for any changes to the form.
ELIGIBILITY - COMPUTATION OF INCOME

Subrecipients must ensure that correct income verification procedures are followed.

Subrecipients must obtain income documentation from applicants as follows:

- for salaried applicants, use the most recent four weeks prior to the date of the application
- for applicants who are self-employed, use business records for three months prior to the date of the application

Documentation may consist of a combination of information sources (e.g., pay stubs, statement from employer). To arrive at a monthly-income figure, the following conversion factors must be used:

- multiply weekly income by 4.3
- multiply bi-weekly income by 2.15
- for applicants paid twice a month, multiply semi-monthly income by 2.0.
- If the applicant’s/household’s gross weekly income varies, average the applicant’s household’s weekly income for the previous four weeks, and multiply the average wage by 4.3 to arrive at a monthly figure
- W-2 statements are acceptable documentation for determining total earnings

When an applicant cannot document income sources (e.g., applicant claims to meet living expenses by taking odd jobs or selling personal items or handicrafts), the Subrecipient should make a written record of the verbal information provided by the applicant regarding amount of income, source, frequency or dates paid, and type of goods or services for which income is/was received, and have the applicant sign and date the statement before a notary public. It is appropriate to ask for supporting documentation, such as copies of the most recent IRS tax returns, to verify such claims.

A notarized statement to document WAP income eligibility should be used only in exceptional situations, i.e., no formal or other documentation exists. When zero or unusually low income is claimed, the Self-Declaration Certification form must be completed, signed by the client and notarized.

In no instance should Subrecipient personnel act as the notary when documenting income eligibility for a potential client.
### INCOME DOCUMENTATION

<table>
<thead>
<tr>
<th>Income Source</th>
<th>Acceptable Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alimony</strong></td>
<td>Court order; pertinent pages of separation agreement or divorce decree that identify client and amount of alimony. (If court ordered payments are not being received by the client, a notarized statement to this effect will be accepted.)</td>
</tr>
<tr>
<td><strong>Annuities</strong></td>
<td>Statement from issuing organization</td>
</tr>
<tr>
<td><strong>Child Support</strong></td>
<td>Court order; pertinent pages of agreement that identify the client and amount of support. (If court ordered payments are not being received by the client, a notarized statement to this effect from the Court, the Child Support Collection Unit, or the spouse required to pay will be accepted.)</td>
</tr>
<tr>
<td><strong>Direct Deposits</strong></td>
<td>Copy of two or more bank statements listing the date and amount of deposit; letter from local bank stating source and amount of direct deposit income; verification of income from benefit source.</td>
</tr>
<tr>
<td><strong>Dividends and Interest, as Regular source of Income</strong></td>
<td>Statement from bank or brokerage firm.</td>
</tr>
<tr>
<td><strong>Estates and Trusts, as Regular Source of Income</strong></td>
<td>Fiduciary statement or current statement from bank or brokerage firm.</td>
</tr>
<tr>
<td><strong>Insurance Proceeds or Dividends, as Regular Source of Income</strong></td>
<td>Statement from insurance company.</td>
</tr>
<tr>
<td><strong>Pensions, Government or Private</strong></td>
<td>Award letter; copy of checks; a letter from administrative agency.</td>
</tr>
<tr>
<td><strong>Rents</strong></td>
<td>Income tax form; rent receipts; notarized statement from applicant listing each apartment and the rent received per month, as well as the description and amount of deductible expenses. When the tenant is a family member and is paying no rent to the owner, a notarized statement should be received from the tenant and signed by the owner stating that no rents are being collected.</td>
</tr>
<tr>
<td><strong>Royalties</strong></td>
<td>Income tax return; current statement from company issuing checks.</td>
</tr>
<tr>
<td>Income Source</td>
<td>Acceptable Documentation</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Self-Employment Income</td>
<td>Business records for three months prior to the date of application; IRS form for income from previous year; notarized statement of gross adjusted income, including list of deductions and amounts, for previous three months.</td>
</tr>
<tr>
<td>Strike Benefits</td>
<td>Award letter; copy of checks; letter from union.</td>
</tr>
<tr>
<td>Training</td>
<td>Award letter, copy of checks; letter from appropriate administrative agency.</td>
</tr>
<tr>
<td>Unemployment</td>
<td>Notice of Benefit Rate letter (Form Benefits L0403x)</td>
</tr>
<tr>
<td>Veterans Benefits</td>
<td>Award letter from Veterans Administration or Department of Defense; copy of checks</td>
</tr>
<tr>
<td>Wages and Salaries Before Deduction</td>
<td>Letter from employer on company’s stationary; wage, earnings, or pay stubs; any combination of the above to document total earnings for the 4 weeks prior to date of application; W-2 statements</td>
</tr>
<tr>
<td>Workers Compensation</td>
<td>Award letter from Workers Compensation Board; current check.</td>
</tr>
</tbody>
</table>
ELIGIBILITY - INCOME EXCLUSIONS

The following income sources are not included in total monthly income for purposes of determining eligibility:

**Cash over Which the Household Has No Control**
Cash including, but not limited to, reimbursement for expenses incurred in connection with employment (e.g., gas mileage provided), and reimbursement for medical expenses (e.g., Medicare payment for doctor bills).

**Loans**
All except reverse-annuity mortgage and home-equity conversion payments.

**Dependent Student Income**
Earnings of full-time high school students aged 17 or younger should not be included in the household's income, however, the income of dependent students over the age of 18 and enrolled for at least 12 credit hours in an institution of higher education should be treated in the following manner:

- Income received by students from State and/or Federal grants and/or loans is excluded as income.
- Earnings of a student living at home are excluded as income in determining a household's eligibility; however, students living at home are included in the household count.
- Earnings of a student enrolled at an institution of higher education and living away from home during normal periods of class attendance and recess are excluded as income in determining a household's eligibility. Such students are, however, included in the household count. A student's status may be further tested by whether the student lives at home during normal vacations periods or is claimed as a deduction on the household's income tax. Students 18 and over must submit documentation of student status and it must be placed in the client file.

**Farm and Business Expenses**
Allowable deductions for farms and businesses include only the cost of doing business. If the enterprise is a partnership, the percentage owned by the applicant should be established by documentation. The adjusted gross income figure listed on an applicant's income tax return should not be used in determining income from small businesses/farms since the IRS allows deductions for depreciation, personal business and entertainment expenses, income tax, personal transportation, purchase of capital equipment, and payments on the principal loans. Business records required by law are to be used to document gross income and business costs for the three calendar months prior to the month of application and pro-rated for an average gross monthly income.
Rental Property Costs
The following costs for rental property may be deducted from the owner's income, if documented:

• Interest paid to purchase income-producing property;
• Insurance premiums;
• Taxes paid on income-producing property;
• Heating and/or utility costs paid for income-producing property where rent includes heat and/or utilities;
• Improvements and/or repairs necessary to maintain the property as income-producing.

Note: To determine the allowable deduction for an improvement, use the life expectancy of the improvement and pro-rate the cost (e.g., a new roof costs $5,000 and has a life expectancy of 15 years). The $5,000 roof would be pro-rated at $333 per year or $27.75 per month. To determine the allowable deduction for a repair, divide the cost of the necessary repair by 12 months, e.g., a $500 repair to a roof would be $41.67 per month.

If the owner/applicant also resides in the income-producing property, the applicant's allowable costs is also prorated. For example, an applicant with a three-unit dwelling who resides in one of the units would receive two-thirds of the allowable costs deducted from his/her gross rental income. Applicants who do not reside in the income producing property would have 100 percent of their documented allowable costs deducted from their gross rental income.

Depreciation, payments on the principal of income-producing property, and net loses are not allowable deductions in determining income for eligibility.

Lump Sum Payments
Non-recurring lump-sum payments which are to be excluded from income in determining eligibility include, but are not limited to: income tax refunds, rebates, or credits; retroactive lump-sum insurance settlements; and lump-sum income from the sale of property.

Special Energy Assistance Payments
Home energy assistance, either in cash or in-kind, provided by a private non-profit organization or by an entity whose revenues are primarily derived on a rate of return basis and regulated by a State or Federal government body, is not to be considered as income.

Payment for Foster Children and Foster Care Adults
Payments provided for care and maintenance of foster children or adults are not considered income. Foster children and foster-care adults (e.g., individuals 18 years of age or older, who are socially, physically, or mentally handicapped and placed in a community-based care setting approved by appropriate State agencies or local social services agencies) are not counted as members of an applicant’s household.
Roomer and/or Boarder Payments
Roomers and boarders are not counted as household members, and their gross income is excluded from the household's income. However, payments made by the roomer/boarder to the household are included in the household income.

Holocaust Survivors Payments
Restitution payments from foreign governments to survivors of the Holocaust are excluded as income.

Income Committed to Health Care/Homemaker Services
The amount which an applicant pays an employee for household work or health care is not an allowable deduction from gross income except in the following cases:

**Health Care Services:** Income used to pay for in-patient hospital care, in-patient care in a skilled nursing facility, or home health care, which is also counted toward Medicaid eligibility, is excluded as income. For income exclusion purposes, home health care means payments made for home nursing services rendered by a person (other than a family member) who is qualified to provide services such as assistance with personal hygiene, dressing, feeding or household tasks, and who has been appropriately trained and is supervised by a registered professional nurse.

**Housekeeper/Homemaker Services:** Reimbursements for housekeepers or homemakers under Title XX of the Social Security Act are not considered as income for eligibility purposes. Those services include assessing the need for, arranging for, providing and evaluating the provision of personal care, home management and incidental household tasks by a professionally trained homemaker.

**In-Kind Services:** When an applicant has an employee residing in the household to assist in household work and health care, the employee’s income should not be considered in determining the household's eligibility nor is the employee included in the household count. No monetary value may be attached to any in-kind contribution which the employee provides to the household.
ELIGIBILITY - SPECIAL GROUPS

Dependent Students
Full-time college students who remain dependents are counted as members of their family's household, regardless of their temporary absence during school terms. Their income (except Social Security Income or Veteran's Survivor's Benefits) is exempted from consideration in determining the family's total income. Full time high school students age 18 or younger and who are temporarily living away from their principal residence in order to attend school should be included in their family's household count. Documentation of student status must be collected and kept in the client file.

Group Homes and Shelters
Prior written approval by DEO is required for the weatherization of any shelter or group home. WAP funds should be leveraged with any other funding that may be available. Documentation of ownership by a non-governmental, not-for-profit agency and of the type of population living in the group home or shelter, (e.g., homeless, domestic violence victims, developmentally disabled, etc.) must be submitted prior to receiving approval. A copy of this documentation must be maintained in the job file(s).

A shelter is a dwelling unit or units whose principal purpose is to house, on a temporary basis, individuals who may or may not be related to one another and who are not living in nursing homes, prisons, or similar institutional care facilities.

A group home is a single unit in which three or more people, not related by blood or marriage, reside and share eating facilities. In addition, a group home must have a clearly definable identity which distinguishes it from more informal, family-type settings. A group home may be either a temporary or a permanent residence.

If a building is a group home or shelter, a Subrecipient may classify the building as more than one dwelling unit. A dwelling unit within a group home or shelter can be classified either by counting each single floor of the building, or by counting each 800 square feet of living space. For example, a group home that houses 12 adults in a three-story structure of 4,000 square feet could be counted as either three units since it has three floors, or five units by square footage (4,000 sq. ft. divided by 800 sq. ft. per unit = 5 units). A separate application and documentation of income eligibility must be received for each dwelling unit, regardless of how units are counted.

Documentation of income or categorical eligibility is required for permanent group homes, such as those for developmentally disabled individuals. This can be accomplished by obtaining a written statement from the operator of the home which lists the residents and the nature and amount of their income, if any.
Unemployed, Strikers, Seasonal Workers
For applicants whose regular, recurring income would render them ineligible for WAP, but who are laid off or unemployed for three months or less during the year, eligibility for WAP services would be based upon this average monthly income amount. The applicant's total annual income should be divided by 12 to yield an average monthly income figure.

Examples of this type of worker are those workers who have a reasonable expectation of returning to work within a three-month period and include but are not limited to, seasonal construction employees, teachers and other contract employees, and strikers. This provision does not apply to individuals who have been fired from their jobs, or whose jobs have been abolished, or who are in a permanent lay-off status.

Self-Employed
In determining income eligibility for self-employed applicants, "earned income" means the net profit from a business enterprise, a business operated from out of the home, or farming. Net profit is the gross income received, less the business expenses (e.g., total cost of the production of the income). To compute income eligibility, this net profit should be averaged for the three calendar months prior to the month of application.

Such income includes earnings over a period of time for which settlement is made at one given time, as in sales of farm crops, livestock or poultry, or lump sum payments for services rendered over a period of more than one month. Such income should be pro-rated over the period covered by the income, (e.g., sale of an annual farm crop should be divided by 12 to yield an average monthly figure, and this amount added in to each of the three months used to determine average monthly income).

Those expenses directly related to producing the goods or services and without which the goods or services could not be produced, must be deducted from the total income. However, depreciation, personal business, entertainment expenses, income tax, personal transportation, purchase of capital equipment and payments on the principal of loans must not be deducted.
CHAPTER 4
SERVICE PROVISIONS

Client Priorities
Once eligibility has been determined, the client priority policy must be followed. Federal regulation 10 CFR 440.16(b) states that priority should be given to households that contain:

- Elderly (age 60 years and older)
- Disabled
- Children age 12 and under
- High residential energy users or those families with a high energy burden

Required Activities for Weatherization
Florida uses a priority list for both site built and mobile homes based on measures specified by the National Energy Audit (NEAT). There are three activities that must be completed on every home weatherized:

- Health and safety measures must be completed in order to ensure the security of the occupants and of the weatherization personnel working in the home.

- General heat waste reduction activities in order to increase energy efficiency of the dwelling and to reduce the household energy burden.

- Client education provides the occupants with the information and tools they need in order to protect the weatherization materials installed. Education also offers clients the ability to actively participate in saving energy in their homes.

Each home must follow the designated measures on the respective priority list unless a NEAT or Mobile Home Energy Audit (MHEA) is run on the home and the measures applied to the home follow the NEAT or MHEA priority. For the technical aspects of each category, please refer to the Florida Weatherization Field Guide.

Disallowed Expenditures
No weatherization grant funds shall be used for the following:

- To weatherize a dwelling unit which is designated for acquisition or clearance by a Federal, State or local program within twelve months from the date weatherization of the dwelling unit would be scheduled to be completed.

- To install or otherwise provide weatherization materials for a dwelling unit weatherized previously with grant funds under paragraph 440.18(a) of this section, except:
  - Unless such dwelling unit has been damaged by fire, flood or other natural disaster and repair of this damage to weatherization materials is not paid for by insurance; or
That dwelling units partially weatherized under this part or under other Federal programs during the period September 30, 1975 through September 30, 1994 may receive further financial assistance for weatherization under this part (re-weatherization).

The Weatherization Assistance Program staff will monitor for compliance through on-site monitoring and review of Certified Public Accountant (CPA) audit reports.

Allowable Weatherization Measures
The Weatherization Assistance program is designed to reduce energy consumption of dwellings through the installation of energy conservation measures approved by the DEO, based on their savings to investment ratio or cost-effectiveness. Additional measures are approved and selected as incidental repairs necessary for the safe and effective installation of energy conservation measures, or to assure health and safety in conjunction with the installation of energy conservation measures.

The specific methodologies used to accomplish the program measures are based, to an extent, on the condition and design of the dwelling. These methodologies are further directed on individual dwelling units through blower door guided air-sealing and analysis and inspection of the heating system.

Weatherization services will include the following:

1. **Energy Audit**
   Each dwelling unit will receive a site-specific energy audit following procedures established under the National Energy Audit (NEAT) or the approved Weatherization Priority List. Measures identified by the audit as having a positive savings-to-investment ratio will be considered to adequately weatherize the dwelling unit. Unless not possible due to existing dwelling conditions, the pre and post audits will include a blower door and heating system assessment to determine potential health and safety concerns and to direct appropriate heating system measures. All findings are to be placed in the client file.

2. **Measure Selection**
   Weatherization measures are to be selected for installation based on the priority of their savings-to-investment ratio taking into account the:
   - Structural, occupant or other considerations particular to the dwelling.
   - Need and associated cost for installation of other required measures.
   - Contractual per unit cost limits of the program.

   All measures noted below have a Saving-to-Investment Ratio (SIR) of 1 or greater as identified by the NEAT Audit. Weatherization measures are prioritized in order of descending SIR as documented by sample NEAT Audits. Of the measures evaluated, the resulting measures specified by NEAT for Florida single-family housing types are as follows:
   - Major Blower Door Guided Air Sealing
• Seal supply and return ducts in unconditioned spaces. Also, seal building cavities used as return or supply chase-ways that leak to the outside.
• Duct insulation in unconditioned spaces
• Attic insulation - unfinished
• Attic insulation - finished
• Insulation - exposed ceilings
• Wall insulation
• Foundation insulation

Additional Measures
• Replacement windows
• Heating system improvements
• General heat waste reduction
• Electric Base load measures
• Mobile Home measures

All measures must have a cumulative S.I.R of the least 1.0 or greater. Further guidance regarding the measures selection is provided in the Florida Weatherization Priority List.

3. Client Education
The Client Education component includes, but is not limited to:

a. An explanation of the weatherization treatments to be provided and how to use and maintain them properly to maximize savings;

b. Motivating client participation in conserving energy and increasing comfort levels;

c. Informing residents of other energy-savings behaviors not directly related to the weatherization measures installed, e.g., thermostat setting/manual setback, energy efficient lighting, water conservation, etc.

d. Material examples that can be included are video tapes, CD's, coloring books, calendars, pamphlets and low cost no cost items.

4. Incidental Repairs
Incidental repairs are those repairs necessary for the effective performance or preservation of weatherization materials. These costs are included in the average cost per house for weatherization efforts.

5. Health and Safety Measures
Weatherization should be provided in a manner that minimizes risk to workers and clients. Although the Weatherization Assistance Program is not capable of providing solutions to all Health and Safety issues, awareness of potential hazards is essential to providing quality services. Procedures to address potential Health and Safety issues include, but are not limited to, the following:
a. Each dwelling must be individually assessed to determine the existence of potential hazards to workers and clients.

b. Subrecipients and their representatives should take reasonable precautions against performing work on dwellings that will introduce the client to health and safety risks. In cases where work activities would constitute a health and safety hazard, action is required to limit or avoid particular measures which may exacerbate a health and safety problem. If a health and safety problem cannot be abated, the home should be deferred from weatherization services.

c. With regard to both immediate and long-term hazards to workers, it is necessary that agency staff maintain awareness of potential hazards associated with the weatherization process. Specifications regarding the health and safety of workers in the construction industry can be found in Construction Industry OSHA Safety and Health Standards (29 CFR 1926/1910), which is available from the U.S. Department of Labor.

d. Technical waivers will be allowed for non-performance of audit, installations and/or inspections if, in the agency's best judgment, such action will expose workers to conditions regarded as unsafe or unhealthy.

Health and Safety measures to be addressed either by the client prior to, or by the agency as part of the weatherization service will include:

- Hazard of fire
- Carbon monoxide
- Indoor air quality
- Asbestos
- Moisture problems / Mold
- Biological contaminant problems
- Lead based paint

Additional program requirements concerning Health and Safety are addressed in the Weatherization Standards and Field Guide.

Costs for Health and Safety will be those material and labor costs neither supported by energy savings of a weatherization measure(s), nor expended for purposes of incidental repairs.

6. Final Inspection
   A Subrecipient representative will inspect the completed work and obtain a completion satisfaction verification signature from the client. This verification will become part of the permanent client file record. Also included is verification that the installed measures were explained to the occupant and that client education was provided.
Quality Control Inspections (QCI) should be performed by a qualified person not involved in the actual installation of measures. If this is not feasible due to the limited number of personnel, it is required that the Weatherization Coordinator performs or oversees this task. Sign-off on the inspection sheet and documentation of the units inspected by the coordinator are to be available for monitoring purposes. Not with standing this requirement, each Weatherization Coordinator is to participate in onsite inspections on a representative number of units to assess the quality of work and the adequacy of the inspection process. More stringent requirements regarding final inspection may be imposed if weaknesses are identified as part of the monitoring process.

In the event that a quality inspection and/or client sign-off cannot be performed due to an uncooperative client, attempts to secure these documents must be thoroughly documented. A letter shall be sent indicating the client has ten (10) days to contact the sub-grantee. If there is no response within the ten days, the job will be closed and no further action will be taken on behalf of the client.

7. Reporting a Completed Unit
Subrecipients are required to inspect 100 percent of completed units to determine compliance with Weatherization Assistance Program (WAP) quality standards, appropriateness of the measures selected for installation and that all reported materials were actually installed.

No dwelling unit may be reported to DEO as completed until a final inspection is performed per the above criteria and signed by a designated Quality Control Inspector. The results of the inspection must be provided to the client for their review and sign-off. Any need for rework should be noted to the client at this time. If no additional work is necessary, a signed and dated BWR is required.

8. Crew/Contractor Labor
The installation of these materials will be accomplished through:

- Direct Hire Labor:
  - Building Shell Measures
  - Heating System

- Subcontract:
  - Building Shell Measures
  - Heating System

9. Budgetary and Per-Unit Expenditure Limitations
Limitations on allowable costs for the installation of weatherization measures are established in accordance with the following:

- Expenditures for materials and operating costs (support and labor combined) may not exceed standards set by the current year WAP State Plan or program notice
average per unit under DOE standard (unless authorized by DEO), \( \text{Cost Per Unit} = \frac{\text{Program Support} + \text{Labor} + \text{Materials} + \text{Vehicle Purchase}}{\text{number of completed Units}} \)

Expenditures for health and safety activities are considered a separate cost category and are not included in the cost per unit average cost limit.
ALLOWABLE EXPENDITURES

The Florida Weatherization Assistance Program (WAP) Subrecipient agencies shall expend and report U.S. Department of Energy (DOE) and Low-Income Home Energy Assistance Program (LIHEAP) funds for the following allowable cost categories:

**Allowable Expenditures**

“Allowable expenditures” shall mean the total of all expenditures qualifying as “allowable expenditures” in accordance with the terms and conditions of the DOE rules published at 10 CFR 440 and at 2 CFR 200 and with all other pertinent guidance from DOE and DEO, including this manual. All expenditures must be properly documented as costs incurred on eligible dwelling units in the Subrecipient’s books and records.

**Administrative Costs**

“Administrative costs” shall mean those costs which a Subrecipient incurs that are not in direct support of individual WAP projects but are necessary for the organization to operate the WAP. Typical expenditures found in this category are wages and fringe benefits for executive, accounting, and administrative personnel working on the program. Other typical administration cost category expenditures are the payroll processing costs, costs to administer health insurance programs, data processing costs, indirect costs as allowable under this agreement and bank service fees. As with the other weatherization cost categories, those costs applied to administration must be actual and allowable under the applicable federal regulation. The Department of Economic Opportunity (DEO) shall authorize payments for those items listed below and in accordance with the approved budget and detailed narratives submitted by the Subrecipient agency.

- **Indirect Costs**
  - Payments based on an indirect cost rate approved by a cognizant federal agency.
  - The approved allocation plan shall be available to the state, on request.

- **Direct Costs**
  - **Salaries and Wages**: Payments of a fixed compensation for agency administrative, financial, and accounting personnel and any other employees performing administrative duties of the agency, regardless of title. (See the salaries and wages section under program support for exceptions.)
  - **Space, Utility and Telephone**: Payments made in accordance with approved budget and details narratives for positions are listed in direct salaries and wages.
  - **Travel**: Payments for mileage, per diem, and subsistence for positions listed in direct salaries and wages. **All travel and subsistence payments shall be made in accordance with the Subrecipient agency travel policy.**
  - **Copier, Postage and Computer Costs**: Payments shall be made in accordance with appropriate cost allocation plan or approved indirect cost for positions listed above. Computer costs may include, but are not limited to, on-line services, computer supplies and maintenance agreements.
  - **Other Costs**: Payments made for other costs of positions in direct salaries and wages which benefit the weatherization program. Other costs are those not
included in the material or program support budget line items that are direct program costs.

- Audit Costs: The cost of audits which are made in accordance with the provisions of 2 CFR 200, are allowable charges to DOE and other federal assistance programs. These charges may be considered a direct cost or an allocated indirect cost. Audit procurement must be in compliance with applicable OMB Circulars. The percentage of costs charged to federal assistance programs for a single audit shall not exceed the percentage represented by federal funds expended to total funds expended by the Subrecipient during the fiscal year.

**Program**

Allowable program support expenditures may include items such as space, utilities, telephone, and similar costs that are directly attributable to program support personnel. DEO shall authorize payments for those items listed below and in accordance with the approved budget. Program support category costs exclude the labor category. Direct Program Costs include:

- **Transportation:** All costs incurred for transporting materials, tools, equipment and work crews to a storage site and to the site of weatherization work shall be supported by a vehicle mileage log. Payment for all other travel and subsistence costs shall be made in accordance with Subrecipient travel policy. **NOTE:** The cost of transporting materials to a storage site and to the site of weatherization work is also allowable under the weatherization materials category.

- **Maintenance** (including repairs) of Tools and Vehicles used in the weatherization program.

- **Purchase of Tools:** Subrecipients must receive prior approval from DEO for tool purchases with a unit acquisition cost of $5,000 or more. All requests for prior approval of equipment purchase of $5,000 or more shall be submitted in writing to DEO and shall include:
  - Brief narrative and description of item
  - List of similar equipment currently on hand at the agency and condition of each item
  - Purpose and benefits for weatherization program
  - Copies of invitations for bids and responses

- **Vehicles & Capital Equipment:**
  - **Purchase or Lease of Vehicles:** All purchases or leases of vehicles require prior approval from DEO and DOE. All requests for prior approval must be submitted in writing to DEO and shall include:
    - Name of requesting Subrecipient
    - Where the equipment will be used and how it will be used—Specify, full or part time use in Weatherization Program
    - A statement of whether this is a replacement vehicle. If this is a replacement, how is the trade-in being addressed?
- Brief description of how the procurement will be done, and confirmation that Agency, State and Federal procurement guidelines will be met
- 2 CFR 225 – Cost Principles for State, Local, and Indian Tribal Governments
- 2 CFR 230 – Cost Principles for Non-Profit Organizations.
- What the funding source(s) will be (e.g., DOE Weatherization Program Operations funds). Subrecipient T&TA funds are not an allowable option.
- Copies of bid specs (vehicle description with options requested) and bids received
- Statement that lowest bid will be selected, or a sufficient justification of the “best value selection” if lowest bid not recommended for DOE approval.

**Vehicle Insurance and Title Requirements:** Any vehicle purchased or leased with weatherization funds shall carry at least the minimum amount of liability insurance as required by state statute and complete physical damage coverage to protect the investment of the vehicles aged five years or newer. *Note:* In the case a vehicle is leased, the leaser may have insurance requirements which exceed those required by state statute. Older vehicles may carry complete physical damage coverage at the discretion of the Subrecipient. All weatherization vehicles purchased with weatherization funds shall be titled to the weatherization Subrecipient agency. The State of Florida Weatherization Assistance Program is to be shown as the first lien holder on all titles. Copies of the titles shall be sent to DEO as soon as new titles are returned from the Motor Vehicle Department.

**Salaries and Wages:** This item, program support staff, may be charged for the portion of time related to program support activities, except when the position is included in an indirect cost rate or cost allocation plan which identifies the position as administrative.

**Note:** Inspectors, on-site supervisors, and clerical support related to program support activities are generally positions which perform program support functions. If any agency position is classified as an administrative position and is not a part of an indirect cost pool and performs program support activities, the time performing those activities may be charged as a direct cost to program support. Detailed time records shall be maintained and will be reviewed by monitors and auditors of the weatherization program.

**Space, Utilities, and Telephone Supplies:** Payments shall be made for the costs associated with approved program support positions. Costs are to be allocated in accordance with a cost allocation basis as identified in the appropriate OMB Circular A-133.

**Labor**
DEO shall authorize payments for only those items below and as approved in the Subrecipient’ budget and detailed budget narrative.

- Payments to supplement wages paid to training participants
- Crew worker expenditures for installing materials
- Employment of on-site supervisory personnel installing materials
Subcontract labor costs to install weatherization materials when contracts are issued in accordance with all appropriate federal and state procurement and contracting rules and regulations.

**Liability Insurance**
DEO shall authorize payments for costs incurred by Subrecipients for liability, POI and workers compensation insurance for weatherization projects for personal injury and for property damage. DEO requires Subrecipients to carry completed operations coverage.

**Materials**
All weatherization materials must meet the latest standards for weatherization as published in 10 CFR 440, revised Appendix A. Materials listed in 10 CFR 440, revised Appendix A, and identified as cost effective by the accepted program energy audit procedure are allowable material costs. Weatherization agencies must obtain and keep current Material Safety Data Sheets (MSDS) for each inventoried material item purchased.

- **Allowable material costs include:**
  - The cost of purchase and delivery of materials. The cost of freight to deliver weatherization materials is an allowable materials cost
  - The cost of transportation to a storage site and to the site of the weatherization work
  - The cost of storage of weatherization materials
  - The cost of incidental repair materials; that is, repair materials needed to protect or aid in the installation of weatherization materials
  - Subrecipients shall give preference in their purchases to products containing the highest level of recovered or recycled materials practicable.

- **Incidental Repairs**
Incidental repair costs may be included, not to exceed 10% of the total material cost of the unit. The 10% limit may be exceeded with an approved waiver from DEO. DOE homes must maintain an overall Savings-to-Investment Ratio of one point zero (SIR 1.0) or higher. Repair materials are to protect or aid in the installation of weatherization materials and are part of the total allowable expenditure.

**Health and Safety**
The cost of materials and labor to abate health and safety hazards before, or because of, installation of weatherization materials or to comply with OSHA requirements are allowable charges as follows:

- Repair of combustible gas leaks inside a dwelling unit, including the installation of the appropriate type of gas line piping
- Repair of combustion appliance vent systems to ensure adequate draft, provide required clearances to combustible materials, and comply with applicable building codes
- Mitigation of indoor air quality problems that may be made worse by air sealing, especially those problems related to excessive humidity. This includes installing/providing additional combustion air and/or ventilation fans
- Removal of an unvented primary heating source and installation of a replacement heat source, if necessary, by extending a heating duct from a forced air system or installing a vented space heater
- DEO requires the installation of one smoke detector per sleeping area which does not have an operable, existing smoke detector
- DEO requires the installation of carbon monoxide alarm per in dwellings which do not have an operable, existing detector
- Health & Safety abatement measures are not required to be cost-justified.
- Smoke detector in a living space that is attached to a garage.

**Training and Technical Assistance**
T&TA costs are allowable for three types of activities:

- State staff monitoring/T&TA, including salaries, travel, and other operating expenses of budgeted staff
- Subrecipient costs to attend approved T&TA activities
- Other contracted T&TA costs
PROCUREMENT PRACTICES

PROCEDURES: All subrecipients must establish written procurement procedures that implement the requirements of this section and all applicable federal and state requirements and result in procurement transactions that provide, to the maximum extent practical, open and free competition.

**Federal Procurement Rules:**
- State and Local Governments: 10 CFR Part 600.236
- Non-Profit Organizations: 10 CFR Part 600.140-148

Subrecipients are required to comply with Federal standards in the purchase of supplies and other expendable property, equipment and services. The purpose of the standards is to ensure that all procurement is practical, open, free competition, and that materials and services are obtained in an effective manner that is the most economical and practical procurement for the Federal Government. These procurement standards must be in compliance with Federal statutes and executive orders.

Dwellings may be bid out as a package, by single dwelling or rotated to each contractor. This is a Subrecipients decision, often contingent upon the availability of interested contractors. Copies of bid packages will be reviewed during monitoring visits.

Bid packages provided to contractors should include a copy of the advertisement for reference (applicable for single, multiple and multi-family projects). The Bid package is to include the Subrecipients policy for bidding and or rotating of contractors. Contractors must attend a Subrecipients held Contractor training orientation before beginning any participation in the WAP.

REQUIRED DEO VALIDATION: At the beginning of each weatherization program year, Subrecipients are required to engage in a solicitation for bid and submit to Department of Economic Opportunity (DEO) a detailed delineation of the full components of the proposed bid process for approval. Grant funds will not be reimbursed unless procurement pre-approval has been received by the Subrecipients.

A. Procurement / Bidding Requirements

All procurement of goods and services with Weatherization funds will be made in accordance with 10 CFR 600.140-148 and OMB Circular A-133 for non-profits, 10 CFR 600.236 and OMB Circular A-102 for State and Local governments and as directed by the Department. These regulations are available through www.waptac.org. It is also understood that more stringent local purchasing policies may apply.

Subrecipients will establish and maintain written procurement procedures which reflect applicable State and local laws and regulations, provided that the procurement conforms to the applicable Federal regulations identified above and the standards identified in part D. of this section.
Subrecipients will maintain a **contract administration system** which ensures that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders and shall evaluate contractor performance and document, as appropriate, whether contractors have met the terms, conditions and specifications of the contract or purchase orders.

B. **Code of Conduct**
Subrecipients will maintain a **written code of standards of conduct governing the performance** of their employees engaged in the award and administration of contracts. No employee, officer or agent of the Subrecipient shall participate in the selection, or in the award or administration of a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when the employee, officer or agent, any member of his immediate family, his or her partner, or an organization which employs, or is about to employ, any of the above, has a financial or other interest in the firm selected for award. The Subrecipient's officers, employees or agents will neither solicit nor accept gratuities, favors or anything of monetary value from contractors or potential contractors. To the extent permitted by State or local law or regulations, such standards of conduct will provide for penalties, sanctions, or other disciplinary actions for violations of such standards by the Subrecipient’s officers, employees or agents, or by contractors or their agents.

C. **Materials Standards**
The minimum requirements are set forth in the U.S. Department of Energy (DOE) 10 CFR Part 440, Appendix A-Standards for Weatherization Materials. These standards are produced by the Consumer Products Safety Commission and are published in Title 16, Code of Federal Regulations.

D. **Procurement Standards**
Subrecipients will make awards only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. The Subrecipients will maintain records sufficient to detail the significant history of a procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, justification for lack of competition when competitive bids or offers are not obtained, and the basis for the contract price.

Awards shall be made to the bidder/offeror whose bid or offer is responsive to the solicitation and is most advantageous to the Subrecipient, price, quality and other factors considered. Solicitations shall clearly set forth all requirements that the bidder or offeror shall fulfill in order for the bid or offer to be evaluated by the Subrecipient. Any and all bids or offers may be rejected when it is in the Subrecipient’s interest to do so.

All procurement transactions will be conducted in a manner providing full and open competition. Full and open procurement procedures require that, based on the
procurement method, advertisements be placed in local newspapers, or that documented telephone or written price quotes are obtained before purchase of goods or services is completed. Annual advertisement about the intent to purchase goods or procure services is acceptable, however additional solicitation may be required if procurement is necessary outside the scope of any completed advertisements.

When conducting a procurement transaction, agencies should be cautious of situations that may restrict free and open competition. Some of the situations considered to be restrictive of competition include, but are not limited to:

- placing unreasonable requirements on firms in order for them to qualify to do business;
- requiring unnecessary experience and excessive bonding;
- noncompetitive pricing practices between firms or between affiliated companies;
- noncompetitive awards to consultants that are on retainer contracts;
- organizational conflicts of interest;
- specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance of other relevant requirements of the procurement; and
- any arbitrary action in the procurement process.

Subrecipients will have written procedures for all procurement transactions. These procedures shall ensure that all solicitations incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description shall not, in competitive procurements, contain features which unduly restrict competition. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a “brand name or equal” description may be used as a means to define the performance or other salient requirements of a procurement.

Some form of cost or price analysis shall be made and documented in the procurement files in connection with every procurement action. Price analysis may be accomplished in various ways, including the comparison of price quotations submitted, market prices and similar criteria, together with discounts. Cost analysis is the review and evaluation of each element of cost to determine reasonableness, allocability and allowability.

Contracts in excess of the small purchase threshold (over $5,000) shall contain contractual provisions or conditions that allow for administrative, contractual, or legal remedies in instances in which a contractor violates or breaches the contract terms, and provide for such remedial actions as may be appropriate.

E. Types of Procurement

1. Procurement by small purchase procedures: Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or
other property that do not cost more than $5,000 over the term of the contract. If small purchase procedures are used, price or rate quotations shall be obtained and documented from an adequate number of qualified sources. At a minimum, documentation must include: the name of the bidder/offeror, description of product or services, date of solicitation, quantity, and per unit and aggregate cost. Procurement of equipment in excess of $5,000 must have the prior approval of the Department.

2. Procurement by sealed bids (formal advertising) for goods or services over $25,000 over the term of the contract: Bids are publicly solicited and a firm fixed-price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming to all the material terms and conditions of the invitation for bids, is the lowest in price. In order for sealed bidding to be feasible, the following conditions should be present:
   • A complete, adequate, and realistic specification or purchase description is available.
   • Two or more responsible bidders are willing and able to compete effectively for the business.
   • The procurement lends itself to a firm fixed-price contract and the selection of the successful bidder can be made principally on the basis of price.

If sealed bids are used, the following requirements apply:
   • The invitation for bids will be publicly advertised and bids shall be solicited from an adequate number of known suppliers, providing them sufficient time for response prior to the date set for opening the bids.
   • The invitation for bids, which will include any specifications and pertinent attachments, shall define the items or services in order for the bidder to properly respond.
   • All bids will be publicly opened at the time and place prescribed in the invitation for bids.
   • A firm fixed-price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs shall be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of.
   • Any or all bids may be rejected if there is a sound documented reason.

3. Procurement by competitive proposals: The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed-price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If this method is used, the following requirements apply:
   • Requests for proposals will be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals shall be honored to the maximum extent practical.
• Proposals will be solicited from an adequate number of qualified sources.
• Subrecipients will have a method for conducting technical evaluations of the proposals received and for selecting awardees.
• Awards will be made to the responsible firm(s) whose proposal is most advantageous to the program, with price and other factors considered.

4. Procurement by noncompetitive proposals: Procurement through solicitation of a proposal from only one source, or after solicitation of a number of sources, competition is determined inadequate. Procurement by noncompetitive proposals may be used only when the award of a contract is infeasible under small purchase procedures, sealed bids or competitive proposals and one of the following circumstances applies:
• The item is available only from a single source.
• The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation.
• The awarding Subrecipient authorizes noncompetitive proposals.
• After solicitation of a number of sources, competition is determined inadequate.
• Cost analysis, i.e., verifying the proposed cost data, and the evaluation of the specific elements of costs and profits, is required.

The type of procurement used shall be determined by the Subrecipient but shall be appropriate for the particular procurement and for promoting the best interest of the program or project involved. (The “cost plus percentage of cost” or “percentage of construction cost” methods of contracting shall not be used.)

F. Subcontracting Procedures

Subcontracting for Weatherization and/or heating system services is subject to all appropriate procurement policies provided in 10 CFR 600. Since procurement by sealed bids (formal advertising) may not be appropriate due to the need to procure these services on an on-going and timely basis, and when more than one qualified contractor is necessary to meet the production needs of the Subrecipient, procurement through competitive proposals is also an allowable means to secure these services.

All provisions of the weatherization Subrecipient’s contract are applicable to subcontract agreements. Subcontract agreements must clearly state appropriate program policy, federal and state regulations as well as the rights and obligations of each party.

After determining what items or services are to be subcontracted, the Subrecipient must develop a list of specifications for the items/services to be procured along with some form of cost or price analysis using historical data, commercial pricing and sales information sufficient to enable the Subrecipient to verify the reasonableness of the price as a catalog or market price of a commercial product.

A Request for Proposal (RFP) must be developed to include the scope of work, job specifications with an itemized price list, necessary contractor requirements, qualifications
and Subrecipient expectations, and women business enterprises, small businesses, and minority-owned firms are encouraged to apply. Notice of the RFP’s availability should be placed in all appropriate newspapers and also be provided directly to companies that Subrecipients have researched and feel have the qualifications to meet the needs of the program.

The Subrecipients must develop written rating standards to be used to certify a contractor as eligible to participate in the program. This rating system must provide for a consistent and objective evaluation of the potential contractors.

Upon review and determination of eligibility, written notification should be sent to all bidding contractors indicating their acceptance or rejection to the RFP. The number of contractor(s) determined eligible shall be based on their overall rating. In addition, the Subrecipient’s production needs and adequate coverage for the service area should be considered when selecting the number of eligible contractors. The Subrecipient may, at their discretion and depending on the reason for rejection, afford the contractor opportunity to revise their proposal to meet the requirements of the RFP. A notice of rejection should include a protest/appeal procedure with a cutoff date for those contractors not meeting the eligibility criteria.

Notice of acceptance to qualifying contractors should indicate a date and time of an initial subcontractors meeting which should include, but is not necessarily limited to, review of:

- program description;
- anticipated production and the amount of work that may be afforded to the subcontractors;
- content and requirements of the subcontract agreement;
- obligations of the Subrecipient and the subcontractor;
- scope of work/job specifications and technical requirements of the program;
- work scheduling, issuance of work orders, provisions for issuing and documenting change orders;
- clearance testing, quality inspection, callback procedures and final signoff; and
- invoicing and payment procedures.

At this time, or at a subsequent meeting, the price lists submitted by contractors for the items identified in the RFP will be reviewed and compared to the Subrecipient’s cost analysis. The price list will be reviewed and negotiated as necessary to arrive at a fixed price for services to be provided by the subcontractors.

Once contractors have agreed to the terms and conditions set forth by the Subrecipient, a subcontract agreement may be executed. They should also be provided with any additional procedural or technical information, and any required forms which are necessary to fulfill the terms of the contract, including a copy of the Florida Weatherization Procedures & Guidelines and the Florida Field Guide.
If, after a Subrecipient has fulfilled all the requirements of a competitive bid process, either through sealed bids (formal advertising) or competitive proposal/negotiation, there is insufficient competition (i.e. no or only one bidder), the Subrecipient may proceed to secure services through noncompetitive procurement. In this case it is required that a cost analysis be conducted to determine the reasonableness of compensation requested by a contractor. Noncompetitive procurement, other than small purchases (less than $5,000 over the life of the contract), must have prior approval of DEO.

G. Inventory Control

The following are the general record maintenance and reporting requirements.

1. **Property and Equipment Inventory** - Record all property, equipment and tools with an acquisition cost over $300 dollars.

2. **Material Inventory Report** – Material inventory is to be maintained in a manner that will provide an audit trail from purchase to installation as well as material on hand.

4. **Daily Material Sign-out Sheet** - document removals from storage/warehouse, usage on jobs and returns on a daily basis. A physical count of equipment and materials is to be performed on a regular basis, no less than quarterly. Discrepancies between the recorded and actual amounts must be documented, reconciled, and signed off by the responsible supervisor.
MONTHLY REPORTS & PAYMENT REQUESTS

Monthly Invoicing/Reimbursements
Subrecipients shall report monthly financial and program data to DEO. Reimbursements shall be made for actual expenditures in accordance with the Subrecipient production schedule.

The WAP monthly Financial Activity (FA) must be provided to DEO no later than the twenty-first day of each month following the end of the reporting month in which funds were expended. Subrecipient shall submit the report regardless of whether funds were expended. Reimbursement of expenditures shall be based on this report. Only with prior approval by DEO, will more than one reimbursement be processed for any calendar month. The FA must be submitted in DEO’s current Subrecipient Enterprise Resource Application (SERA) and a signed copy submitted via facsimile or electronic mail by the due date. In the event the twenty-first day of the month falls on a weekend day or holiday, the FA shall be due on the next business day. The FA must be signed and dated. Each FA shall contain the following information:

1. All expenditures that occurred during the reporting month
2. The amount of reimbursement requested
3. The number of dwellings weatherized
4. An attestation, signed by an authorized signatory, that Subrecipients was open and operating during its reported business hours

Each completed dwelling reported, will have a Building Work Report package consisting of a completed:

<table>
<thead>
<tr>
<th>SERA Payment Cover Sheet</th>
<th>SERA Reimbursement Printout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate and Date Supplement Form</td>
<td>Billing Summary</td>
</tr>
<tr>
<td>METS &amp; Backup</td>
<td>Quality Control Inspections (QCI) Forms</td>
</tr>
<tr>
<td>Contractor Invoices</td>
<td>Building Work Report (BWR)</td>
</tr>
</tbody>
</table>

DEO shall review each FA for compliance with the budget requirements outlined in Attachment A of the Subrecipients WAP Agreement.

Monthly Expenditure Tracking System (METS) Reports:
Mid Agreement METS is due to DEO by the 21st day of each month of the WAP Agreement. In the event the twenty-first day of the seventh month falls on a weekend day or holiday, the mid-agreement report shall be due no later than the next business. The Subrecipients will submit:

a. A completed METS to include all PS and Admin line item actual costs incurred by Subrecipients through each month of the WAP Agreement.

b. A Revenue and Expenditure spreadsheet (or applicable fiscal supporting document) that will provide the actual expenditure amounts per month to date that support the METS totals.

Upon DEO receipt of these documents, DEO staff will compare the Financial Activity (FA) and Admin amounts Subrecipients with the METS Program Support and Admin amounts and supporting
spreadsheets. Subrecipients will be notified if any other supporting documentation is needed based upon the results of this review. If DEO determine an on-site monitoring is warranted to resolve an issue, it will be scheduled.

A Close-out METS with the last FA expending the remaining balance of funding in the Agreement is submitted to DEO. Subrecipients will provide a METS that includes all costs charged in the PS and Admin categories along with the supporting spreadsheet. Subrecipients cannot exceed the percentage caps for either PS or Admin at the end of the Agreement period.
REIMBURSEMENTS

The reimbursement process is based on allowable expenditures made by the Subrecipients and the rate of production. Please refer to the allowable expenditures section of this chapter for a description of expenditures chargeable to your WAP agreement.

General Information
When the Financial Activity (FA) is received by DEO it will be reviewed for completeness, accuracy, desk audited against the terms of the contract, and adjusted, if necessary, based on the findings of the DEO monitor or fiscal representative. In addition, the Subrecipient’s production will be evaluated against its production schedule, and the level of payment shall be adjusted accordingly.

Payment Adjustments
DEO reserves the right to make payment adjustments in accordance with Attachment D of the weatherization agreement.

Withholding Payment
DEO reserves the right to withhold payments in accordance with the weatherization contract.

Cash Balance Review
DEO reserves the right to periodically review Subrecipient’s actual cash balance of funds received pursuant to the WAP agreement, to evaluate such cash balances in accordance with 10 CFR 600, Subpart B, section 600.122, and to take such remedial action as reasonably necessary, which may include reducing payments due under this agreement.

Disallowed Program Income Expenditures
Program Income expended in any manner which is inconsistent with the policies and procedures shall be disallowed. DEO reserves the right to deduct any disallowed program income expended from any payments due and owing from this agreement.

Non-Reimbursement
1. DEO shall not reimburse for any claimed expenditures for third party claims against the contractor and/or any of its subcontractors, suppliers or their agents or employees or for any claims by subcontractors or suppliers against DEO for labor, materials, or equipment furnished to the contractor.

2. DEO shall not reimburse for any claimed expenditures which it finds to be based on a misrepresentation of material fact including, without limitation, work not in fact performed or materials not in fact supplied or incorporated in the work. Such misrepresentation shall also constitute an Event of Breach as provided for in the contract between DEO and the Subrecipients.

3. DEO shall not reimburse for any claimed expenditures, notwithstanding such expenditures that may be otherwise allowable and expended on an eligible dwelling unit, for work performed in less than a workmanlike manner or defective and not remedied, for materials
installed which are not in conformity with the materials specifications set forth in 10 CFR 440, Appendix A, or otherwise defective or substandard and not replaced or repaired within a reasonable period of time after receiving a written notice from DEO.
OWNER PERMISSION

Signed permission from the owner of each eligible dwelling unit must be obtained and documented in the client file prior to performing any inspections, tests, or weatherization measures on a dwelling.
COMPLAINTS AND DISPUTE RESOLUTION

POLICY: Subrecipients have the responsibility to resolve all client complaints, including applicant denials, project deferrals, and work quality issues.

A grievance must be filed in writing using the Client Complaint form for a Subrecipient to take action, except when a complaint can be resolved quickly.

All complaints received by DEO will be referred to the applicable Subrecipient. Therefore, Subrecipients must have a written appeals system that is:

   a) adopted by the Board of Directors;
   b) formatted as a Subrecipient handout;
   c) posted in the client intake area of the Subrecipient's agency; and
   d) provided to those applying for weatherization services.

PROCEDURE:

LEVEL 1 (Local): Complaints must be in writing to allow the subrecipient to take action. Client must complete a Client Complaint Form and state what part of the weatherization process was unsatisfactory and provide sufficient documentation of the problem. Once the Complaint Form and any documentation provided by the client have been received, the Subrecipient will:

   1. Review the following:
      a. Complaint Form and documentation provided by the client.
      b. SERA data or notes, household file information and any other documentation.
      c. Pertinent federal/state rules and WAP policies.

   2. Respond in writing within 10 business days to the client, AND

   3. Include in its response the following:
      a. Statement of findings and its conclusion.
      b. Any action the Subrecipient will take to resolve the issue.
      c. Information about additional options the client may have and provide the following information:
         i. That the request to DEO must be postmarked no more than 10 business days from the subrecipient’s decision.
         ii. DEO Address.
         iii. Name/phone number of DEO Weatherization Program Manager.

LEVEL 2 (DEO): If the client is not satisfied with the Subrecipient’s conclusion or action taken, they may send a written complaint to DEO, which must be postmarked within 10 business days of the date of the Subrecipient’s decision. DEO will:

   a. Notify the Subrecipient that DEO received the complaint.
   b. Request that the subrecipient forward all documents in the household file, including the client’s complaint form and the subrecipient’s response. In additional, DEO will review the most recent HES file data.
   c. Review all documents/details relevant to the complaint.
   d. Conduct a site visit, if necessary at DEO’s discretion.
   e. Request that the subrecipient take corrective action, if applicable, in writing.
   f. Subrecipient will respond in writing to the client with DEO conclusion.
   g. Include in its response the following:
      i. Statement of findings and its conclusion.
ii. Any actions that subrecipient will take to resolve the issue.

iii. Information about additional options the client may have.

**Level 3 (U.S. Department of Energy):** If the client is not satisfied with the Weatherization Agency’s conclusion including DEO’s input or action taken they may send a written complaint to the United States Department of Energy Project Officer.

DOE is the last step. Client should seek private counsel for additional remedies.
Applicants have the right to appeal the decisions of the Administering Agency.

1. An appeal must be submitted in writing within fifteen (15) calendar days of the completion of work or receipt of a decision in writing. An explanation should be provided detailing the nature of the specific complaint, or the problem with the work performed and why you believe it is not satisfactory. The appeal should be mailed to the attention of the Weatherization Program Director at:

   ABC Community Action, Inc.
   P.O. Box 896
   Anytown, FL  22222

2. The Weatherization Program Director/Coordinator will review your appeal and provide a written response via certified mail within fifteen (15) calendar days.

3. If you do not accept the above response, you may appeal to the Chief Operations Officer (COO) in writing sent to the same address above within fifteen (15) calendar days of receiving the response.

4. The COO will review your appeal and provide a written response via certified mail within fifteen (15) calendar days.

5. If you do not accept the above response, you may appeal to the Chief Executive Officer (CEO) in writing sent to the same address above within fifteen (15) calendar days of receiving the response.

6. The CEO will review your appeal and provide a written response via certified mail within fifteen (15) calendar days.

7. If you do not accept the above response, you may appeal to the Board of Directors in writing sent to the same address above within fifteen (15) calendar days of receiving the response.

8. The Board of Directors or designated Board Committee (the Board) will review your appeal and provide written response via certified mail. The decision of the Board is the final outcome of the appeal.

If the applicant has completed this appeals process and is not satisfied with the decision, the applicant may proceed by sending a written complaint to the Florida Department of Economic Opportunity in writing via mail within 10 business days of the date of ABC Community Action, Inc.’s final decision.

Florida Department of Economic Opportunity
Division of Community Development
Weatherization Assistance Program
107 E. Madison Street
Caldwell Building, MSC 400
Tallahassee, Florida 32399
Office: 850-717-8451

The Florida Department of Economic Opportunity will review the matter with input from any party involved, and advise both the applicant and ABC Community Action, Inc., of the decision.
If the applicant is dissatisfied by the State’s conclusion, the applicant may send a written complaint to the United States Department of Energy.
CHAPTER 5
Deferral/DENIAL OF ASSISTANCE – WHEN NOT TO WEATHERIZE

The Florida Weatherization Assistance Program (WAP) may elect to defer a dwelling from receiving weatherization services where health and safety hazards exist for WAP staff, contractors, clients or where conditions prevent the safe and effective implementation of weatherization measures. The decision to defer work in a dwelling, or in extreme cases, provide no weatherization services, 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 problem can be resolved. Information for making this determination may become evident during the eligibility process, during the audit, or after work has started.

Conditions which may cause a dwelling to be deferred may include, but are not limited to the following:

- The dwelling was weatherized after September 30, 1994.
- A dwelling unit is vacant.
- A dwelling unit is for sale.
- A dwelling unit is scheduled for demolition.
- When there are minor children in the dwelling but no adult client or adult agent of the client at the time of the estimate or at any other time subrecipient personnel must enter the dwelling.
- The eligible member of the household moves from the dwelling unit where weatherization activities and services are in progress. In such a case, the subrecipient must determine whether to complete the work and the circumstances must be documented in the client file.
- The client has known health conditions that prohibit the installation of insulation and other weatherization materials. When a person’s health may be at risk and/or the 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. Failure or the inability to take appropriate actions must result in deferral.
- A dwelling unit is deemed by the auditor to have irreparable conditions that pose a threat to the health or safety of the crew or subcontractor.
- A mobile home is improperly installed (for example, inadequate supports).
- A dwelling unit is uninhabitable (for example, such as a burned-out apartment).
- There are health or safety hazards that must be corrected before weatherization services may begin including, but not limited to:
  - The presence of animal feces and/or other excrement,
  - Disconnected waste water pipes,
  - Hazardous electrical wiring, or
  - Unvented combustion appliances.
- The building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and the conditions cannot be resolved cost-effectively.
- The house has sewage or other sanitary problems that would further endanger the client and weatherization installers if weatherization work were performed. Deferral may be necessary.
in cases where a known agent (odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.) is present in the home that may create a serious risk to occupants or weatherization workers

- The property has been condemned or electrical, heating, plumbing, or other equipment has been “red tagged” by local or state building officials or utilities.
- Moisture problems, mold, and/or mildew are so severe they cannot be resolved under existing health and safety measures and with minor repairs.
- The home has drainage related conditions (gutters, downspouts, extensions, flashing, sump pumps, landscape, etc.) that may create a serious health concern and require more than incidental repair.
- Dangerous conditions exist due to high carbon monoxide levels in combustion appliances, and cannot be resolved under existing health and safety measures.
- Dangerous conditions exist due major gas leak(s), and cannot be resolved under existing health and safety measures.
- If pollutants pose a risk to workers and removal cannot be performed or is not allowed by the client. Pollutants include Formaldehyde, Volatile Organic Compounds (VOCs), and other Air Pollutants.
- When the extent and condition of lead-based paint in the house would potentially create further health and safety hazards.
- Infestation of pests, including rodents, vermin, fleas, roaches, may be cause for deferral where it cannot be reasonably removed or poses health and safety concern for workers.
- If there is a dangerous dog or other animal which poses a threat to weatherization workers
- Improperly stored chemicals, combustible materials, or other fire hazards that present a danger to the occupants or workers.
- The home cluttered to the extent that mobility and ability to perform weatherization work is hindered and obstacles create a safety hazard.
- If the home is being remodeled or rehabilitated and the weatherization work is not coordinated with that effort.
- Obvious discrepancies are found between the information supplied by the client on the application and observed conditions at the time of weatherization. The subrecipient must resolve these discrepancies before weatherization work can continue.
- The client is uncooperative with the weatherization subrecipient, either in demanding that certain work be done and refusing higher priority work, which is needed, or by being abusive to the work crew or subcontractor, or by being unreasonable in allowing access to the unit. Every attempt should be made to explain the program and the benefits of the work. If this fails, work should be suspended and the State Weatherization Office consulted.
- If, at any time prior to the beginning or work (materials installed in a unit), the subrecipient determines that the client is no longer eligible or subrecipient personnel believe that circumstances may have changed, the unit shall not be weatherized until updated information can be obtained from the client.
- The presence of live knob-and-tube wiring in areas where weatherization work must be performed.
- The illegal presence or use of any controlled substance in the home during the weatherization process.
Deferral Procedures:

Deferrals During Audit
If an auditor arrives at a home, begins to review the dwelling and determines it should be deferred prior to concluding the audit, the auditor shall immediately contact the subrecipient Weatherization Director to describe the situation and ask for guidance. If in the auditor's judgment during the audit, he/she feels the dwelling should be deferred for a problem likely and/or easily fixed - and that the dwelling will eventually be weatherized, the audit may continue, however, the auditor shall immediately contact the subrecipient Weatherization Director to describe the situation and ask for guidance. If possible, the Weatherization Director (or his/her assignee) may want to meet the auditor in the field to discuss the situation further and brainstorm ideas to allow the audit to continue and avoid deferral. No dwelling may be deferred without approval from the subrecipient Weatherization Director. If possible, all areas of the home should be inspected to identify all deferral issues in order to avoid multiple deferrals. Photos of all deferral conditions should be taken and included in the client file.

If the dwelling must be deferred, the auditor shall provide the homeowner with a brief statement (when feasible) of why they are recommending a deferral. The auditor will then report the recommended deferral to the subrecipient Weatherization Director, who will assess the documentation (photos, description of situation); approve or disapprove the deferral; and notify the homeowner in writing of the deferral decision.

If a deferral occurs before the audit is completed, the unit is eligible for payment, as an audit cut short for deferral reason. If the cause of the deferral is resolved, the Subrecipient shall assign the same auditor to the unit to conclude the audit. If a dwelling is deferred after the audit is completed, payment may not be made unless and until the “Administrative Procedures to be Followed for Deferred Units” below is concluded.

Deferral at Time of Measure Installation
Any crew or contractor who arrives on site and discovers what they believe to be a cause for deferral shall immediately contact the Weatherization Director to discuss the situation and determine a course of action. No work shall be done on the dwelling.

If the unit is to be deferred, the contractor shall provide the homeowner with a brief statement (when feasible) of why they are recommending deferral, before departing. The contractor will then report the recommended deferral to the Subrecipient Weatherization Director, who will assess the documentation (photos, description of situation); approve or disapprove the deferral; and notify the homeowner in writing of the deferral decision. The Contractor shall then be entitled to payment for work completed prior to the deferral.

Administrative Procedures to be Followed for Deferred Units
Once a unit has been deferred, the Subrecipient shall make every effort to bring homeowners back into the program. The Subrecipient shall:

1. Direct a letter to the homeowner informing them the dwelling has been deferred and asking them to correct the deferral conditions and contact the Agency when work is
complete. Agency should give the client 60 days or a reasonable amount of time to correct the issue(s). The letter should refer the client to any help or resources that may assist with the deferral conditions, as well as information on their right to appeal.

2. If no action is taken by the homeowner, a second letter will be sent to the client by certified mail, informing them that they must contact the Subrecipient within 30 days to be eligible for weatherization.

3. If no response is received to the certified letter, the unit is removed from further consideration by the WAP at the current time.

4. If at any time the homeowner states that they cannot or will not make the needed repairs, a final letter shall be sent to the homeowner informing them that they have been removed from the program and that they may not participate in WAP unless and until the identified conditions have been remedied and an updated application is submitted.

All letters and documentation of efforts to contact or help the homeowner shall be kept in the clients file by the Subrecipient.

It is the homeowner’s responsibility to correct the above conditions(s) in order for weatherization services to proceed. When the conditions causing the deferral have been addressed, homeowners are asked to contact the weatherization subrecipient to reevaluate the dwelling. When possible, weatherization subrecipients are encouraged to make referrals or collaborate with other programs and other local resources to best serve the customer.

Notification and Appeal
Households shall be informed in writing by the Subrecipient when services are deferred based on the deferral guidelines above. The deferral notice will include instructions to remedy the conditions that led to the deferral, or to appeal the deferral based on the ‘Complaints and Dispute Resolution’ policy.

In unusual situations not covered above or where other problems of a unique nature exist, DEO should be consulted.

If obvious discrepancies are found between the information supplied by the client on the application and observed conditions at the time of weatherization, the Subrecipient must resolve these questions prior to weatherization. Some examples of discrepancies are an obvious change in the client’s income, e.g., an unemployed client who is now back to work, a difference in the number of persons living in the dwelling unit, (fewer persons than listed, a person or persons not accounted for who may have income), evidence of unreported business being conducted in the unit, etc.
RE-WEATHERIZATION

Re-weatherization should not occur as a routine practice since many households have never received service. However, there may be a need for re-weatherization under certain special circumstances. Re-weatherization must be processed as a new application, including all documentation requirements. In all cases, re-weatherization is subject to prior approval by the DEO.

Units that were originally weatherized prior to September 30, 1994 or units damaged by fire, flood, or an act of God and that require additional weatherization services may be re-weatherized at the discretion of the Sub-grantee. In very rare cases, and with prior approval from DEO, a unit weatherized after September 30, 1994 and having a documented need for additional work may be re-weatherized.

When a previously weatherized unit is damaged by fire, flood or an act of God, (e.g., tornado, earthquake, lightning, or other natural disaster), the unit may be re weatherized if the owner has no insurance to cover the damage. An Affidavit of Damage must be completed, listing the date and type of occurrence that caused the damage, including the owner’s signature attesting to the lack of insurance. This form must be included in the job file for the unit. Only those materials and labor costs considered allowable under WAP guidelines will be considered.

Previously weatherized units may receive additional services subsequent to completion of the weatherization if those other services are considered part of a project that is considered a coordinated activity and there is no additional cost to the WAP.
**LEAD-SAFE WEATHERIZATION**

In Weatherization Program Notice (WPN) 09-6, issued January 2009, WPN 08-6, issued in September 2008, and in earlier guidance, DOE requires that all WAP-funded work be conducted in a lead-safe manner. The US Environmental Protection Agency (EPA) published the Lead; Renovation, Repair and Painting Program final rule in 2008. To ensure compliance with this rule all Subrecipients should receive training in lead-safe work practices. Department of Economic Opportunity (DEO) requires Subrecipients to attend Lead Renovation, Repair and Painting training to ensure that crews and subcontractors are knowledgeable in current requirements.

The new EPA Final Rule became effective on April 10, 2010. The rule requires that each Subrecipient is certified by EPA as a Certified Renovation firm, therefore Certified Renovators must be onboard with Subrecipient crews or contractors, and performing all the EPA required functions on all pre-1978 housing that has not been determined as exempt by state-approved protocols. The rule also has provisions on worker protections, client notification, client health and safety, and documentation of lead-safe work. The following requirements apply.

**Lead Paint Hazard Control Procedures**

- DOE requires that all work performed on dwellings built before 1978 be completed using lead safe work practices (LSW) unless the dwelling is exempt, pursuant to U.S. Department of Energy (DOE) notice WPN 09-6.

DEO requires all Subrecipients and their subcontractors to carry pollution occurrence insurance (POI). If the Subrecipient or subcontractor does not have POI, they must defer all work that may bring them in contact with lead paint or dust until they have secured the proper insurance. Certificates of insurance must be submitted to DEO for approval prior to commencing any work that may bring Subrecipients or subcontractors in contact with lead paint or dust. The certificates must identify DEO as certificate holder and additional insured parties, and must contain a provision that coverage afforded under the policies will not be cancelled or that DEO’s interest will not be otherwise affected unless at least 30-day prior notice has been given to DEO.

Sub-grantees must follow the specified EPA requirements with regard to worker protection. Sub-grantees must adopt basic safety precautions to protect workers and the occupants of the dwellings they weatherize from lead exposure. DEO requires Subrecipients to follow the specified EPA and OSHA standards for worker safety as well as all state and local requirements.

To ensure client health and safety, Subrecipients must ensure that residents and pets do not have access to the work area while work is underway. Sub-grantee staff and subcontractors must make every effort to contain the work area and eliminate tracking any dust or materials throughout the dwelling (or exposing residents and pets to any contaminants). If containment cannot be achieved and there is risk of traffic through the work area (e.g., work will take several days involving kitchens, bathrooms, or bedrooms) agencies are advised to defer the work until other resources can be secured to offset relocation expense for the residents and pets (see section on deferral, below). DEO policy requires owners to address lead hazards that exist in a unit that are not related to the weatherization work to be done. The policy advises that in some situations, such as when there are lead paint hazards in the premises and the weatherization work under such conditions would pose a
threat to the residents and the workers, the Subrecipient must defer the weatherization work until the problem has been corrected such that the weatherization work can be safely performed or until the Subrecipient is otherwise able to perform the work using lead safe work practices. The agreement between the owner and the Subrecipient requires the owner to remediate any lead-based paint hazard in the premises. The Subrecipient must not commence the weatherization work until the owner has completed his/her portion of the work.

Client Notification
DEO requires Subrecipients to follow the EPA requirements related to notification. Owners and occupants of a dwelling built before 1978 must receive the EPA’s new publication “Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools” must be used. The following link is the link for the “Renovate Right” publication: http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf

When to Defer Work due to Lead Hazards
Compliance with lead safe work requirements may mean that in some situations weatherization work must be deferred until the Subrecipient can ensure that no lead paint hazards will be created by the work, or until another Agency has corrected the problem so that weatherization work can be safely performed.

Weatherization work should not be deferred solely because there is lead based paint in the dwelling. The Subrecipient must follow lead-safe work practices in all units that are not specifically exempted, to ensure that hazards that exist in a unit do not pose a threat to the residents or the workers.

In determining whether or not to defer weatherization work, the Subrecipient should consider the following:

- Is Subrecipient adequately prepared to work with lead-based paint? (i.e., have workers received training in lead safe work practices; does the Subrecipient have the necessary personal protective equipment such as protective suits, and respirators; and does the Subrecipient have the necessary equipment and materials to follow lead safe work practices such as a HEPA vacuum and plastic);

- What is the condition of the painted surfaces on the inside and the outside of the dwelling? (i.e., are they so seriously deteriorated that a worker’s presence just walking around the dwelling, drilling holes in sidewalls, installing weather-stripping, etc. could be enough to stir up lead-based paint dust residues and thus pose a threat to the clients and to the workers themselves);

- What is the extent to which the specific energy-efficiency measures determined by the energy audit will disturb painted surfaces? (i.e., will the disturbance generate dust in excess of the OSHA minimums); and,
Will the cost of doing lead-safe weatherization represent a disproportionately large portion of the total unit cost?

Based on these factors, the Subrecipient should determine whether to:

1) Proceed with lead-safe weatherization work;

2) Do some weatherization measures and defer others; or,

3) Defer all weatherization work until work can be performed by trained personnel who can follow lead-safer work practices, or defer all work until another Agency has corrected the problem such that weatherization can be safely performed.

**Lead-Safe Work Practices**

All Subrecipients shall use the following lead-safe work practices whenever known or presumed lead-based paint is disturbed.

1. **General:** When any lead-based paint is disturbed:
   a. Tell the occupants to stay out of the work area;
   b. Ensure that workers can wash their hands and face when leaving work area;
   c. Ensure that workers do not smoke, eat, drink, chew tobacco or gum, or apply cosmetics in the work area;
   d. Wear a respirator
   e. Obtain a Ground-Fault Circuit interrupter (GFCI) if electrical equipment will be used;
   f. Do not use any of the following methods to remove the paint;
      i. Open-flame burning or torching;
      ii. Machine sanding or grinding without high-efficiency particulate air (HEPA) local exhaust control;
      iii. Abrasive blasting without HEPA local exhaust control;
      iv. Heat guns at temperatures above 1100°F for charring the paint;
      v. Dry sanding or dry scraping except:
         vi. Paint stripping in a poorly ventilated space using a volatile stripper that is a hazardous chemical under OSHA as applicable to the work.
   g. Lightly spray the paint with water before disturbing it. Try to keep it wet and use wet sanding/scraping methods whenever disturbing the paint;
   h. If equipment is going to be reused, wash it thoroughly before leaving residence;
   i. Dispose of all lead-based paint, debris, coveralls, and plastic covering in regular trash; and
   j. Dispose of all water contaminated with lead-based paint in a sanitary sewer system.

2. **Minor Paint Disturbances:** When less than 2 square feet per room or 10% of an interior component of lead-based paint is disturbed inside or less than 20 square feet of lead-based paint is disturbed outside:
   a. Follow general requirements described in item1) above;
   b. Tape a plastic bag or sheeting on the horizontal surface below the paint to collect paint chip sand any dust that may be formed; and
c. After work is done, wipe the surface with a baby wipe or towel.

3. **Exterior Paint Disturbances:** To be used when more than 20 square feet of exterior lead-based paint is disturbed. Generally, removing siding from a wall is presumed to disturb more than 20 square feet of lead-based paint unless it is known before-hand that deteriorated lead-based paint and lead dust is not behind the siding.

   a. Follow general requirements described in item 1) above;
   b. String barrier tape saying “WARNING” or “DANGER” or “DO NOT ENTER” at least five feet beyond area where lead-based paint will be disturbed;
   c. Post OSHA warning signs in the exterior work so it can be easily read from 20 feet away from the edge of the exterior worksite.
   d. Ensure that everyone who enters the work area wears plastic coveralls, shoe covers, and hair covering and removes them when leaving the work area.
   
   e. Seal any windows, door, dryer exhaust or other openings in the work area;
   f. Either remove or cover any equipment in the work area with plastic sheeting;
   g. Place six-mil thick plastic sheeting on wall below the paint to be disturbed and on the eight feet from the wall in a manner that it captures the water (15 feet if disturbed paint is on the second floor);
   h. Place a 2” x 4” board or similar device along the outer edges of the plastic to capture water;
   i. Wash off any siding that is removed;
   j. Repair any deteriorated paint and fix cause of deterioration;
   k. Remove plastic, clean-up any debris, and dispose in trash so that no deteriorated paint and visible paint remain.
MOLD AND MILDEW

Over the past several years health professionals and building scientists have become increasingly concerned with the presence of mold and mold-like conditions in and around the dwelling and the health effects on dwelling occupants.

The WAP has been concerned with indoor air quality issues for many years and has paid close attention to the role of moisture and ventilation as variables affecting the quality of the living environment. Although weatherization funds cannot be spent to mitigate mold, Subrecipients must be aware of the conditions in and around the dwelling unit that can cause or worsen mold and mold-like conditions.

In the course of performing the initial walk through and energy audit of the dwelling unit, and when interviewing the client, it is very important that the energy auditor assess the property and speak with the client to determine the presence of mold or dwelling and environmental conditions that can produce mold or exacerbate existing mold conditions.

Although mold can appear in any part of the dwelling it is most often associated with bathrooms, basements and crawlspaces. Mold-producing conditions can result from any type of water leak, water damage, flooding, or if the basement or any other area in the dwelling gets damp and wet. Water collecting around the perimeter of the dwelling from improper drainage, underground water supplies lack of proper gutters, roof leaks, excessive condensation and numerous other conditions can also contribute to the growth of mold. Mold will not grow if moisture is absent.

Subrecipients must incorporate a thorough mold inspection protocol as part of their routine re-weatherization assessment of the dwelling. The presence of mold should be documented in writing on the WAP Inspection Tool (WIT), and pictures in the client file. All visible signs of mold should be cleaned by the client or the client’s representative before any work is begun. Weatherization funds cannot be used for this activity. The presence of more than two square feet of visible mold that cannot be cleaned may warrant a referral to the county health department. Likewise, if during the client interview, the client indicates that a household member has experienced unusual itchy eyes, sneezing, coughing, rash, flu-like symptoms, itchy skin, etc. and the visible signs of mold are present, a referral to the local health department may be warranted. In such cases, weatherization should be deferred pending a determination regarding how to proceed.

Subrecipients are encouraged to proceed with caution when considering dwelling units for weatherization where the presence of mold has been discovered. In the vast majority of cases, the cleaning and removal of the presence of the mold coupled with activities designed to alleviate the original causes of the mold, i.e., improved ventilation, addition of a bathroom or kitchen fan, a change in client behavior, etc. may be all that is necessary to effectively address the situation. Refer the client to the EPA, “A Brief Guide To Mold, Moisture and Your Home” as to how to proceed with cleanup.

However, occasionally the Subrecipient may encounter a situation where the presence of mold
is more than 10 square feet or less extensive and where the conditions that produced the original mold are not easily corrected or are beyond the scope of what weatherization can handle, i.e., the dwelling unit is constructed over or near a stream that permeates through the dirt floor crawl space or cellar, or the dwelling unit has been constructed in an area with a high water table and poor drainage, making the presence of ground water a consistent variable that must be taken into account. In such cases, weatherization may not have to be deferred, as much as fundamentally reconsidered.

Instead of tightening the dwelling, performing air sealing, installing insulation and doing other conventional measures, the energy auditor and weatherization coordinator may have to consider work that will address the presence of the ground water and its ramifications for the structure as a whole such as preventing and or reducing moisture penetration into the basement and crawlspace, dehumidification, adding mechanical ventilation, removing standing water from the perimeter of the dwelling, as well as spending as much time as possible with the client to explain to them the dynamics underlying the energy performance of their dwelling, it’s location in relation to the moisture source, and how this effects the structure and its energy system.

The proposed work-scope may require that the Subrecipient document the existing conditions that have led to the proposed measures. In some cases, it may be best to advise the client that energy savings from weatherization will be relatively modest because the work is aimed at measures to prevent further moisture penetration and damage to fundamental structural systems of the dwelling. Energy savings may be more attributable to various base load measures related to lighting, refrigeration and other related control devices.

As with other potential problems, the presence of mold is best handled through a “whole house approach.” However, it is best to approach the presence of the mold as a condition that requires additional work to determine the cause or causes of the mold and the likely ramifications, if any, as a result of performing traditional “whole house” weatherization protocols.

Before completing the work scope the Subrecipient must consider whether performing air sealing, insulating, adding mechanical ventilation/dehumidification, performing Heating, Ventilation and Air-Conditioning (HVAC) system work and the other weatherization protocols will make the mold conditions worse, about the same, or promote an improvement.

Subrecipients are encouraged to thoroughly document the visible conditions of the dwelling unit and the surrounding areas around the dwelling unit with pictures and relevant data.

If Mold is found during the inspection process:

- Document the mold with photos.
- Determine what may be causing the problem.
- If the exposed surface area of the mold is less than two square feet, you may consider proceeding with weatherization if addressing the measure will stop the moisture problem.
It is highly recommended that photo documentation of before and after work is taken and placed in the client file.

- If more than two square feet of mold or moisture present and it is determined that the work would probably not stop the water intrusion, or the scope of work required is beyond allowable measures, a Deferral of Services situation exists.
ASBESTOS POLICY

In general, asbestos removal is not an approved health and safety weatherization cost, however, asbestos should not be disturbed if at all possible. Guidelines are:

- Removal or encapsulation is allowed and may be necessary when the measure will provide a cost-effective savings-to-investment ratio, normally true of large, multifamily heating systems.

- Removal and replacement of asbestos siding for purposes of wall cavity insulation is permissible if allowed by state and local codes. Subrecipients are required to contact local building codes department to determine the correct course of action.

- When permitted by code or Environmental Protection Agency (EPA) regulations, encapsulation (usually less costly measures that fall short of asbestos removal) may be used.

- WAP Subrecipients encountering an asbestos situation should contact DEO for direction before proceeding with blower door testing or work is performed.

Note: Refer major asbestos problems to the Florida Department of Environmental Protection and/or the U.S. Environmental Protection Agency.
NATIONAL HISTORIC PRESERVATION (SHPO)

In accordance with Section 106 of the National Historic Preservation Act (NHPA) 16 U.S. Code 470F and 36 CFR (Code of Federal Regulation) part 800, Florida Weatherization will adhere to the following guidelines when applying measures to wall insulation and window repair or replacement.

Whereas the projects funded are subject to review under Section 106 of the NHPA and its implementing regulations at 36 CFR part 800 and include rehabilitation, energy efficiency retrofits, renewables and weatherization undertakings the following guidelines have been set forth for any structure listed or eligible for listing on the National Historic Register will follow the following guidelines when applying measures to wall insulation and window repair, restoration or replacement.

Wall insulation:

- Insulation will not result in noticeable holes on the exterior.
- Remove siding to blow and replace siding. Cause no visible damage during removal, blowing insulation, capping holes and replacing siding.
- Wood siding can be drilled to install insulation but the holes must be plugged with a wood plug, sealed in place, sanded smooth and repainted with matching paint. Plugs cannot be visible.
- Cellulose insulation which uses aluminum or ammonium sulfate as the fire retardant cannot be used. (Cellulose treated with boric acid as the fire retardant is approved.)
- Interior paint must offer/work as a vapor barrier at all interior surfaces/walls containing the newly blown insulation.
- Insulation installed under a new siding is not permitted when it covers architectural features. (No siding and insulation overlay replacement allowed.)
- Attaching insulation to inside, framed out with firing strips is not allowed if it covers original features such as cornices, chair rails, window trims, or if it causes the destruction of historical plaster or other wall finishes.
- Following manufacturer’s instructions for installing insulation with appropriate fireproofing; rigid foam insulation must be covered by appropriate fireproof covering (1/2” gypsum wallboard). The insulation is not to be left exposed.

Blown from the inside:

- Must not damage historical plaster or other wall finishes.
- Must follow EPA Lead Based Paint guidelines.
- Must be refinished (not seen when complete).

Windows:

- Replacement windows will not be approved except under these conditions:
  - Replacement windows can only be installed with the approval of National Historic Preservation Act (NHPA).
Department of Economic Opportunity (DEO) encourages Subrecipients to work with local housing agencies in the Subrecipients’ service area to coordinate Weatherization Assistance Program (WAP) resources with other affordable housing resources whenever possible. DEO requires the Subrecipient to conduct an energy audit on the assisted project early in the partnering process. The results of the energy audit should then be included in the overall scope of the program.

Strong coordination is advantageous between the partners to ensure the following core program principles are maintained:

- Clients must be eligible under WAP rules.
- There must be a WAP energy audit, with a concern for health and safety, documenting the nature and scope of the work the WAP is funding.
- Materials and installation standards must meet WAP requirements.

The energy audit is to be driven by the federal requirements of the program and providing a comprehensive analysis of the energy systems providing heat, hot water, air conditioning and lighting to the dwelling’s envelope.

DEO recommends that Subrecipients and local housing agencies initiate a dialogue early in the process where the intent is to coordinate program resources. Familiarity in terms of understanding each program’s mission is fundamental to knowing what can be accomplished by each program, and to understanding the limitations and opportunities inherent in coordination. Although the approach may at first appear to be potentially time consuming or cumbersome, it often establishes a rapport and sense of collegiality that can be mutually beneficial to all parties while reducing confusion, misunderstanding and other barriers to success.

DEO staff is available to assist Subrecipients who are interested in establishing contacts with their local counterparts. DEO is committed to an open and flexible approach in matters related to facilitating coordination between Subrecipients and local housing Agencies. Affordable housing is often made possible when resources from various programs are brought together to produce a result far greater than any one program can achieve alone. In a climate of limited resources and mounting energy costs DEO strongly believes that coordination of resources should be pursued.
The Technical Weatherization Policy (TWP) contains policies and requirements for the Florida Weatherization Assistance Program. Subrecipients receiving funding from the State of Florida for local administration of the weatherization program shall follow the guidelines contained in the TWP. Procedures and Best Practices may be found in SWS/Florida Guide or on-line at the National Renewable Energy Laboratory Standard Work Specification (NREL-SWS) website. sws.nrel.gov (https://sws.nrel.gov/node/190).

This section of the P&G contains the technical weatherization policies and requirements for the Florida Weatherization Program, including measures guidelines/policies, inspection/diagnostic testing and energy audit requirements, standards and specifications for weatherization measures, manufactured home weatherization requirements, and health and safety requirements.
ENERGY AUDITS AND INSPECTIONS

It is the responsibility of the Sub-grantee’s energy auditor to assess the existing conditions of the dwelling unit/structure and record the information on the WAP Inspection Tool (WIT). The assessment must be completed before the commencement of any work and include each of the following diagnostic measures:

- Blower door test for air infiltration/exfiltration;
- Steady state efficiency test for combustible Heating, Ventilation and Air Conditioning (HVAC) efficiency;
- Test efficiency of HVAC distribution system and related controls;
- Moisture problems; inspect for presence of mold or mildew;
- Inspect for potential lead-based paint hazards;
- Determine condition and effectiveness of previous weatherization measures, if any;
- Conduct indoor air quality tests;
- Assess overall condition of structure, including the proper identification of the dwelling envelope;
- Determine whether any problems may exist with the way the client uses the HVAC system(s);
- Assess adequacy of ventilation/venting systems;
- Conduct base load usage analysis; and,
- Determine existence of any other health and safety issue(s).

DEO has approval for the use of the Florida Weatherization Priority List, the National Energy Audit Tool (NEAT) and the Mobile Home Energy Audit (MHEA).

Other Energy-Related Measures
DEO allows Subrecipients flexibility in determining work scopes, to enable a more comprehensive approach to serving income qualified clients. Certain repairs may be completed in the course of providing WAP assistance. However, Subrecipients are reminded that the overall goals of the WAP are to reduce energy use of heating and cooling costs by improving energy efficiency and ensuring health and safety. All repairs provided under the program must be incidental and consistent with the mission of the program.

The following energy related repairs may be permitted, when necessary:

- Ventilation may be installed in situations where it is necessary to mitigate health and safety or moisture problems encountered in a dwelling unit being weatherized, including proper ventilation of combustion appliances.

- HVAC distribution/fuel system repair or replacement is permitted when proven to increase efficiency or useful life of the system.

- Chimneys may be relined or repaired when the existing chimney condition creates an unsafe or inefficient condition during the operation of the primary heating appliance. In situations
where an existing chimney is inadequate for the proper venting of combustion appliance(s) other than the primary heating appliance, alternative cost-effective methods of venting those appliance(s) should be explored and the most cost-effective measure(s) must be utilized.

- Hardwired lighting fixtures may be replaced in kitchens, hallways, foyers, or bathrooms when replacement is done to accommodate more energy-efficient lighting, or when existing fixtures are unsafe.

- Ground Fault Circuit Interrupter (GFCI) may be installed in areas where an existing GFCI is not functioning properly or where one is required to ensure safe installation of a WAP measure.

- A roof may be repaired only when this work is necessary to protect insulation that has previously been installed or is proposed as part of the work scope for the unit.

- Electrical circuits may be upgraded only when it is necessary in conjunction with the installation of a measure(s). For example, when the installation of a new HVAC or ventilation appliance requires a circuit that is not currently present or adequate.

- High-efficiency appliances should be considered when documented by testing of the existing appliance, or when warranted by health and safety concerns. They should always be considered if there are supplemental funds available to leverage installation efforts.

- Installation of atmospheric heating appliances are not allowed.
GENERAL INFORMATION
The Priority List is made up of those weatherization measures that should be in all Florida single-family dwellings. These measures have been determined to be the most cost effective based upon projected energy savings, energy costs, and climatic conditions. Florida’s Priority List ranks the most cost-effective measures in order starting with the number one measure or activity (after Health & Safety) – Air Sealing. At a dwelling to be weatherized, if a Priority List item is already present and meets guidelines or is not applicable to the dwelling, move on to the next Priority List item to be addressed.

HEALTH & SAFETY MEASURES
• Combustion Appliance Efficiency, Repairs, Replacements
• Other Health & Safety measures as needed

PRE-APPROVED MEASURES
A Pre-Approved list has been compiled that identifies general heat waste measures that should be installed in all dwellings
- Water heater pipe insulation
- Water heater tank insulation
- Faucet aerators
- HVAC System Filters
- CFL Lighting Retrofits
- Low-flow showerheads

PRIORITY LIST MEASURES – Building-Specific Energy Conservation Measures
In addition to those measures identified in the Pre-Approved List, the following weatherization measures should be installed as conditions dictate and funding allows. Site specific audits should be completed for unusual dwellings or when measures not listed below appear suitable for a particular dwelling.

1. Infiltration Reduction (Air Sealing)
Building enclosure air sealing is a cost-effective measure for all areas of the state. This measure includes sealing HVAC ductwork located in uninsulated spaces in addition to general air sealing between conditioned and unconditioned areas of a dwelling. Priority should be given to ductwork located in unconditioned spaces and air leakage at the attic and floor planes of the dwelling. A blower door test should be used to identify air sealing needs, and sufficient ventilation should be added if necessary once air sealing measures have been completed. Existing attic insulation should be pulled back to inspect for air sealing opportunities. A cost-effective approach is $30.00 per 100cfm of reduction.

2. Attic Insulation
Filling roof cavities with loose insulation is cost effective for all regions of the state. Attic insulation installation should be done in conjunction with air sealing. Insulate
uninsulated and/or under-insulated attic spaces to an effective R-30. Attic spaces with R-19 or more insulation coverage should not receive additional insulation. Attic spaces with R-11 or less should be insulated to R-30. Attic spaces with uninsulated knee-walls should receive insulation with an attic-side air barrier. Existing insulation may be reused, with additional insulation applied directly on top to achieve desired R-Value. It is important to follow all necessary attic prep measures before adding attic insulation.

3. **Duct Sealing and Insulation**
Duct insulation should be installed in all homes where uninsulated ductwork is located in attics and/or uninsulated foundation spaces. Newly installed duct insulation should be R-8 for ducts located in attic spaces and R-6 for ducts located in other unconditioned areas. Use a pressure pan test to identify where duct sealing is necessary. Sealing should be completed on all ducts, connections, and boots with mastic. Install insulation on ducts located outside of conditioned space with foil-faced duct insulation.

4. **Floor Insulation R-19**
Floor insulation is only a cost-effective measure for existing uninsulated foundation spaces. Auditors should evaluate all non-conditioned foundation spaces for the presence of existing insulation. If insulation is present, then floor insulation should not be added to those spaces as part of an energy conservation package.

5. **Sun Screens / Window Film**
Installing sun screens to windows is cost effective for all regions of the state. Sun screens should not be installed on the north side of the dwelling.

6. **Dense-Pack Sidewall Insulation**
Wall insulation is only a cost-effective measure for existing uninsulated wood framed exterior walls. Auditors should inspect all exterior walls for presence of existing insulation. If insulation is present, then wall insulation should not be added to those walls as part of an energy conservation package, unless at least half of the wall cavities have no pre-existing insulation, then insulation is warranted. As with attic insulation, sidewall insulation should also be done in conjunction with air sealing.

7. **Refrigerator Replacement**
   a. metering required

**OPTIONAL MEASURES**
- Programmable Thermostat
FLORIDA WEATHERIZATION PRIORITY LIST
FOR
MANUFACTURED HOME – SINGLE FAMILY

General Information
The Manufactured Home Priority List is made up of those weatherization measures that should be in all Florida single-family manufactured dwellings. These measures have been determined to be the most cost effective based upon projected energy savings, energy costs, and climatic conditions. Florida’s Manufactured Home Priority List ranks the most cost-effective measures in order starting with the number one measure or activity – Duct Sealing. At a dwelling to be weatherized, if a Priority List item is already present and meets guidelines or is not applicable to the dwelling, move on to the next Priority List item to be addressed.

HEALTH & SAFETY MEASURES
- Combustion Appliance Efficiency, Repairs, Replacements
- Other Health & Safety measures as needed

PRE-APPROVED MEASURES – General Heat Waste Reduction Measures
A Pre-Approved list has been compiled that identifies general waste heat measures that should be installed in all homes once they enter the Weatherization Assistance Program.
- Water heater pipe insulation
- Water heater tank insulation
- Faucet aerators
- HVAC System Filters
- CFL Lighting Retrofits
- Low-flow showerheads

PRIORITY LIST MEASURES – Building-Specific Energy Conservation Measures
In addition to those measures identified in the Pre-Approved List, the following weatherization measures should be installed as conditions dictate and funding allows. Site specific audits should be completed for unusual single-family homes or when measures not listed below appear suitable for a particular house.

1. Duct Sealing
   Identified as the top weatherization priority, duct sealing is cost effective for all regions of the state. Use a pressure pan test to identify where duct sealing is necessary. Sealing should be completed on all ducts, connections, and boots with mastic. Install insulation on ducts located outside of conditioned space with foil-faced duct insulation that has an R-value of R-8.

   The following table outlines duct sealing expenditures allowed within the state of Florida, based on location and primary heating fuel type. This chart is based on performing duct sealing which results in pressure pan readings of ≤1 Pa at each register.
2. **Air Sealing**  
Reducing air infiltration into the home is cost effective for all regions of the state. Air sealing goals should be at least a 30% reduction from the pre-weatherization infiltration test. A blower door test should be used to identify air sealing needs, and sufficient ventilation should be added if necessary once air sealing measures have been completed. Existing attic insulation should be pulled back to inspect for air sealing opportunities.

3. **Shade Screens**  
Installing additional shade screens to windows is cost effective for all regions of the state.

4. **Roof Insulation**  
Filling roof cavities with loose fiberglass insulation is cost effective for all regions of the state.

5. **Wall Insulation**  
Wall insulation is only a cost-effective measure for existing under-insulated exterior walls. Auditors should inspect all exterior walls for presence of existing insulation. This measure should not be performed in instances where less than 2 inches of open cavity space is available for installation of insulation. In such cases, documentation must be provided.

6. **Refrigerator Replacement**  
   a. metering required

**OPTIONAL MEASURES**
- Programmable Thermostat
AIR SEALING & BUILDING TIGHTNESS LIMITS

Every dwelling unit needs to be air sealed as thoroughly as economically possible. Every effort should be made to seal the by-passes in the home with the proper materials and weatherization techniques (see note below).

The following is a list of common by-passes. Note: All by-passes found in the dwelling unit must be sealed, even if not covered on this list.

Attics:
- Plumbing chase
- Plumbing soil stack
- Furnace/Water heater flue chase
- Top plate (interior & exterior walls)
- Wire penetrations
- Exhaust fans
- Ceiling mounted junction boxes
- Recessed lights
- Fireplace/chimney chase
- Missing fireplace flue damper
- Soffits above interior cabinets
- Dropped ceilings
- Attic stairway stud spaces
- Balloon framing wall/ceiling cavity
- Whole house fan
- Joist cavities beneath knee walls
- Area above laundry chute
- Dumb waiter shaft
- Duct plenum
- Duct penetrations (wall & ceilings)
- Plaster and lath voids
- Attic hatch
- Fold away attic stairways

Basement & Crawlspaces:
- Plumbing stack
- Bathtub trap
- Wire penetrations
- Plumbing penetrations
- Duct shafts
- Duct penetrations
- Chimney or flue
- Balloon framing wall cavity
- Basement/crawlspace or slab interface
- Utilities entries
- Dryer vents
- Sill plate
- Foundation cracks or holes

Inside Dwelling:
- Dropped ceiling
- Floor trim
- Ceiling trim
- Outletsswitches
- Wall mounted fixtures
- Wall mounted exhaust fans
- Medicine cabinets
- Plumbing penetrations beneath sinks
- Bathtub cutouts
- Plumbing access hatch
- Permanent window air conditioners
- Cracks or holes in exterior/interior walls
- Panned returns (floor & wall cavities)

**NOTE:** Before air leakage reduction measures are installed, the thermal & pressure boundaries must be defined and existing health & safety issues must be corrected.

**Air Sealing “Targets”:**
Air Sealing requires a *PRESCRIPTIVE* and *PERFORMANCE* approach.

**PRESCRIPTIVE:** Air seal all chases, holes, penetrations, joints, seams, gaps, etc. Anywhere that air can infiltrate/exfiltrate the building envelope.

**PERFORMANCE:** Reduce air infiltration by a certain percentage based on initial blower door test results and volume of house.

**Target CFM50 Rates**

Target CFM50 levels based on a range of existing leakage rates are shown in Table 100-1. Target CFM50 levels relate existing CFM50 leakage rates to expected post-weatherization leakage rates. The premise is that homes with high leakage rates have a potential for larger cost-effective leakage reductions that tighter dwellings.
Air Sealing work should continue when the target has been achieved and additional air sealing opportunities are present.

A concerted attempt to reach the target CFM50 must be made in every home. The most cost-effective air sealing involves addressing the largest leakage paths first and sealing leaks in the top part of the home. Confirm effectiveness of air sealing strategies by performing intermediate blower door tests.

**Intermediate Blower Door Test**

Contractors and crew are required to measure, record and submit CFM50 readings to Weatherization Agencies. Known as “intermediate readings”, these readings can provide immediate feedback to those doing the air sealing work and where the leakage rate is with respect to the Target CFM50.

**Table 100-1 Target CFM50 Rates**

Contractor Blower Door Requirements

- Contractors are required to do an initial blower door test before beginning work to confirm the assessor’s existing leakage rate and target CFM50 rate.
- If the contractor’s existing leakage rate is off by plus and minus 10%, the contractor should call the assessor to ensure that house set-up is the same as it was during the assessment. If necessary, the assessor may re-calculate the target CFM50 rate.
- Contractors should ensure the effectiveness of air sealing work.
- Air sealing work should be validated using smoke with the house under depressurization or pressurization.
- Zone pressure measurements should be taken and compared to the assessor’s zone pressure numbers.
- Contractors must submit their initial blower door test, intermediate readings, final blower door test reading to the WX agency.
- Architectural contractors and crews are required to conduct a spillage test-out every day following completion of work “Spillage Test-Out”. This test is only required for natural draft appliances.

Post-Blower Door Test the following items should be checked after conducting a blower door test.

- Inspect all pilot lights of combustion appliances to ensure that blower door testing did not extinguish them.
- Reset thermostats of heating appliances and water heaters that were turned down or off for testing.

Determining Target Rates Examples for determining the target rate are provided here.
1. The average leakage rate in Florida homes prior to weatherization is 3900 CFM50. The target rate is 64% of 3900 CFM50, or 2496 CFM50. A reduction of 1404 CFM50 (36%) is needed to achieve this target (3900 – 2495 = 1404).

2. The existing rate of a home is 3700 CFM50. The target rate is 2368 CFM for a reduction of 1332 CFM50. Air-tight enclosures were added over four recessed light fixtures. An intermediate reading was taken to determine the effectiveness of this work and was found to reduce air leakage by 400 CFM50, about 30% of the reduction needed to achieve the Target. Foam board was found to reduce air leakage by only 50 CFM50 indicating to the air sealing crew that, even though the soffit was sealed, this was not as large a leakage location as was originally thought and that air leakage is occurring at other locations within the thermal boundary.

3. Divide CFM50 by 10 to determine approximate square inches to help visualize the size of the “hole” that needs to be sealed. Thus, for a typical home that measures 3900 CFM50 prior to weatherization, the size of the “hole” that needs to be sealed to achieve the target rate is about 140 in² (1404/10=140) or 12”x 12”.

<table>
<thead>
<tr>
<th>Existing CFM50</th>
<th>Target CFM50 Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 1250</td>
<td>99% of existing CFM50</td>
</tr>
<tr>
<td>1251 to 1560</td>
<td>90% of existing CFM50</td>
</tr>
<tr>
<td>1561 to 2750</td>
<td>72% of existing CFM50</td>
</tr>
<tr>
<td>2751 to 4250</td>
<td>64% of existing CFM50</td>
</tr>
<tr>
<td>4251 to 5500</td>
<td>54% of existing CFM50</td>
</tr>
<tr>
<td>5501 to 7500</td>
<td>50% of existing CFM50</td>
</tr>
<tr>
<td>≥7500</td>
<td>45% of existing CFM50</td>
</tr>
</tbody>
</table>

Example = A house has an initial blower door test with a CFM reading of 3,700CFM @50 pascals. So, we look under the existing CFM50 on the above chart and it shows 3,700 is between 2,751 & 4,250. Therefore, we look to the left to see our target number, within this example is 64%. We then multiply our 3,700CFM reading x.64 this equals 2,368CFM and this our target. If we take the 3,700CFM and subtract 2,751CFM, we will get 1,332CFM and this is our total reduction number.

DEO will be requiring all three of these readings on every home. This information shall be placed in a spreadsheet and will track every home of every agency. We will calculate the numbers to find the average reduction from each agency. DEO will share this spreadsheet every year.

**BOTH PRESCRIPTIVE & PERFORMANCE AIR SEALING REQUIREMENTS MUST BE SATISFIED.**

During the air sealing process, blower door tests should be performed to monitor the effectiveness of air sealing, and to help identify any additional bypasses. Once the prescriptive checklist is completed, air leakage may be measured and compared to the Target Closure Rate.
Prior to establishing an initial blower door reading, gross air sealing must be done. An “as is” blower door test may be performed to identify any sources of gross air leakage in need of repair. This test will indicate whether gross air sealing or repair work is needed before a more representative initial blower door test can be made. Examples include replacing broken window glass, installing glass where missing, and sealing holes in the building envelope.

If final blower door test exceeds the minimum ventilation rate as per the RED calculation; additional mechanical ventilation should be installed.
BLOWER DOOR

POLICY: A blower door test must be conducted on every dwelling to be weatherized to determine the actual leakage rate at 50 pascals and identify all air-infiltration paths, basically to quantify and locate air leakage.

PROCEDURE:
1. A blower door test must be completed by the auditor during the audit to:
   - Establish the pre-weatherization air leakage level and the building tightness limit.
   - Determine the maximum amount of air sealing that may be completed while maintaining a Savings-to-Investment Ratios (SIR) of one or greater.

2. Installers should complete blower door tests:
   - Before the installation of conservation measures begin.
   - At the completion of major conservation measures (i.e., after major air sealing or wall insulation).
   - At the completion of all shell measures and mechanical work activities.
   - In the case of a multiple-day or delayed work jobs, blower door readings should be taken and recorded at the end of each day.

3. A blower door test must be completed at the final inspection.

4. All blower door readings must be recorded in the WAP Inspection Tool (WIT)

EXCEPTIONS: Dwellings that have a fireplace or wood stove, evaporative oil heater (e.g., space heater or other appliances with a wick), or unconnected/open sewer may be exempt from this policy provided that:

1. Every reasonable effort is being made to obtain blower door readings, especially once repairs which allow readings to be taken, are completed.

2. The existing conditions cannot be corrected or changed.

3. The final results are clearly documented in the comment boxes of the WIT.
PRESSURE DIAGNOSTICS

Pressure diagnostics are required for all dwellings. Readings must be taken during the energy audit during the initial and final inspections. Also, if feasible; during intermediate points during the work process. Pressure diagnostics aid in any or all of the following:

1. Evaluating the air tightness of the dwelling’s air barrier.
2. Identifying which of the dwelling’s components are conduits for air leakage.
3. Establishing the thermal boundary of the dwelling.

PROCEDURE:

1. Complete pressure diagnostic activities at required times.
2. Use the process in this guidance manual to identify and seal air leaks.
3. Record all pressure diagnostic readings in the WAP Inspection Tool (WIT)

Pressure diagnostic readings at final inspection should be:

- As close to zero pascals as possible for space within the thermal/air boundary with respect to the outside.
- As close to 50 pascals as possible for spaces outside the thermal/air boundary with respect to the outside

If dwelling conditions make it impossible to reach acceptable standards after cost effective air sealing has been performed, a notation listing the reasons should be recorded on the WIT.
PRESSURE PAN READINGS

Pressure pan readings are required on every dwelling to be weatherized to identify duct leakage. Testing is required during the initial and final dwelling inspections. Also, if possible, during intermediate points throughout the work process.

PROCEDURE:
1. Complete pressure pan testing at required times.
2. Use the process as outlined within this manual to identify and seal duct leaks.
3. Record all pressure pan readings in the WAP Inspection Tool (WIT).

STANDARD:
1. Pressure pan readings at final inspection should be 1 pascal or less.
INCIDENTAL REPAIRS

Incidental repairs are allowed when the repair:

1. Protects and ensures the effectiveness of weatherization materials.
2. Is necessary or required in order to install weatherization materials.
3. Adheres to the cost limits described in the STANDARD below.

PROCEDURE:
1. Record the following in the WAP Inspection Tool (WIT):
   - Existing conditions that justify the need for the repair.
   - Proposed activity and actual work completion details.
   - Estimated and actual repair cost.
2. General incidental repairs include but are not limited to:
   - Installing poly, installing/taping sheetrock, minor carpentry work and applying sealants to protect exterior surfaces of weatherization and/or repair materials.
   - Site drainage problems which cause moisture to enter the structure and may compromise the integrity of the foundation can be addressed as incidental repairs to protect the structure against moisture damage and related health and safety problems.
   - Problems with guttering systems that may result in moisture damage to the house may be addressed as incidental repairs to protect the sidewall insulation. Gutters may be cleaned, repaired, replaced or installed as protective measures to prevent or repair water damage that could affect the performance of weatherization measures.
   - Repair or replacement of leaking plumbing lines or water heater tanks is an authorized incidental repair in manufactured homes.
   - Minor roof leaks may be sealed to protect the integrity of the structure.
   - Removal of fire hazards
   - Repair of unsafe electrical wiring
   - Exterminate pests, insects, or rodents from attics, eaves, walls, under floors, crawl spaces and basements
3. In addition, please note the following:
   - Mechanical repair work is not usually considered to be a general incidental repair.

STANDARD: Client documentation indicates that incidental repair activity:
1. Either protects a weatherization material or allows a weatherization material to be installed.
2. Does not result in a cumulative job SIR of less than one.
3. Does not exceed 10% of the total material cost of the unit.
   - The 10% limit may be exceeded with an approved waiver from DEO. All dwellings must maintain an overall Savings-to-Investment Ratio (SIR) of 1 or more.
APPLICABLE CODES

Weatherization measures shall be installed in accordance with these specifications, all applicable State and local codes, and Federal regulations, including the Americans with Disabilities Act. All applicable permits must be obtained prior to installation of measures. Department of Economic Opportunity (DEO) does not assume responsibility for enforcing or determining compliance with local or federal codes, regulations or interpretations. However, DEO will disallow any work that is found to be not in compliance with current codes.

A number of these specifications refer to or reflect federal, state, or City laws, which may be changed or subject to changes in interpretation in the future. References to related codes are supplied for informational purposes only and should not be considered the relevant or only code for the specific situation or jurisdiction – the contractor is responsible for determining the appropriate code for a given situation.

Where code and specification requirements differ, the most stringent of the requirements shall apply. In case of any conflict between this manual and any applicable law, regulation or ordinance now or hereafter in effect, the law, regulation or ordinance shall be followed.

Federal Regulation: Other Code Compliance Issues - It is the state's responsibility to ensure that weatherization-related work conforms with applicable codes in jurisdictions where the work is being performed.
ATTIC INSULATION

Reference the Priority List for Single Family Homes or run a NEAT audit to determine if adding insulation would be cost effective. If there is an existing level of insulation of at least an R-19 it would not be cost effective to add additional insulation. Check existing level of entire attic insulation after air sealing has been completed. Insulation that was removed for the purpose of air sealing must be placed back properly. If there is a need to add more, insulate to R-30.

Reference the following table to determine the R-value of existing insulation.

<table>
<thead>
<tr>
<th>Insulation type</th>
<th>R-value per inch of thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber glass blanket or batt</td>
<td>2.9 to 3.8 (avg. 3.2)</td>
</tr>
<tr>
<td>Loose-fill fiber glass</td>
<td>2.3 to 2.7 (avg. 2.5)</td>
</tr>
<tr>
<td>Loose-fill rock wool</td>
<td>2.7 to 3.0 (avg. 2.8)</td>
</tr>
<tr>
<td>Loose-fill cellulose</td>
<td>3.4 to 3.7 (avg. 3.5)</td>
</tr>
<tr>
<td>Perlite or vermiculite</td>
<td>2.4 to 3.7 (avg. 2.7)</td>
</tr>
</tbody>
</table>
HEALTH & SAFETY PLAN -Revised

Related Policies and Procedures:
The client application form includes a statement regarding any existing health conditions that the Subrecipient should be aware of prior to commencing with any diagnostic testing procedures or impact of installing any measures, i.e., blower door testing; blowing insulation; etc.

Deferral process outlines the Subrecipient notification requirements and references that the household is still eligible for weatherization once the issue prohibiting weatherization services from being provided have been rectified.

WAP H&S for Hazard Abatement – For each dwelling weatherized, there is a set-aside amount of funds to be utilized for addressing any activity required to assure the safe installation and protection of a weatherization measure. In addition, Subrecipients must be cognizant of the number of health and safety areas/issues that may or not be allowable to be addressed by WAP. Addressing these areas/issues should not negatively impact the health and safety of the household in any way. General guidelines include:

1. **Current Limit towards Health & Safety is 15% as directed by U.S. Department of Energy (DOE).**
2. Use for performing Lead Safe Weatherization (LSW) activities.
3. Used for performing Mold and Moisture related activities.
4. Charged amount for this activity is itemized – material & labor.
5. H&S costs are not included with the other material and labor charges on the Building Work Report (BWR).
6. Notation in BWR Comments section regarding what H&S funds were used for.
7. Reported as a separate line item charge on the Financial Activity (FA).

Crew and Contractor Health and Safety
Weatherization services should be provided in a manner that minimizes risk to workers. Subrecipients and their representatives are required to take all reasonable precautions against performing work on homes that will subject workers and clients to health and safety risks. Therefore, all Subrecipients, contractors, and crew workers providing services using funding under the WAP are required to comply with the following requirement of the Occupational Safety and Health Administration (OSHA) standard: Hazard Communication Standard, Title 29, CFR 1910.12: “Preparation and implementation of a hazardous communication program so that workers are informed about potential hazards.” The Standards include:

- Identification of hazardous materials in the workplace.
- Provision of container labels and other forms of warning.
- Employee access and implementation of OSHA requirements and Material Safety Data Sheets (MSDS).
- Documented mandatory field in-progress unit inspection for assessing the utilization of good, safe work practices in according to all required EPA, OSHA, SHPO, etc.
- Requirement of all agencies to complete the OSHA 10-hour worker and 30-hour crew leader training hosted in a centralized location and provided by certified OSHA proctor.
- Provision of employee training regarding hazardous materials.
• Complete exchange of information between contractors and subcontractors regarding the use of hazardous materials.
• Use EPA Recommendations for spray polyurethane foam (SPF) fumes. Available online at: www.epa.gov/dfe/pubs/projects/spf/spray_polyurethane_foam.html

Note: There is an expenditure Limit of max 15% U.S. Department of Energy (DOE) per dwelling for providing health and safety activities directly related to the weatherization work being performed, i.e., labor, materials, proper tools and equipment, protective clothing, respirators, etc. Costs for Department approved OSHA training, medical exams, and other items or activities related to the health and safety of workers is also an allowable cost that may be charged to either the Health and Safety or Training and Technical Assistance categories reported on the monthly Financial Activity (FA) report with prior WAP state office approval.

Client Health & Safety
Weatherization services should be provided in a manner that also minimizes risk to clients and other household members. Concerns to ensure health and safety of the household should be identified and addressed, if possible, within the scope of the weatherization program. The on-site dwelling inspection will focus on determining the existence of these situations and could result in a deferral of services and/or specific activities to be implemented in order to protect the health and safety of both the household occupants and the weatherization providers. The Subrecipient WAP inspector must conduct a thorough dwelling inspection to determine if:

a) There is an existing health and safety situation that must be rectified before weatherization services can be provided.
b) The health and safety situation will be eliminated in conjunction with providing allowable weatherization services.
c) The situation is outside the scope of weatherization services and another funding source (or the client can rectify the situation) will need to be contacted.

The following is a list of potential hazards that are to be considered for each dwelling eligible to receive weatherization services along with recommended actions to minimize risk to both the workers and the client (household).
A. Biological
Concern: Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowed however, addressing bacteria and viruses is not an allowable cost.

Action/Allowability:
The Subrecipient inspector will:
- Inform client of observed conditions.
- Provide as applicable, information on how to maintain a sanitary dwelling and steps to correct condition.
- Indicate a deferral situation exists where a known agent is present in the home that may create a serious risk to occupants or weatherization workers.
- Provide a written Deferral of Services notification to client (certified mail) – reference Deferral section for guidance on limited allowable activities.

Training:
- Inspectors familiar with products that would promote biological conditions or unsanitary conditions.

B. Moisture
Concern: Limitations on what WAP can mitigate. High relative humidity can create allergic reactions or respiratory infections as a result of exposure to biological contaminants; damage to building materials. Moisture conditions from major drainage issues may be beyond the scope of the WAP.

Action/Allowability:
- Eliminate sources of excess moisture, avoid over-tightening of dwelling, and assure proper ventilation, especially in kitchen and bathroom areas.
- Assure clothes dryers are vented to the outside.
- Educate clients that gas ranges and/or ovens are not to be used for space heating.
- Comprehensive moisture inspection of the dwelling unit should be completed.
- Interview with the occupant(s) in regard to existing/noticeable moisture problems.
- Document existing issues on Priority List Assessment and Testing (PLAT) inspection form.
- Controlling moisture at the source will be required when excessive amounts of indoor moisture are evident. This will usually take the form of exhaust fans. Caution will be used so that added ventilation devices will not adversely affect combustion appliances.
- Attic bypasses must be sealed in order to reduce migration of moisture into attic spaces where condensation problems can occur.
- During the initial inspection and throughout the weatherization process, locate mold, mildew, and any other biological organisms that may be hazardous to the workers or occupants.
- Dwellings with conditions that may create a serious health concern that require more than incidental repair should be deferred.

Training:
- Training will be provided on how to recognize moisture and ventilation problems.
- Guidelines reviewed regarding limitations of WAP to correct some moisture problems.
C. Mold

**Concern:** The WAP is not a mold mediation programs. Only if the source of the moisture contributing to mold development can be stopped during the course of installing an allowable measure, should a Subrecipient proceed with work. To avoid “inheriting” a problem that cannot be addressed within the scope of the program, the inspection and evaluation process will determine whether weatherization work would eliminate future mold problems.

**Action/Allowability:**
If mold is found during the inspection process:
- Document the mold location with photos.
- Determine what may be causing the problem.
- If the exposed surface area of the mold is less than two square feet, you may consider proceeding with weatherization if addressing the measure will stop the moisture problem. It is highly recommended that photo documentation of before and after work is taken and placed in the client file.
- Upon the discovery of a mold condition, client must be informed immediately and include the specific weatherization measure that will assist in alleviating the mold condition, and/or how not to promote new mold growth.
- The Pre-Work Order Agreement (PWOA), signed by the client before weatherization work commences, will indicate the measure/activity that will be performed to alleviate the mold condition.
- The PWOA also includes disclaimer language holding the WAP/ Subrecipient harmless.
- Along with the PWOA, the client will receive a copy of the U.S. Environmental Protection Subrecipient (EPA) Indoor Environments Division (IED), “A Brief Guide to Mold, Moisture, and Your Home.” [http://www.epa.gov/mold/moldguide.html](http://www.epa.gov/mold/moldguide.html) pamphlet.
- If more than two square feet of mold or moisture present and it is determined that the work would probably not stop the water intrusion, or the scope of work required is beyond allowable measures, and a Deferral of Services situation exists.

**Training:**
- Taking photos of areas around the water heater, heating and cooling units and vents during initial inspection process of existing mold and even when there is no visible mold to document no existing mold or moisture problem.
- Training will be provided utilizing national curriculum on mold and moisture on procedures for addressing mold clean-up and removal of materials in a safe manner.

D. Drainage

**Concern:** Exterior/envelope and basement draining may create or contribute to mold and moisture problems in and around the dwelling.

**Action/Allowability:**
- Inspect all gutters, down spouts, extensions, flashing, sump pumps, and ground depressions during initial inspection process.
- Interview with the occupant(s) in regard to existing/noticeable moisture problems.
- Follow mold and moisture inspection protocols.
- Document inspection results.
• Determine if stabilizing an energy related situation can be performed so effective weatherization can be completed.
• If drainage situation is due to an unsanitary source, avoid direct contact. Inform client of unhealthy environment.
• Mitigation activities most likely not allowable activity in WAP.
• Follow Deferral policy as applicable.

Training:
• Recognizing possible causes of mold and moisture from outside the building envelope.
• Knowledge of what other resources exist for referring client to for assistance in rectifying the drainage situation.

E. Combustion Appliances and Combustion Gases
Concern: Proper venting of all fuel burning appliances used for water heating, space burning, cooking, solid fuel heating and clothes drying. Before any time is spent on the whole dwelling evaluation process, the Coordinator should first determine if there are combustible fuel appliances utilized by the household. If there are, a Carbon Monoxide (CO) test must be performed on all combustible appliances and the gas analyzer (leak detector) test on fuel source before proceeding with any other inspection or testing process. Note: Combustible appliances include water heaters, heating and cooling units, clothes dryers, space heaters, and stoves.

Action/Allowability:
All weatherization providers must perform CO testing:
• Utilize a Monoxor III with printing capabilities.
• Perform a final CO test of any new combustible fuel appliance(s) installed.
• Perform a final ambient CO test in the room with each existing appliance if no replacement combustible fuel appliances are installed.
• Have copies of the pre and final readout in the client file, each listing the appliance tested, and/or the ambient test(s) results with room listed.
• If combustible appliances test results are above the allowable CO level, repair or replacement is coordinated along with weatherization (allowable measures only).

Note: No weatherization services will be provided on a dwelling with an appliance testing over the acceptable limit until the CO problem is addressed.
No Fuel Situation:
- Assist client by referring to the local Low-Income Home Energy Assistance Program (LIHEAP) provider Subrecipient grantee for home energy assistance or winter crisis funds to obtain fuel (allowable as long as the fuel and heating system are attached and contingent upon available funding).
- Follow-up with LIHEAP Subrecipient for status.
- Contact local fuel provider for assistance (partial fuel donation to allow for required testing).
- Postpone services until fuel is obtained; perform testing, then if acceptable levels of CO, prioritize providing weatherization services to client.

Note: For additional information in performing a thorough inspection and testing procedures to identify dangerous fuel leaks, the potential for CO poisoning, and fire hazards, the U. S. Department of Energy (DOE) Hot Climate Initiative, “Combustion Appliance Safety & Efficiency Testing” pamphlet should be referenced. A copy of that pamphlet is located in Section Two of the Florida Weatherization Programs Manual.

Dangerous Level of CO:
- If any combustible appliances test above the allowable CO level, the test results must immediately be brought to the client’s attention.
- The fuel source will need to be temporarily turned off until the problem is corrected.
- That appliance may be disconnected (by gas technician) if other combustible appliances are safe and need to be operational for the household.
- If the high CO reading is from a weatherization allowable combustible appliance, that measure can be prioritized as the first item to be taken care of.
- If the unacceptable CO reading is from a stove, other funding sources should be utilized to rectify the situation (replacement or major repair) before weatherization is performed.
- If the unacceptable CO situation cannot be rectified, then a Deferral of Services situation exists.

Guidance on Appliances and Water Heaters
Unvented Space Heaters:
- If an existing unvented heater (fixed or portable) is the primary heating source and is not going to be replaced, weatherization services cannot be performed.
- Unvented heaters must be removed and vented heater may be installed in order to proceed with performing weatherization on the dwelling.
- An unvented heater may be left in a dwelling as a secondary heating source if it tests acceptable.
- If it does not test acceptable, it must be removed before weatherization can be performed.
- Replacement not an Health & Safety (H&S) charged measures.
Water Heaters
- Replacement not an H&S charged measure.
- Installation of an insulation blanket and water line insulation a required activity but not charged to H&S.

Air Conditioning and Heating systems
- Replacement not an H&S charged measures.
- Applicable energy audit used for replacement recommendation.
- Cleaning and repair to ensure the efficiency of the unit is allowable under central unit on BWR not H&S.
- Reference air conditioning and heating systems replacement guidelines in the Florida WAP Manual.

Training:
- Awareness of CO testing guidelines and deferral process.
- Use of diagnostic tools (Monoxor, blower door, pressure pan) to determine if dwelling is excessively depressurized.
- Performing zonal and Compliance Appliance Zone (CAZ) testing.
- Maintenance and disposal of appliances requirements.

F. Fire Hazards
Concerns: Combustion appliances and their associated venting systems can also present potential fire hazards based on proximity of location and efficient/safe venting capabilities.

Action/Allowability:
- Subrecipients must inspect combustion appliance vents in order to identify potentially dangerous situations.
- Subrecipients must provide written notification to clients and landlords when fire hazards prevent weatherization work from proceeding.
- Correction of fire hazards is allowed when necessary to safely perform weatherization.
- Smoke alarms are an allowable H&S measure if there are combustible appliances existing or installed.
- Follow manufactured recommendation regarding number of and placement in a dwelling.
- Creosote build-up in chimneys and wood stove flues are issues that may be addressed with DOE funds however, Subrecipients should contact their state consultant to discuss remedy prior to implementing action.

Training:
- Review of the USDOE Hot Climate Initiative, “Combustion Appliance Safety & Efficiency Testing” pamphlet should be referenced. A copy of that pamphlet is located in Section Two of the Florida WAP Manual.

G. Existing Occupant Health Problems
Concern: Some individuals’ health problems could be exacerbated by weatherization activities. For example, some clients can be sensitive to dust generated from the installation of cellulose
insulation. There is also some concern that the use of blower doors could aggravate certain health problems, although the limited research conducted on this topic has not validated these concerns.

**Action/Allowability:**
- On the Client Intake Form (CIF) there is a space for the client to confirm and list any household health problems.
- During the initial inspection process as the inspector performs the walk-around and asks about moisture, mold of other dwelling conditions or household environment issues, and if anyone in the household has a health issue.
- Any diagnostic testing process can be waived if an existing occupant health issue can be documented (i.e., doctors script, evidence of occupant on portable oxygen, etc.).
- When the PWOA is presented to the client, and the list of work to be performed is explained, the client should be asked, has an opportunity, to comment on any concern of health-related side effects a weatherization measure installation may cause (i.e., blown insulation).
- Temporary relocation of at-risk occupants is not an allowable activity to be charged to WAP.
- Deferral of services may be an option but the state office should be contacted for advisement before that step is taken (possible grievance situation).

**Training:**
- Awareness of information provided on a client’s application form regarding existing health issues.
- Waiver process for not performing specific diagnostic test.
- Ability to assess occupant preexisting condition and how to “work around it”.

**H. Indoor Air Quality**

**Concern:** In addition to asbestos, and combustion systems, there are a number of other sources of indoor air pollutants in homes that may present long-term health risks to clients. Precise knowledge is lacking regarding the interaction of weatherization of homes and indoor air quality. Also, mineral fiber is known to be an irritant to lungs, eyes, and skin. Exposed mineral fiber shall not be left in occupied areas of the home. Workers are required to wear properly-rated respirators and protective clothing when working with or around mineral fiber products.

**Action/Allowability:**
- **ASHRAE 62.2-2016** is required to be met to the fullest extent possible, when performing weatherization activity.
- Implementing ASHRAE 62.2-2016 is not required where acceptable indoor air quality already exists as defined by ASHRAE 62.2-2016.
- Existing ventilation (bathroom, kitchen, whole house) fans and blower systems should be updated if not adequate to meet ASHRAE 62.2-2016.
- The pre and post weatherization blower door test will be required on 100% of all dwelling units. Exceptions must be documented in the client’s file.
- The blower door test must identify the Cubic Foot / Minute (CFM) rate to establish baseline tightness.
- The blower door will be used for leak detection in the building shell, duct delivery and return systems, and assisting with combustion appliance testing.
Training:
- Inspector awareness of determining indoor air pollutants and attention to the level of air-tightening measures performed on a home to aid in the improvement of the situation.
- Awareness of requirement to wear properly-rated respirators and protective clothing when working around indoor air pollutants.

I. Asbestos

Concern: Asbestos is a non-combustible mineral and the fibers are very small. When disturbed/distributed and released into the air, the fibers can be inhaled. Exposure may result in lung cancer, asbestosis or mesothelioma. There is no safe exposure level when it comes to asbestos. Until its use was strictly limited in the 1970’s, asbestos was used in a large number of building products. The most common applications that could involve interaction with weatherization staff include furnace insulation, pipe insulation, duct insulation, siding shingles, furnace gaskets and ceiling texture materials. To a lesser degree, workers may encounter asbestos in plaster, joint compound, roof shingles, floor tiles and other building products.

Action/Allowability:
- Inspectors will need to learn to recognize suspected asbestos-containing materials.
- When determined that vermiculite is present, take precautionary measures as if it contains asbestos, such as not using blower door tests and utilizing personal air monitoring while in attics.
- Where blower door tests are performed, it is a best practice to perform pressurization instead of depressurization.
- Removal is not allowed. Encapsulation of small asbestos on pipes, furnaces and other small covered surfaces is allowed by an AHERA asbestos control professional and should be conducted prior to blower door testing on case-by-case basis only.
- Avoid disturbance of friable Asbestos Containing Materials (ACMs). Friable asbestos is “any material containing greater than one percent asbestos by weight or volume that hand pressure can crumble, pulverize, or reduce to powder when dry, or any asbestos-containing material that can reasonably be expected, as a result of the demolition or renovation to be undertaken, to become pulverized through breaking, chipping, crumbling, crushing or other means of rendering fibers available to the ambient air.”
- For limited exposure exists, wearing appropriate respirators, protective clothing, etc. required. Wetting down suspected ACMs would reduce the levels of airborne fibers, although this will not completely eliminate the risk in all situations and may, under certain circumstances, relocate the asbestos fibers to another location where they could pose a risk.
- Provide written disclosure to clients regarding the existence of suspected ACMs and provide client education advising non-disturbance of such materials.
- Protective gear such as Tyvek coveralls, head coverings, booties, etc., gloves, eye protection, respirators, and other safety equipment required by law must be provided to all employees who will come in contact with asbestos or suspected asbestos products.
- Employees will be required to use the appropriate safety equipment as required under state policy. Each Subrecipient will be required to monitor their employees’ adherence to state policy and local policies and standards.
• Subrecipients will be responsible for the compliance of their employees and contractors. Failure of Subrecipient or individuals at the Subrecipient or contractors to follow policies on asbestos will result in disciplinary action. Continued violations may result in defunding of the weatherization program for that Subrecipient. Current weatherization contracts will be terminated and future contracts to provide weatherization services may not be issued.
• In order to achieve the required OSHA fit test of a respirator, it may be necessary for Subrecipient weatherization staff that is required to wear respirators, to be clean-shaven. A clean-shaven policy may include removal of most facial hair including beards, some mustaches, long sideburns, etc. It might be possible to waive the clean-shaven policy if the employee will use a full head-type respirator in the place of a full or half face-type.
• Liability for asbestos cannot be waived.

Training:
• All crews, inspectors, contractors and their supervisors, or anyone else who visits weatherization eligible homes, will be required to receive asbestos awareness and identification training. Training is available online at the Asbestos Hazard Emergency Response Act (AHERA) website at http://ahera.org/ and through the U.S. Environmental Protection (EPA) “Purple Book” at http://www.amazon.com/Assessment-Asbestos-Removal-Carried-Guidance/dp/1249422604
• All Occupational Safety and Health Administration (OSHA) regulations that deal with asbestos and weatherization are to be enforced and be made available to all workers.
• Contractors must follow the state and local policies and standards 100 percent. No exceptions will be made under any circumstances.

Note: This information is a general guide for weatherization personnel and does not provide detailed specifications for proper handling of ACMs. Training and supervision for personnel providing asbestos remediation services are beyond the scope of the WAP. Weatherization personnel or appointed representatives shall not remove or dispose of asbestos without proper training and without prior authorization from the state WAP office.

J. Radon
Concern: An odorless, colorless gas that occurs naturally in the earth’s crust. Long-term exposure to elevated levels may cause lung cancer. Present research indicates that weatherization usually has little effect on radon levels.

Action/Allowability:
• Where there is a previously identified radon problem, work that would exacerbate this problem should be limited.
• Radon abatement is not an allowable activity under the weatherization program.
• However, those costs associated with taking precautions in a dwelling known to have radon problems are allowable weatherization expenditures.
• Installation of a vapor barrier in the crawl space under a dwelling is the most common activity to offset somewhat the radon gas intrusion.
• These costs are allowable if an energy audit indicates that weatherization techniques would help in radon remediation.
• Major radon problems should be referred to the appropriate local environmental organization or Subrecipient for mitigation or abatement.

Training:
• Testing may be allowed in locations with high Radon potential.
• Information about radon locations along with possible resources to leverage with are available at the Homes website - https://healthyhomestraining.com

K. Formaldehyde and Volatile Organic Compounds
Concern: Formaldehyde, a strong-smelling colorless gas, is a component of many building materials.

Action/Allowability:
• Testing is through sensory perception
• Health hazards include lung ailments, impaired brain and vision function, fatal in high concentrations.
• Extensive air leakage work is not recommended on homes with known significant level of formaldehyde.
• Formaldehyde vapors may be slowly released by some new carpets, wafer board, plywood, etc. Volatile Organic Compounds (VOCs) are also emitted by some household cleaning agents.
• If client refuses removal, a deferral situation exists.
• Caution should be taken when selecting air tightness limits in dwellings with VOC problems.
• Removal is allowed and is required if they pose a risk to workers. If VOCs pose a risk to workers and removal cannot be performed, the dwelling must be deferred.

Training:
• Develop written information regarding the safety and proper disposal of household pollutants to be shared with clients.

L. Lead Paint
Concern: The WAP is not a lead abatement program. Only labor and materials costs associated with measures installation and Health & Safety funding may be used for performing Lead Safe Weatherization (LSW). The Florida Weatherization Program Manual details guidelines and procedures for performing LSW. All pre-1978 homes must be tested for lead by a Certified Renovator (CR) and any work performed on a home with lead must comply with EPA guidelines and be performed by a Certified Firm. The Subrecipient inspector must evaluate the condition of all painted surfaces, especially around the doors and windows. If extensive deterioration is evident, a postponement of services situation exists due to possible health and safety risks for the client and workers.

Action/Allowability:
• All Subrecipients follow EPA’s “Lead; Renovation, Repair and Paint Program (RRP).
• The brochure “The Lead-Safe Certified Guide to Renovate Right” from EPA must be provided to all clients.

• Subrecipient must obtain a signature confirmation of receipt of this brochure – on the PWOA form.
• All Subrecipient crews and contractors working on pre-1978 dwellings must receive training on LSW.
• LSW may be implemented if the dwelling:

  1. Is pre-1978 construction.
  2. Has more than 6 sq. ft. of surface will be disturbed by measure(s) installation.
  3. Has visible flaking or chalking painted surfaces.
  4. Clearance testing confirms lead paint present
• Subrecipients considers working with other housing repair programs that require clearance testing to be performed on dwellings slated to receive weatherization.
• Testing results must be included in client file to justify why no LSW activities were performed.
• The CR requirement for performing lead paint testing is mandatory. All Subrecipients must have a CR on staff.
• All state monitors will also be CR certified.
• The pre-work testing process on pre-1978 dwellings must be performed by a CR.
• Even if the Subrecipient sub-contracts an entity to perform this function, the Subrecipient is responsible for ensuring that the tests are performed correctly, and all required documentation is completed and reviewed prior to preparing the work order for bid. In addition, the post-work testing must be confirmed.
• If a Subrecipient contracts out the lead paint testing process (pre or post), the Subrecipient CR must initial the results of each test performed.
• Copies of all CR testing documentation and other client file required items must be submitted along with photo-documentation of LSW procedures being performed on the first pre-1978 weatherized dwelling submitted for reimbursement that has any of the following measures addressed - exterior doors or windows, exterior or interior wall repair or ceiling repair.
• If no documentation or photos are received for the first home, the next pre-1978 dwelling meeting the criteria for performing LSW must be met. No reimbursements requests will be processed until CR items and LSW practices are photo documented and submitted.
• After the initial LSW photo documentation requirement has been met, no more CR items or photo documentation may be required to be submitted (but should be taken to include in the client file). However, CR testing and/or LSW procedures (a dwelling in progress) may be requested to be visited during the monitoring visit. CR and LSW requirements to be reviewed during monitoring visits:

  1. Pollution Occurrence Insurance coverage (continual).
  2. All applicable CR related items in the client file.
  3. Confirmation/documentation of crews or contractors receiving LSW training.
  4. Photo documentation of LSW being performed on a pre-1978 dwellings being weatherized.
  5. Site visit to a dwelling in progress utilizing LSW.
Training:
- To assure that weatherization Subrecipients, crews, and subcontractors are properly trained, annually the state office will coordinate refresher training on LSW practices.
- LSW training will focus on work practices to reduce the generation and spread of lead dust. All field personnel are required to attend this training. Training will include the LSW Cleanup, Verification, and Debris Disposal requirements.
- Also coordinated annually will be the CR certification training.
- Both trainings will be provided by an organization having the required accreditation and will have the certified trainers retained so agencies can meet this important requirement in a fast and effective fashion.
- All inspectors, Subrecipients crew members and contractors must attend and successfully complete the approved, LSW and CR training.

M. Building Structure
Concern: Weatherization agencies shall not install measures that will damage the structural integrity of a home. Similarly, all homes must be inspected for pre-existing conditions that may threaten the safety of workers and clients during or after weatherization.

Action/Allowability:
- Deteriorating foundations, unsound roof, ceiling, or wall structures, and any other potentially hazardous situation must be recognized and a course of action identified prior to any work done on the unit.
- Solutions to structural problems are sometimes complicated and expensive.
- Minor structural type repairs are allowed under the Subrecipient’s incidental repair budget (not health and safety).
- More extensive repairs will require outside sources of funding or cost participation.
- Depending upon the extent of repairs needed and the overall energy savings potential for the unit after weatherization, the repairs may be beyond the scope of weatherization.
- Incidental repairs necessary for the effective performance or preservation of weatherization materials are allowed. Examples of these limited repairs include sealing minor roof leaks to preserve new attic insulation and repairing water-damaged flooring as part of replacing a water heater. These types of repairs could be incorporated into the cost of the associated energy measure when determining cost-effectiveness.
- Client notified if dangerous structural situations exist which may result in a deferral situation.

Training:
- Awareness of other federal and state funded housing repair programs both statewide and locally will need to be disseminated throughout the network for creating additional leveraging opportunities.
- Refresher training on visual assessment and inspection of the structural component of each dwelling.
- Refresher training on diagnostic equipment that can reveal hard to detect structural situations, i.e., infrared camera.
N. Electrical Issues

Concern: Common problems with electrical wiring that may be encountered while weatherizing a dwelling agencies are usually related to one of the following: 1) electric shock while crew personnel are working around wiring in all areas of the homes; 2) fire resulting from arcing between loose wiring connections; and 3) fire resulting from lack of dissipation of heat due to insulation around heat producing sources.

Action/Allowability:

- Inspections by trained Subrecipient personnel or licensed electricians are required prior to the installation of insulation that will cover electrical lines.
- A voltage drop measurement is required of any electrical circuit in an enclosed cavity.
- Knob-and-tube wiring cannot be covered with insulation.
- Protection of electrical splices that will be covered with insulation by enclosing in an electrical junction box or by isolating the splice so that it is not covered with insulation is required.
- Electrical work not associated with energy conversation measures is generally considered beyond the scope of weatherization.
- Should inspectors or crews find such existing problems, they should notify the client/owner and follow the guidelines for health and safety deferral.
- Electrical repair costs must be associated with an energy saving measure, and the costs (labor and materials) must be included with the measure when determining cost effectiveness.
- Weatherization measures that involve the installation of new equipment such as air conditioners, heat pumps, or electrical water heaters can exacerbate previously marginal overload problems to hazardous levels. The problems should be noted in the client file. To the extent that these problems prevent adequate weatherization, the Subrecipient should consider repairing them on a case-by-case basis or consider a deferral situation may exist.
- Client should be asked about any occasional dimming of lights.

Training:

- All electrical work must be performed by a state certified electrician.
- Subrecipient Inspectors should consider having the electrical contractor participate in the initial inspection process if possible situations may be present.

O. Refrigerant Issues

Concern: The replacement of air conditioners, and the recently approved refrigerator replacements (Weatherization Program Notice 11-6) requires agencies to reclaim refrigerant per Clean Air Act 1190, section 608, as amended by 40 CFR 82, 5/14/93.

Action/Allowability:

- Client file must have documentation to support that the appliance vendor, de-manufacturing center or other entity recovering the refrigerant possesses the Environmental Protection Agency (EPA)-approved section 608 type I or universal certification.
- Subrecipients should ensure they have appropriate protocols in place that comply with all standards relating to the disposal of the existing appliances.
• De-manufacturing documentation must be obtained and placed in client file
• Client refusal of removal of replaced refrigerator, as spelled out on the Pre-Work Order Agreement (PWOA), will result in a deferral of services situation.
• De-manufacturing documentation must be obtained and placed in client file

Training:
• Subrecipient inspectors must be aware of local certified de-manufacturing entity in the service area.
• Inspector must make clear to client that no replaced refrigerator will remain on client property.

P. Code Compliance
Concern: It is the local Subrecipient’s responsibility to ensure weatherization-related work conforms with applicable codes in jurisdictions where the work is being performed. All Subrecipients are required to review the Standard Work Specifications (SWS)/Florida Field Guide (FFG) to ensure local code compliance and/or prepare an addendum per the item/measure that for its installation, must follow stricter codes for compliance. This addendum will be included in the Subrecipient copy of its SWS/FFG and shared with for hire contractors and crews.

Action/Allowability:
• All weatherization work must conform to federal, state guidelines and be in compliance with local county, municipal and city building codes.
• Correction of preexisting code compliance issues is not an allowable cost other than where weatherization measures are being conducted.

Training:
• During monitoring visits, state staff will confirm that each Subrecipient has a copy of the local codes.
• Code Compliance will be a written requirement in any bid or agreement between the Subrecipient and the contractor.

Q. Deferral Standards
Concern: All weatherization technicians must be able to perform all authorized weatherization activities and measures without undue threats or concerns regarding their health & safety.

Action/Allowability:
Conditions which may constitute a situation that will require corrective actions before weatherization services may be provided include but are not limited to the following items:
• If an unvented space heater is present in the unit, no weatherization work will be allowed unless the weatherization crew or contractor is allowed to remove and dispose of the unit. If an unvented space heater is replaced with a vented heating system during the weatherization process, the local Subrecipient will remove and dispose of the unvented heater at the time the system is installed. The owner cannot retain ownership of the heater.
• Any overt threat of violence, verbal abuse, physical abuse, or profanity towards any weatherization staff member or any household member during the weatherization process.
- Evidence of substantial, persistent infestation of rodents, insects, and other vermin which cannot be reasonably removed or poses health and safety concerns for workers.
- The presence of animal or human feces in any area of the dwelling unit where field staff must perform various weatherization measures.
- Electrical or plumbing hazards that cannot be resolved prior to or as a part of the authorized weatherization work.
- Excessive garbage and clutter build-up in and around the dwelling unit where field staff must perform weatherization measures.
- Maintenance and housekeeping practices that are negligent to the point of limiting access of field staff to the dwelling or creating an unhealthy working environment.
- Evidence of the presence and/or use of any illegal/controlled substance in the dwelling unit.
- The lack of the presence of a home resident who is at least 18 years old when any weatherization staff is performing the weatherization process.
- A heating system in use has been determined to be unsafe or nonfunctional (through the determination of a qualified Subrecipient or technician) and cannot be resolved through the normal efforts of the weatherization Subrecipient prior to the commencement of weatherization work or during the normal weatherization process.
- Evidence of environmental hazards such as serious moisture problems (more than two square feet of visible mold is present), carbon monoxide, gas leaks, friable asbestos, or other hazardous materials, which cannot be resolved prior to the weatherization work.
- Extensive (obvious) flaking or chalky painted surfaces (indicative of lead paint).
- The integrity of the weatherization measures to be installed will be compromised.
- The inspection process reveals that there are structural problems or the condition of the dwelling warrants rehabilitative services.

When a dwelling, unit or building is considered not to be a good candidate for weatherization, Subrecipients follows a formal course of action utilized for placing services on hold until a situation has been rectified by either the dwelling owner or another funding source or program. A written notification must be sent by certified mail to the dwelling owner (or landlord and client). This correspondence will include the:

- results of the dwelling/unit/building inspection;
- situation(s) that prohibits work from proceeding;
- corrective actions needed to be done before weatherization can proceed;
- timeline (180 days) for correcting the situation and notifying the Subrecipient so a follow-up inspection can be coordinated;
- requirement to recertify the client’s eligibility after 180 days;
- placing of the client file in a pending status until notified of corrective action completed;
- option of the Subrecipient to administratively close the client file if there is no response from the client after 180 days;
- Subrecipient written grievance procedures; and
- submitting of a copy of the deferral letter along with a copy of the applicable dwelling assessment tool to the Department.
Training:

- Inspector’s awareness of situations that warrant deferral actions and the documentation/tracking process.
- Knowledge of other programs available in-service area that may be of assistance to client for addressing the situation prompting the deferral situation.
SPACE HEATER POLICY

Per U.S. Department of Energy (DOE) Guidance Weatherization Program Notice (WPN) 08-4, any vented gas or liquid filled space heater will be treated the same as a furnace in a home as it relates to testing, repair, and replacement. Other than incidental repairs, electric space heaters are not eligible for repair or replacement under DOE guidance. DOE funds may not be used to repair an unvented unit left in the home as either a primary or secondary heat source. DOE funds may be used to either repair the primary heat source in the home if it is either a furnace or boiler system, or they may be used to install an appropriately vented space heater if it is the primary source of heat.

Please note that WPN 08-4 below, goes into greater detail regarding allowability, cost effectiveness, code compliance, client education, and other considerations and should be consulted before any measures related to space heaters are performed.

**Vented Space Heaters:** Vented gas- and liquid-fueled space heaters should be treated the same as furnaces in terms of repair and replacement, as well as combustion appliance safety testing. This policy applies to vented natural gas-fired space heaters, vented propane-fired space heaters, and oil-fired space heaters.

**Unvented Space Heaters:** Separate guidance applies to electric space heaters and unvented gas- and liquid-fueled space heaters.

**Electric Space Heaters** – DOE will not permit any DOE-funded weatherization work other than incidental repairs on electric space heaters. DOE will not preclude the use of other funding sources for the replacement or major repair of electric space heaters, but the Department does not encourage it because of:

- The high cost of electricity as compared to fossil fuels;
- Lower output ratings (size);
- Risk of fire hazards; and,
- Inadequate electrical systems in older homes frequently cannot safely carry the power required to operate an electric heater safely.

Work on such systems may make local Agencies liable for inadequate electric wiring and damages that may result.

**Unvented Gas- and Liquid-Fueled Space Heaters** – DOE will not permit any DOE-funded weatherization work where the completed dwelling unit is heated with an unvented gas- and/or liquid-fueled space heater as the primary heat source. This policy applies to unvented natural gas-fired space heaters, unvented propane-fired space heaters, and unvented kerosene space heaters.

DOE strongly encourages removal of all unvented gas- and liquid-fueled space heaters and replacement with vented, code-compliant heating systems as a prerequisite to weatherization.
However, DOE will allow unvented gas- or liquid-fueled space heaters to remain as secondary heat sources in single-family houses provided they are in compliance.

DOE is allowing this flexibility primarily to provide low-income clients an emergency back-up source of heat in the event of electrical power outages. Therefore, preference should be given to code-compliant units that do not require electricity.

Specifically, any unvented gas- and liquid-fueled space heaters that remain in a completed single-family house after weatherization:

- Shall not have an input rating in excess of 40,000 Btu/hour;
- Shall not be located in, or obtain combustion air from sleeping rooms, bathrooms, toilet rooms, or storage closets, unless:
  - Where approved by the authority having jurisdiction, one listed wall-mounted space heater in a bathroom:
    - Has an input rating that does not exceed 6,000 Btu/hour;
    - Is equipped with an oxygen-depletion sensing safety shut-off system; and
    - The bathroom meets required volume criteria to provide adequate combustion air;
  - Where approved by the authority having jurisdiction, one listed wall-mounted space heater in a bedroom:
    - Has an input rating that does not exceed 10,000 Btu/hour;
    - Is equipped with an oxygen-depletion sensing safety shut-off system; and
    - The bedroom meets required volume criteria to provide adequate combustion air.
- Shall require the enforcement of minimum ventilation guidelines as determined by the greater of:
  - 15 cubic feet per minute (CFM) per person,
  - 15 CFM per bedroom plus one [(# of bedrooms + 1) x 15 CFM], or
  - .35 air changes per hour.

The above minimum ventilation guidelines are natural ventilation rates, not with the house depressurized to -50 Pascal with a blower door.

Alternately, the minimum ventilation guidelines in the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) Standard 62.2 2016, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, may be used if the State desires.

DOE funds may only be used to replace the primary heating source. DOE funds may not be used to replace unvented space heaters to be left in the weatherized dwelling unit as secondary heating sources. For example, a home has several older gas or liquid-fueled, unvented space heaters that do not comply with the International Residential Code because they do not have oxygen-depletion sensing safety shut-off systems. The Weatherization Program can replace the primary unvented space heater with a vented unit, but cannot expend DOE funds to replace one of the existing secondary space heaters with a code-compliant unvented unit with an oxygen-depletion sensing safety shut-off system. DOE will not preclude the use of other funding sources to replace secondary space heaters with code-compliant units.
The Manufactured Home Construction and Safety Standards require all fuel-burning, heat-producing appliances in mobile homes, except ranges and ovens, to be vented to outside. Further, all fuel-burning appliances in mobile homes, except ranges, ovens, illuminating appliances, clothes dryers, solid fuel-burning fireplaces and solid fuel-burning fireplace stoves, must be installed to provide for the complete separation of the combustion system from the interior atmosphere of the manufactured home (i.e., to draw their combustion air from outside).

**Cost Effectiveness:** Current regulations governing weatherization activities require that measures installed in a dwelling unit be selected on the basis of cost effectiveness, with the most cost effective installed first. Unvented space heaters have very high efficiency ratings because they discharge their exhaust gases directly into the space being heated rather than outside, allowing the energy embodied in the hot exhaust gases to be released into the heated space. Vented space heaters exhaust combustion products and considerable amounts of energy out of the residence, and, therefore, are far less energy efficient.

The replacement of an unvented space heater with a vented one may not be cost-justified through energy savings. However, DOE strongly encourages States to combine other weatherization measures and health and safety considerations with vented space heaters as replacements for unvented space heaters. In such instances, the heat energy demanded by the structure can be lowered by energy-saving, cost-effective weatherization measures so that total energy costs are less or the same, while the indoor air quality is greatly improved through the use of a vented space heater paid for with health and safety funds.

**Smoke and Carbon Monoxide Detectors:** Any space heater replacement or repair procedure should include inspection to ensure that working smoke and carbon monoxide detectors are installed on the same floor as the space heater. In instances where smoke and carbon monoxide detectors are not present or are not operating properly, new detectors may be purchased and installed with DOE funds. The purchase and installation cost of the smoke and carbon monoxide detectors may be charged to the health and safety category or to program operations at the State’s discretion.

**Client Education:** Client education, including information on the proper operation of the heating equipment and installed smoke or carbon monoxide detectors, should be provided. Of critical importance is strong client education regarding the dangers of carbon monoxide and excessive moisture levels, particularly if any unvented space heaters are left in the dwelling as a secondary heat source, or emergency back-up.

**Other Health and Safety Consideration:** Electrical wiring and chimneys should be checked to ensure they are in good condition and that no obvious building code violations are evident. Masonry chimneys used by vented space heaters should be properly lined. Safety inspection related to the space heater should include, but not be limited to, a check for adequate floor protection and code-compliant clearances to walls and other combustible materials. Even though many vented space heaters are manufactured with spill switches, it is still a requirement that a worst-case depressurization draft test be performed on all vented units.
Compliance with Local Code, Permitting, and Inspection Requirements: Installation of space heaters requires knowledge of appropriate industry standards and adherence to all aspects of the applicable building code(s) in the municipality where installation is taking place. Building permits should be secured, where required, (this is a program operations cost) for all space heater work and final inspection by competent professionals should take place before any heater is put into operation. States are reminded that even licensed heating contractors may not be aware of the stringent requirements of the Weatherization Program, so their work should be reviewed by Program staff.
INDOOR AIR QUALITY HEALTH AND SAFETY TESTS

Indoor air quality (IAQ) tests are required to be completed for all buildings regardless of size or number of units, and should contain analytical and quantifiable data when possible. The following IAQ tests must be conducted in all units and documented during the initial dwelling audit:

1. Test for carbon monoxide (CO): Measure CO in the ambient air of dwellings where combustion appliances are used for space heating, gas cook stoves, and water heaters. Eliminate sources of CO that contaminate the indoor air. Test at audit and at final inspection.

2. Combustion gas leak test: Test all accessible gas lines and piping for gas leaks. Repair leaks. Test at audit, after any work on the gas piping is complete, and at final inspection.

3. Install CO detectors in accordance with manufacturer’s recommendations.

4. Combustion Appliance Zone (CAZ) Pressure Test or Backdraft Test: Measure the worst-case negative pressure in all vented combustion appliance zones. Eliminate conditions that may cause back drafting. Test at audit, after any air-sealing work is done, and at post final inspection.

5. Chimney Draft Test: Measure and assess the draft in combustion appliance vents. Repair vents with inadequate draft. Test at audit, after any air-sealing work is done, and at final inspection.

6. Inspect the dwelling for mold and moisture damage: Locate and eliminate sources of excessive moisture if possible. Install ventilation if necessary and feasible.

7. Identify potential Fire Hazards: Educate the client about potential fire hazards that are observed in the dwelling. Ensure that adequate smoke alarms and CO detectors are installed and working properly.

8. Unvented space heaters: Educate the client about the potential danger of CO and fire from unvented space heaters. Explain that significant amounts of combustion products, including water vapor and CO2, are produced.

9. Assess the dwelling for faulty/inadequate and dangerous wiring.

10. Verify pressure relief valves on water heater tanks and boilers.

11. Record and properly document all test results and observations.

The Subrecipient should contact the local gas company to establish criteria for notifying the company regarding necessary gas leaks or high carbon monoxide.

Whenever there is evidence of a leaking heat exchanger in a furnace or space heater the
Subrecipient is required to inspect the heat exchanger for leaks using standard, acceptable
diagnostic methods. The result of the inspection must be documented and placed in the client file.
Whenever a hole is found in a heat exchanger you should consider the heating appliance to be
unsafe and follow the steps outlined in this manual.

Information on indoor air quality must be recorded on the WAP Inspection Tool (WIT).

Carbon Monoxide Testing
The ambient air in the living space must be tested after all combustion appliances have been
operated at steady state for a period of ten minutes with the dwelling under heating season
conditions (windows and doors closed).

When combustion appliances are present, ambient air must be tested for carbon monoxide at the
initial dwelling audit and immediately after the implementation of weatherization measures. Test
results must be documented.

- If ambient readings are no greater than 10 parts per million (ppm) above recorded outdoor
  levels, CAZ testing should proceed.

- If ambient levels are 10-35 ppm greater than the recorded outdoor level, re-measure
  ambient level after a 5-minute interval. If the ambient reading is no greater than 10 ppm
  above the recorded outdoor level, testing of other CAZ tests should proceed. If the time-
  weighted ambient measurement exceeds 10 ppm, or the original ambient measurement
  exceeds 35 ppm, or the appliance produces CO in excess of 200 ppm at steady state, then
  the following procedures are recommended:

  1. Turn off appliance
  2. Ventilate Dwelling
  3. Complete Health & Safety Notification Form?? and have client sign
  4. Identify problems
  5. Prepare and initiate workscope immediately

Appliance Carbon Monoxide Testing
All vented combustion appliances must be tested for carbon monoxide in undiluted flue gas, and
the results documented. Exceptions to this include wood or coal stoves and any gas fired
appliances that are designed to operate with a positive pressure in the vent pipe (American Gas
Association (AGA) category III or IV gas appliances)

Combustible Gas Testing
Gas Leak Detection tests must be conducted along accessible gas lines throughout the interior and
exterior of the dwelling, and the findings recorded on the WIT.
For significant leaks, ventilate area, disable combustion appliances, and notify fuel supplier for shut off until repairs are completed. Minor leaks may be addressed at the time of inspection or specified for repair.

**CAZ Pressure Testing**
Any zone or area of the dwelling that contains a vented combustion appliance, including space heaters, water heaters, gas clothes dryers, is considered a combustion appliance zone. This definition may incorporate the main body of the house or rooms/areas of the main living space. All CAZ shall be tested for worst case depressurization. Negative pressures within the CAZ tests of up to -4 Pa. may be acceptable if all venting appliance drafts simultaneously meet draft standards. Negative pressures of -5 Pa or greater must be corrected. Chimney draft is measured just above the draft diverter or barometric draft control.

**Draft Testing**
Draft tests on all vented combustion appliances must be conducted and the results recorded on the WIT. Exceptions include inoperable, unsafe, or sealed combustion appliances, wood or coal stoves, and gas appliances. Outdoor air temperature and results of draft testing must be documented on the Indoor Air Quality Tests.

When the outdoor temperature is above 80 F measured draft should exceed 1 Pa. or .005" W.C.

When the outdoor air temperature is between 30-80 F measured draft must exceed 2.50 Pa. or .01" W.C.

When the outdoor air temperature is below 30 F, measured draft must exceed 5.00 Pa./.02" W.C.

If tested drafts do not meet these standards, examine the venting system for proper design including; size, materials, pitch, positioning of diverters, height above roof line, etc. and inspect venting system for holes. Check chimney interior for obstructions or blockage.

Mitigate any venting problems.
CARBON MONOXIDE AND SMOKE DETECTORS

All dwellings must have smoke detectors, one near each combustion zone and one in each bedroom. Carbon Monoxide detectors must also be installed in all dwellings.

Common appliances that would cause carbon monoxide in the home include: gas space heaters, gas ovens/ranges, wood stoves, back-drafting combustion furnaces, back-drafting atmospheric water heaters, and an automobile running in an attached garage.

As to the exact installation location, follow your local codes and the manufacturer’s literature.
KNOB AND TUBE WIRING

Subrecipients may install conservation measures in dwellings with live knob-and-tube wiring and recessed lighting fixtures provided that the criteria in the PROCEDURE below are met.

PROCEDURE:

Knob and tube wiring:
- Subrecipients must verify if the knob-and-tube system is in service before proceeding with any additional measures.
- Subrecipients must inspect the wiring that is to be covered to determine the type(s) of wiring present, the circuit protection, wiring condition, and to identify any other hazards.
- Subrecipients must obtain permission from the homeowner or authorized agent to install proper overcurrent protection. If permission is not given, insulation cannot be installed.
- Install insulation only as follows:
  - In those areas where knob-and-tube wiring is active, circuits must be protected by properly sized overcurrent protection;
  - Insulation is to be placed up to a depth of two inches from the underside of the knob-and-tube wiring provided that an open-air space is permanently maintained above such wires; OR
  - Barriers must be installed in such a manner around knob-and-tube wiring to ensure that the insulation shall not directly cover the wiring and that an adequate air space of at least one inch on all sides is maintained.
  - Document if sidewall cavities are insulated. DO NOT INSULATE SIDEWALLS containing live knob-and-tube wiring.

Recessed lights:
Follow manufacturer’s instructions concerning clearance to combustibles. If there are no instructions, construct a box from fire code gypsum or cement board that is two-foot square, enclosed, and air tight (notches may have to be cut to accommodate attic floor joists). Insulate over this box if allowed by manufacturer’s installation instructions.

STANDARD:

1. National Electrical Code requires the following MINIMUM circuit protection:
   a. 15-amp fuse for #14 wire
   b. 20-amp fuse for #12 wire
   c. S-type fuses and adapters for live knob-and-tube wiring or appropriately size circuit breakers.
2. Covered electrical junction boxes are installed where needed to meet code. All splices are within properly sized junction boxes with approved covers.

3. Bare wires and other hazards are corrected.

4. Wiring junction boxes to be covered with insulation are flagged for location.

5. All conditions and corrections are documented in the appropriate comment section of the WAP Inspection Tool (WIT).
Combustion Safety Testing is a very important part of the weatherization process. Never do we want to create a situation at a dwelling that could endanger health or life. Since the weatherization process includes air sealing, the dwelling dynamics are being altered. Chances for an atmospheric appliance to back draft will be much greater. Combustion Safety Testing must be done: prior to the dwelling being weatherized, and during the final inspection of the weatherized dwelling.

The following tests must be done as applicable:
- Combustion Appliance Zone (CAZ) depressurization
- Spillage
- Draft
- Carbon Monoxide (CO)
Test combustion appliances using the procedures spelled out in the Florida Weatherization Manual and Field Guide. Use the manufacturer’s specifications if they are available or the standards in the tables below to determine if work is needed and whether mechanical contractor’s work is acceptable.

### GAS FIRED HEATING EQUIPMENT

<table>
<thead>
<tr>
<th>PERFORMANCE INDICATOR</th>
<th>SSE 70%+</th>
<th>SSE 80%+</th>
<th>SSE 90%+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustion Zone Pressure</td>
<td>- 4 Pa</td>
<td>- 5 Pa</td>
<td>- 6 Pa</td>
</tr>
<tr>
<td>Carbon monoxide in <strong>furnace</strong> flue</td>
<td>&lt; 50 ppm</td>
<td>&lt; 50 ppm</td>
<td>&lt; 50 ppm</td>
</tr>
<tr>
<td>Carbon monoxide in the plenum</td>
<td>&lt; 5 ppm</td>
<td>&lt; 5 ppm</td>
<td>&lt; 5 ppm</td>
</tr>
<tr>
<td>Carbon monoxide in <strong>boiler</strong> flue</td>
<td>&lt; 100 ppm</td>
<td>&lt; 100 ppm</td>
<td>&lt; 100 ppm</td>
</tr>
<tr>
<td>Carbon monoxide (air free)</td>
<td>&lt; 400 ppm</td>
<td>&lt; 400 ppm</td>
<td>&lt; 400 ppm</td>
</tr>
<tr>
<td>Oxygen</td>
<td>6 – 9%</td>
<td>6 – 9%</td>
<td>6 – 9%</td>
</tr>
<tr>
<td>Gross Stack Temperature (degrees)</td>
<td>350 - 475</td>
<td>325 - 450</td>
<td>&lt; 120</td>
</tr>
<tr>
<td>Heat Rise (degrees)</td>
<td>40 - 70</td>
<td>40 - 70</td>
<td>30 - 70</td>
</tr>
<tr>
<td>Steady State Efficiency (SSE)</td>
<td>72 - 78%</td>
<td>78 – 82%</td>
<td>92 – 97%</td>
</tr>
<tr>
<td>Draft (regular)</td>
<td>- 4 Pa</td>
<td>- 4 Pa</td>
<td>+ 25 - 60</td>
</tr>
<tr>
<td>Draft (Worst Case)</td>
<td>- 4 Pa</td>
<td>- 4 Pa</td>
<td>NA</td>
</tr>
<tr>
<td>Propane manifold fuel pressure</td>
<td>10.5 WC</td>
<td>10.5 WC</td>
<td>10.5 WC</td>
</tr>
<tr>
<td>Natural gas manifold fuel pressure</td>
<td>3.5 WC</td>
<td>3.5 WC</td>
<td>3.5 WC</td>
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### OIL FIRED HEATING EQUIPMENT

<table>
<thead>
<tr>
<th>PERFORMANCE INDICATOR</th>
<th>Non-flame Retention</th>
<th>Flame Retention</th>
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</thead>
<tbody>
<tr>
<td>Combustion Zone Pressure</td>
<td>- 4 Pa</td>
<td>- 4 Pa</td>
</tr>
<tr>
<td>Carbon monoxide in the flue</td>
<td>&lt; 50 ppm</td>
<td>&lt; 50 ppm</td>
</tr>
<tr>
<td>Carbon monoxide in the plenum</td>
<td>&lt; 5 ppm</td>
<td>&lt; 5 ppm</td>
</tr>
<tr>
<td>Carbon monoxide (air free)</td>
<td>&lt; 400 ppm</td>
<td>&lt; 400 ppm</td>
</tr>
<tr>
<td>Oxygen</td>
<td>4 - 9%</td>
<td>4 - 7%</td>
</tr>
<tr>
<td>Smoke (1 - 9)</td>
<td>&lt; 2</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Gross Stack Temperature (degrees)</td>
<td>325 - 600</td>
<td>300 - 500</td>
</tr>
<tr>
<td>Heat Rise (degrees)</td>
<td>40 - 70</td>
<td>40 - 70</td>
</tr>
<tr>
<td>Steady State Efficiency (SSE)</td>
<td>&gt; 75%</td>
<td>&gt; 80%</td>
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<td>Draft (regular)</td>
<td>-5 Pa to -12 Pa</td>
<td>-5 Pa to -12 Pa</td>
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<tr>
<td>Draft (Worst Case)</td>
<td>-5 Pa to -12 Pa</td>
<td>-5 Pa to -12 Pa</td>
</tr>
<tr>
<td>Fuel pressure</td>
<td>100 psi</td>
<td>100 psi</td>
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<td>GAS/OIL FIRED WATER HEATER</td>
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</tr>
<tr>
<td>---------------------------</td>
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</tr>
<tr>
<td>PERFORMANCE INDICATOR</td>
<td>STANDARD</td>
<td></td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>&lt; 50 ppm</td>
<td></td>
</tr>
<tr>
<td>Carbon monoxide (air free)</td>
<td>&lt; 200 ppm</td>
<td></td>
</tr>
<tr>
<td>Draft (regular)</td>
<td>- 4 Pa</td>
<td></td>
</tr>
<tr>
<td>Draft (worst case)</td>
<td>any negative draft</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>GAS RANGE</th>
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<td>PERFORMANCE INDICATOR</td>
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<tr>
<td><strong>Oven</strong> carbon monoxide</td>
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<tr>
<td><strong>Burner:</strong> carbon monoxide</td>
</tr>
<tr>
<td>Oven carbon monoxide (free air)</td>
</tr>
</tbody>
</table>
DUCT SEALING/PRESSURE BALANCING

Duct sealing and pressure balancing are required activities in dwellings with forced air heating systems. This is done to assure that the dwelling operates as close to a neutral pressure as possible.

PROCEDURE:

1. In single family site-built dwellings the installers must:
   - Seal return duct leaks to help prevent negative pressures in the basement and avoid placing the dwelling under a positive pressure.
   - Seal supply duct leaks to prevent the dwelling from operating under a negative pressure and/or to improve the static pressure across the heating plant.
   - Pressure balance rooms within the fully conditioned space of the dwelling unit.
   - Take room pressure measurements immediately prior to pressure balancing activities.
   - Take room pressure measurements after pressure balancing activity is complete.
   - Record both the before and after room pressure measurements in the WAP Inspection Tool (WIT). Note: If room pressures are below 5 pascals, action must be taken to mitigate above average pressures negative or positive.

2. In manufactured homes installers must:
   - Take pressure pan readings at all boots/registers.
   - Air seal all ductwork where initial pressure pan reading is greater than 1 pascal.
   - Record both before and after pressure pan readings in the WIT.
WORST CASE DRAFT TEST

All atmospheric combustion appliances used to heat the dwelling (boilers, furnaces, and space heaters) or produce hot water must pass a worst-case draft test for the dwelling to be considered complete. Worst case draft testing must be performed using the procedure specified below and at the following times:

1. By the auditor, after all other weatherization work is complete.
2. By the quality control inspector, at the time of final inspection.

PROCEDURE: The following procedure is required:

- Close all windows and exterior doors. Remove the blower door or cover the blower door fan.
- Turn on all equipment that exhausts air to the outside, including but not limited to: range hoods; bathroom, kitchen or any other exhaust fans; cook top ventilators; and gas or electric clothes dryers.
- Shut off air conditioners and whole house fans.
- Wood burning furnaces, stoves or fireplaces must NOT be in operation.
- Turn on all combustion appliances
- Allow these appliances to operate for five minutes, and then take their draft readings. In dwellings with forced-air systems, make sure the furnace fan is on and running. NOTE: Two-pipe sealed combustion furnaces are excluded from the test itself, but must still be operating when the other appliances are being tested.
- If any appliance(s) does not pass the test, complete the following procedure:
  - Open a nearby window or door to the exterior. Retest the appliance(s) and complete either b. or c. below.
  - If the appliance(s) now passes, install combustion air.
  - If the appliance(s) still does not pass, look for and correct other problems, such as chimney or venting blockages.
- Retest the appliance(s) after corrective measures are taken.
REFRIGERATOR REPLACEMENT

Whether or not a refrigerator should be replaced cannot be decided by the age and/or appearance of the unit. The energy efficiency of the unit must be determined.

Refrigerator replacement is cost effective when the cost of replacing a refrigerator is less than or equal to the discounted savings over the life of the product. Costs include the product cost plus any delivery, setup and disposal fees and taxes if applicable. Savings are based on estimated kilowatt hour savings and energy costs. To make this determination, Subrecipient should use the Refrigerator Analysis Tool provided on the WAPTAC web site at (https://nascsp.org/wap/waptac/)

OPTIONS FOR DETERMINING REFRIGERATOR REPLACEMENT:

- http://www.appliances.energy.ca.gov/About.aspx
- If your meters don’t automatically calculate usage, this equation (from DOE’s Standardized Curriculum, Topic 8, PowerPoint page 41 in: http://waptac.org/WAP-Standardized-Curricula/Energy-Auditor-002D-Single-Family-2002E0.aspx) can be used:

\[
\text{Metered usage (kWh) \times 60 \text{ minutes hour} \times 8,760 \text{ hours year}} = 0.882
\]

The following criteria will provide the basis for such a replacement:

1. Refrigerators may not be installed where none exist.

2. The refrigerator to be replaced must be the primary refrigerator used by the household. In cases where more than one refrigerator is being used, the Subrecipient should encourage the client to dispose of the secondary refrigerator(s). The disposal of secondary refrigerator(s) will be considered an eligible activity; however, the client must provide the Subrecipient with written permission for this disposal. If the client does not wish to dispose of secondary refrigerator(s), the Sub-grantee should provide client education,

3. All refrigerators that are replaced must be removed from the clients’ premises upon delivery of the replacement and properly disposed of in accordance with The Clean Air Act, USC Title 42, Section 7671g. This Act makes it unlawful for any person to dispose of refrigerants in a manner in which they will be allowed to enter the atmosphere.

4. The replacement refrigerator must be:
   - Energy Star-rated* or equivalent energy efficiency (kWh) rating
   - The same or no more than 2 cu ft larger IF one unit is replaced
The primary refrigerator and an additional freezer or refrigerator can be replaced with 1 single unit up to 21 cu ft (Non-icemaker models only).

No water or ice dispensers in the door.

No new water plumbing allowed.

Cost must include delivery, installation and removal (if applicable).

Any color acceptable to the client as long as there is no additional charge for the color change. Otherwise, the standard color must be installed.

Configured as top freezer. (Side by side not allowed)

Photo documentation of metering results must be in client file.

5. A replacement refrigerator should not be installed if it involves any structural, architectural, plumbing or electrical modifications to the dwelling.

6. Subrecipients must determine that a replacement will be cost effective before considering a refrigerator replacement as an eligible repair option. To accurately determine the cost effectiveness of replacing a refrigerator, first determine the annual energy consumption of the existing refrigerator and compare this to the estimated consumption of the replacement. The following methodology will provide the basis for this determination:

**Determining the annual consumption of the existing refrigerator:**
It is not required to meter every existing refrigerator that is replaced. DOE requires states to meter at least 10% of the units replaced. Units that cannot be located in the refrigerator databases may make up all or most of the 10% requirement.

**Determining the cost effectiveness of the replacement:**
If the annual usage of the existing refrigerator is 900 kWh or more, the refrigerator may be replaced. Consider using one of the following two options:

**Option #1: Example Payback Calculation:**

- Existing Refrigerator Energy Use: 1000 kWh
- New Refrigerator Energy Use: 600 kWh
- kWh savings/year: 400 kWh

Multiply kWh savings/year by cost of electricity: 400 x $0.10/kWh = $40 savings/year

Divide cost of new refrigerator by annual savings: $500/40 = 12.5

**12.5 is number of years for new refrigerator to “payback”**

If payback is less than 15 years, it is cost effective to replace

When a Subrecipient does metering, the following procedures apply:

A. Use a cumulative watt hour meter to determine the present usage of the refrigerator. Plug the meter into a wall outlet and plug the refrigerator into the meter. You must document
the date, exact time, and the initial reading, when removing the meter, you must also record the date, time and reading. The difference in the two readings will be the number of watt hours or kilowatt hours used for the time the refrigerator was metered. If Watt hours are shown they must be converted to kilowatt hours by dividing the number of watt hours by 1000.

B. The refrigerator must be metered for a minimum of two hours and, wherever possible longer. This should be accomplished during the course of performing the energy audit on the building. Consider using one of the following three options:

**OPTION #1** - Metering the refrigerator for a 24-hour period will provide actual real-life sample electricity consumption. (Photo documentation of meter reading must be in client file.)

**OPTION #2** - Metering the refrigerator for a 2-hour period will provide an estimation of the annual electricity consumption however, the defrost cycle switch must be adjusted to prevent defrosting during metering. (Photo documentation to show switch location and of meter reading must be in client file.)

**OPTION #3** - Entering refrigerator data into either the NEAT or MHEA audit will provide a recommendation to replace if the unit is not energy efficient. Utilizing the NEAT/MHEA audit will require entire dwelling data to be entered. It may be more applicable to use the audit to see if a replacement will be recommended when addressing a heating and cooling unit replacement.

C. If the automatic defrost cycle is activated during testing, you will not get a true reading of usage. In cases where you have a unit with an automatic defrost cycle, try to return to the refrigerator every 15-20 minutes to determine if it has gone into the defrost mode.

D. A significant increase in watts over a short period of time is a good indicator of defrost mode. If the refrigerator has gone into the defrost mode, the reading cannot be used and the refrigerator must be retested.

E. The metered usage, in kilowatt hours, must then be converted to an hourly usage by dividing the reading by the number of minutes the refrigerator was plugged in to the meter and then multiplying by 60. This number must then be multiplied by 8766 (the average number of hours in a year) to determine the annual usage.
Subrecipients can contract to purchase refrigerators through the vendor of their choice. Delivery and setup should be provided by the vendor with all costs included when figuring the SIR of the refrigerator.

**Final Inspection:**

During the Subrecipients final inspection, the inspector must verify the correct model was installed, the old refrigerator was removed for proper disposal and warranty information has been provided to the client.

**Warranty:**

1 Year Warranty on parts and labor is required.
HEATING, VENTILATING AND AIR CONDITIONING (HVAC) & WATER HEATER REPLACEMENT

HVAC Replacement
- Please reference Florida Weatherization Program Notice 15-08 – Chapter 7
- There are three conditions for replacement of an existing heating and cooling system
  - The equipment is 10+ years old;
  - Central HVAC – The cooling component no longer functions; Window/Wall Reverse Cycle – unit runs but no longer heats or cools;
  - Client requires a controlled environment, i.e. life-threatening cases – there must be adequate documentation provided by the client’s physician
- The system must be verified as being operable during the pre-dwelling inspection process to determine if the system is to be considered as a candidate for replacement
- Subrecipients must use the NEAT/MHEA audit tool to determine if an HVAC unit 10 years or older is a candidate for replacement.

WATER HEATER REPLACEMENT
- Please reference Florida Weatherization Program Notice 15-08A – Chapter 7
- Water heaters may be replaced when energy savings justify the replacement costs.
- As with all energy efficiency measures installed with DOE funds, water heater replacement must result in a savings-to-investment ratio (SIR) of 1.0 or greater.
- Water heaters may be replaced for related health and safety reasons. When replacing water heaters for health and safety reasons, they must be brought up to code.
- Water Heater Replacement - In households that use large amounts of hot water, or existing water heaters are old and inefficient, water heater replacement can save energy.
- Subrecipients must use either the NEAT or MHEA audit to determine the units SIR.
INSULATING WATER TANKS

Wrap gas & electric water tanks that could benefit from the extra insulation unless otherwise instructed not to do so from the manufacturer (reference the tank itself or any literature that came with the tank, if available). Insulate all water tanks in unconditioned areas, if possible.

It is recommended to use the fiberglass insulation jackets.

Water Heating, as to what areas not to cover with insulation, such as: access doors for the elements and their controls on electric tanks, temperature & pressure relief valves, drain valves, discharge pipes, burner access doors and gas valves on gas tanks, etc.

Insulate the hot and cold pipes for the water tanks. Pipe sleeves made from polyethylene or neoprene work well and are very easy to install. Insulate: first 6 feet of both hot & cold pipes (use proper size), cover elbows (miter the joints), keep pipe insulation at least 6” away from flue pipe. Standard Work Specification (SWS) -- Storage Tank, Page 522.
HEALTH AND SAFETY EQUIPMENT

All technicians performing diagnostic tests, inspections, or installations, must have access to all necessary personal safety equipment required by the Federal Occupational Safety and Health Administration (OSHA). Required safety equipment includes, but is not limited to:

- Fitted respirators with canister filters;
- Dust masks;
- Gloves;
- Protective clothing;
- Safety glasses; and,
- Hard hats.

Technicians must be trained in proper use and applications for these devices and must adhere to OSHA regulations when on the job site.

All hand tools, power tools, ladders, and diagnostic equipment must be handled and used in a safe manner and kept in good working condition. Equipment and diagnostic tools must be maintained and calibrated according to manufacturer’s specifications.

A copy of the Material Safety Data Sheets for all materials used on the job and installed in the unit must be kept on each crew vehicle and made available to all workers and clients upon request.

Where the presence of asbestos, lead, mold and/or other potentially hazardous material is known or suspected, all relevant State and Federal (EPA) guidelines must be followed to ensure technician and occupant safety. Blower door tests may not be performed in dwellings where there is a risk of asbestos becoming airborne and being drawn into the dwelling. Respirators with filter cartridges must be worn when working in areas where exposure to airborne mold, asbestos, lead, fiberglass, or formaldehyde is a risk.

Carbon monoxide (CO) levels in the ambient air around the technician must be monitored throughout all combustion safety tests. Diagnostic evaluations and inspections must be aborted if ambient CO concentrations greater than 35 ppm are recorded. CO-producing appliances must be disabled and repaired before proceeding with additional diagnostics or inspections.

Refer to standards on combustion safety for complete requirements applicable to CO exposure limits and action levels in the Florida Weatherization Field Guide.
USING FIRE BLOCK FOAM

A newer product labeled a “FIREBLOCK FOAM” which is a polyurethane foam sealant rated Type V Residential Construction must not be used around combustion flue pipes or chimneys. This product is not designed for this purpose. Cured foam may be combustible if exposed to flame or temperatures above 240 degrees F. Even though it may not be combustible at lower temperatures, it will eventually break down over time and will not provide any air sealing benefits. Continue to seal around any fireplace, chimney, or combustion system flue pipes with non-combustible sheet metal and high-temperature silicone sealant.
COMBUSTION ANALYZER AND BLOWER DOOR CALIBRATION

To ensure accurate readings with the combustion analyzer, blower door (fan & manometer) and other diagnostic equipment, you must have them periodically calibrated. Follow manufacturer’s specifications. For example, the DG-700 or DG-1000 manometer (from the Energy Conservatory) specifies having it calibrated at least once a year.
WORK/MATERIAL STANDARDS

All weatherization, health/safety, and other materials must be installed in a quality manner. A quality manner is achieved when materials are installed in conformance with all applicable standards listed below. All weatherization materials must meet or exceed the specifications in 10 CFR 440, Appendix A.

PROCEDURE: Use the installation method that is appropriate to the material being installed.

The installation of the material should be in accordance with any or all of the following:

- Applicable local or State Building Codes.
- Manufacturer’s specifications or instructions.
- Is properly sealed or protected from the elements (exterior only).
- Does not detract from the appearance, structural soundness, safety or durability of the dwelling.
CHAPTER 7
MEMORANDUM

TO: Weatherization Provider Subgrantees

FROM: Debbie Smiley, Manager
Weatherization Assistance Programs

DATE: June 12, 2015

SUBJECT: State Weatherization Program Notice 15-07
Quality Control Inspector (QCI).

PURPOSE: To provide the Florida Weatherization Assistance Program (WAP) network with clarification on the requirements to support and verify quality work in the Department of Energy’s (DOE) Weatherization Assistance Program. The guidance will detail Florida’s directive for implementation during the April 1, 2015 – March 31, 2016 Program Year.

SCOPE: The provisions of this guidance apply to all Florida Sub-grantees awarded a weatherization assistance grant by Florida Department of Economic Opportunity (DEO) under the Department of Energy (DOE) WAP.

BACKGROUND: The Department of Energy Weatherization Program Notice 14-4 (WPN 14-4) was issued on December 16, 2013, and superseded by WPN 15-4 on October 21, 2014. Sections one and two address mandatory requirements from DOE. First, all tasks performed on client homes must meet the specifications, objectives, and desired outcomes outlined in the Standard Work Specifications (SWS) for Home Energy Upgrades where applicable. Second, Grantees must provide Sub-grantees and/or Contractors with technical requirements for field work including, but not limited to: audits/testing, installation of energy conservation measures, health and safety, incidental repair measures and final inspections. This is to ensure:

- The Grantee is implementing work quality standards that align with the Standard Work Specifications for Home Energy Upgrades.
- All Sub-grantee staff, Contractors, and anyone doing the actual work are aware of these standards; and
- Every home is inspected and complies with the SWS.
Acronyms Referenced:

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Compliance

Every DOE WAP dwelling unit reported as a “completed unit” must receive a final Quality Control Inspection which ensures that all work meets the minimum specifications identified in the Standard Work Specifications - Florida Field Guide (SWS/FFG) and the Florida Weatherization Assistance Program Procedures and Guidelines (P & G). The Quality Control Inspection must be performed by a certified Home Energy Professional Quality Controlled Inspector (QCI). A DOE WAP dwelling unit is not eligible for reimbursement as a “completed unit” until it has passed a Quality Control Inspection and all required documentation has been submitted to the State WAP office.

QCI Activities:

i. the audit recommendations or priority list has been followed;

ii. the applicable pre work diagnostic testing has been performed and the results incorporated into the work order;

iii. measures installation meets the SWS/FFG;

iv. the state energy codes along with state and local building codes are conformed to;

v. the results of the client file review, dwelling inspection and post diagnostic testing results are recorded on the QCI report;

vi. the QCI report must be signed and dated by both the subgrantee inspector and the individual performing the QCI; and

vii. a copy of the signed QCI report must be submitted when the dwelling is included on the subgrantee’s monthly FSR.

QCI Administration

The Florida WAP subgrantees have two levels of QCI to choose from for meeting this requirement. Each level has specific guidance to follow that must be considered for planning and implementing.

Level #1 - Independent QCI (I/QCI): There are two options available to meet the QCI requirement, contingent upon the staffing of the subgrantee.
Option #1 - The subgrantee has a certified QCI on staff who has no involvement as the auditor/inspector or with weatherization work on a dwelling to perform the final QCI and complete the QCI report. No involvement is defined as not:
   i. performing the pre or post inspection or diagnostic testing;
   ii. completing the audit or priority list;
   iii. preparing work order or PWOA form; or
   iv. supervising or having any involvement in actual weatherization work.

Implementation Criteria:
• The non-certified staff must be able to demonstrate proficiency/competency in performing activities by completion of the core of applicable trainings on diagnostic testing tools and utilizing the audit/priority list as applicable.
• If more than one subgrantee staff is a certified QCI, each could conduct the QCI on the other's job.
• The QCI will perform all required diagnostic testing procedures to confirm the original final testing results were accurate.
• The QCI will perform the inspection and complete the QCI report.
• Both the QCI and the non-certified inspector must sign and date the QCI report.
• The costs for performing the QCI will be charged to the program support category of the subgrantee agreement budget.

Option #2 - The subgrantee does not have staff certified to conduct the QCI and has to “outsource” that activity.

Out-sourcing Implementation Items:
• The outsourced activity may be performed by a certified QCI from another subgrantee or a private entity but neither may have any involvement in the prior work on the dwelling either as the auditor, crew member or contractor.
• Fees paid for performing the outsourced QCI will be charged to program support.
• The outsourced QCI will perform all diagnostic testing that was applied to a selected dwelling during the State inspection to confirm the original final testing results were accurate.

Outsourcing comments/concerns/obstacles/costs:
   i. There should be three inspections performed on each dwelling:
      a) Initial evaluation and testing by non-certified staff.
      b) Post work testing to confirm required results are achieved and workmanship compliance to SWS/FFG by non-certified staff.
      c) Outsourced QCI accompanied by non-certified staff.
   ii. Areas that may result in additional outsourcing costs:
      a) Penalty cost for late cancellation/notification (client not available).
      b) No access to dwelling during scheduled visit.
      c) Rescheduling of the initial dwelling visits with I/QCI.
d) Failed inspection may require a second QCI being conducted.
e) QCI indicates that corrective actions are required on QCI.
f) Follow-up QCI required - possible resolution options:
   o SWS/FFG infraction - submit photo documentation to QCI.
   o Diagnostic testing - photo documentation of testing being performed and of results (gauges, readings, etc.) to QCI.
   o Reduced cost for QCI review (to be negotiate between subgrantee and QCI).
g) QCI report indicates the noncompliance issues required a second on-site inspection being performed.
h) Second QCI cost not an allowable program charge – subgrantee responsibility.

iii. Impact from having second QCI conducted:
   a) Time required for resolution to be completed results in delay in submitting job.
   b) Additional time required for prompt addressing of corrective actions.
   c) Meeting agreement schedule of deliverables and reporting deadlines;
   d) Impact on subgrantee cash flow.
   e) Impact on meeting advance expenditure.

iv. Subgrantee challenging a QCI failed job:
   a) QCI indicates that corrective actions are required on QCI report.
   b) Follow-up QCI required - possible resolution options:
      o SWS/FFG infraction - submit photo documentation to QCI.
      o Diagnostic testing - photo documentation of testing being performed and of results (gauges, readings, etc.) to QCI.
      o Reduced cost for QCI review (to be negotiate between subgrantee and QCI).
   c) QCI indicates the noncompliance issues required a second on-site inspection being performed.
   d) Subgrantees disputing QCI results will contact the State WAP office (grant manager) to request intervention.

Level #2 - Independent Auditor/QCI (IA/QCI):
The Subgrantee has only one staff involved with the implementation of the WAP and that individual is a certified QCI who completes the following functions for every dwelling::

i. Perform the initial dwelling inspection and diagnostic testing.

ii. Prepares the priority list or applicable audit (NEAT or MHEA) input and evaluation.

iii. Creates the work order; but NOT participate in any weatherization work.

iv. Conducts the final diagnostic testing, dwelling inspection and file inspection, at the same time.

v. Completes the Quality Control Inspection Report which the employee signs and dates as both the subgrantee WAP staff inspector.
NOTE: Independent verification of the IA/QCI report will be performed during State WAP office monitoring visits.

During the State WAP office monitoring visit the IA/QCI will be required to:

i. Perform all diagnostic testing that was applied to a selected dwelling during the inspection to confirm the final testing results were accurate.

ii. Demonstrate competency in completion of priority list or generating and interpreting the applicable audit.

iii. Confirm completed dwelling unit's compliance to SWS/FFG, P&G and local building codes.

NOTE: The State WAP office is required to perform its QCI on 10% of the dwellings weatherized by any subgrantee utilizing the Level #2 IA/QCI.

**QCI Outsourcing Guidance**

Outsourcing is referenced in the Level #1, Option #2, as a method to meet the requirement that all DOE WAP dwelling units pass a quality control inspection conducted by a certified QCI. Additional guidance and requirements to be considered when out-sourcing include:

1. Only certified QCI are eligible to participant as an O/QCI. Subgrantees should first consider utilizing certified QCIs on staff with subgrantees in close proximity to the DOE WAP dwelling unit.

2. The O/QCI activity may be performed by a certified QCI from a private entity but that QCI may not have any involvement in the prior work on the dwelling either as the auditor, crew member, contractor or consultant.

3. Fees paid for the outsourced QCI will be charged to the program support category on the subgrantee agreement budget.

4. The outsourced QCI will be required to perform all diagnostic testing that was applied to a selected dwelling during the inspection to confirm the original final testing results were accurate.

5. Subgrantee fees generated by performing the QCI for another subgrantee are considered as Program Income; must be tracked; and utilized for weatherization related activities. The Program Income generated must be reported on the subgrantee Close-out form at the end of an Agreement. Unexpended provided to the State WAP office.

6. O/QCI fees earned by an outside entity/sub-contractor may go to that entity.
All private Outsourced Quality Control Inspectors O/QCIs are required to:

1. Provide the hiring sub-grantee with a copy of their QCI certification prior to initiating any services.
2. Obtain appropriate insurance coverage for performing off sight activities.
3. Adhere to the requirements of the SWS/FFG and the Florida WAP P&G.
4. Provide a detailed invoice for reimbursement to the hiring subgrantee, for each QCI inspection performed.
5. Recommend Fees schedule should be based upon the following (see attached for fee rate calculation):
   - Hourly Rate for services
   - Number of hours work
   - Travel Costs involved

**State Office Oversight**

- For subgrantees implementing the **Level #1 I/QCI** approach, the State office will conduct its state level QCI on a minimum of five percent (5%) of the subgrantees agreement projected production. Costs for this QCI activity will be paid by the State office.
- For subgrantees implementing the **Level #2 IA/QCI** approach, the State office will conduct its state level QCI on a minimum of ten percent (10%) of the subgrantees production.
- The State will track each subgrantees performance in regard to meeting the QCI reporting requirements and the level of compliance through documentation submitted for review each month. If during the review of this documentation, it appears that questionable issues may exist, the subgrantee will be contacted. Since no weatherized dwelling may be accepted if there are questionable issues at the state level, subgrantee response to the State’s Grant Manager should be prioritized to avoid having a job removed in order to process the payment by the end of a month.
- Annual on-site subgrantee monitoring is required. During a State monitoring visit, if it is determined that the QCI demonstrated inadequate inspection practices, the State office will implement the following steps:
  i. Bring the issue to the attention of the subgrantee inspector and certified QCI individual during the visit.
  ii. Determine the reason for the discrepancy.
  iii. Document the issue (photo).
  iv. Determine what corrective actions are required.
v. The subgrantee will coordinate with the contractor/crew to perform the corrective actions (if a workmanship issue) to achieve compliance photo documentation of the corrected activity to the State WAP office within a prescribed time frame.

vi. Determine if additional training is required for the QCI in the minor or one instance situation.

vii. Consider having another I/QCI perform a spot check of dwellings and files to be reported in the following FSR month prior to that report being submitted.

viii. Request a copy of all documentation (inspection data forms, audit, priority list, etc.) for a dwelling to be reported in the following month along with photos of all measures installed.

ix. Coordinate a follow-up on-site Quality Assurance (QA) visit to focus on the past issue; the QCI documentation and conduct a dwelling inspection.

- The monitoring instrument will be updated to reflect the state’s monitoring activities for the QCI initiative. If the results of an on-site monitoring visit indicate that a subgrantee is not conducting the QCI requirement in accordance to State P&G, that subgrantee could be placed on a conditional probationary status. The ensuing monitoring report will:
  i. Identify the QCI non-compliance issues.
  ii. Include the required corrective actions or additional oversight to be implemented by the subgrantee.
  iii. Provide a time line for addressing and rectifying the non-compliance issues.
  iv. Reference applicable state or federal guidelines.
  v. Follow-up State office oversight activity may include:
     o Additional documentation, i.e.; copies of audits, work orders, and photos of workmanship when future dwellings are submitted for State office review.
     o On site visit of completed dwellings by another QCI.
     o Cost incurred will be the responsibility of the subgrantee.

- **Repeat QCI Non-Compliance**
  Each QCI non-compliance situation will be handled on a case-by-case. If any QCI is found to be in non-compliance with repeat infractions, a written notification from the State WAP office will be provided to the subgrantee directing it to seek alternate means for having the QCI performed on future dwellings.

The QCI individual will also be notified in writing of their suspension from performing future QCIs for Florida subgrantees. If that individual participates in refresher QCI training, they may be given an opportunity to demonstrate competency in a supervised, probationary period.
WAP agreement termination may be initiated if a subgrantee:

i. Fails to address, initiate or implement corrective actions in a timely manner.

ii. Demonstrates failure to implement required internal controls.

iii. Continue to have repeat issues.

Sign for acknowledgment of receipt & understanding

______________________________ (Weatherization Sub-grantee Name), certify that we have read and understand the Guidance contained in this notice. Signatures indicate receipt of this guidance and certify our sub-grantee will immediately begin adhering to the attached guidance.

_____________________________ Executive Director __________________________ Date

_____________________________ WAP Coordinator __________________________ Date

Please submit by email or fax to your DEO Grant Manager by Friday, June 19, 2015.
MEMORANDUM

TO: Weatherization Provider Subgrantees

FROM: Debbie Smiley, Manager
Weatherization Assistance Programs

DATE: June 12, 2015

SUBJECT: State Weatherization Program Notice 15-06
Implementation of American Society, Heating, Refrigerating and Air Conditioning Engineers (ASHRAE 62.2-2013)

DEFINITION: ASHRAE 62.2 – Used to specify minimum ventilation rates and other measurements intended to provide indoor quality that is acceptable to human occupants and that minimize adverse health effects.

PURPOSE: To provide the Florida Weatherization Assistance Program (WAP) network with an ASHRAE 62.2-2013 Ventilation Rate Calculator and guidance for the ASHRAE 62.2-2013 Standard.

SCOPE: The provisions of this guidance apply to all sub-grantees awarded a weatherization assistance grant by Florida Department of Economic Opportunity (DEO) under the Department of Energy (DOE) WAP.

PROCEDURES: The DOE requires all grantees to comply with the ASHRAE 62.2-2013 ventilation standard as prescribed in its Weatherization Program Notice 11-6, addressing Health and Safety guidance measures. As such, sub-grantees are required to use the ASHRAE 62.2-2013 Standard to evaluate all units for weatherization.
What is the ASHRAE 62.2-2013 Standard?

Guidance to make the air in homes healthier and safer without adding significant costs. ASHRAE 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, is the only nationally recognized indoor air quality standard developed solely for residences. The standard defines the requirements for ventilation and air cleaning system design, installation, commissioning, operations and maintenance.

What are some key components of the ASHRAE 62.2-2013 Standard?

- ASHRAE 62.2-2013 evaluation requires fan flow metering, evaluation of air distribution systems and existing fans and follow up testing to ensure compliance.
- Occupants or owners must be provided the product information and owner's manual on any installed ventilation system. The subgrantee staff should discuss the operation and maintenance requirements on the new system with the occupants.
- ASHRAE 62.2-2013 determines ventilation needs of a dwelling using estimates of natural air-change and pressure diagnostics.
- Whole building ventilation - a mechanical exhaust system, supply system, or combination thereof must be installed in a dwelling unit to provide whole-building ventilation when evaluation determines necessary.
- Local exhaust fans must be installed in full baths and kitchens and vented to the outdoors.
- Ventilation air must come from outdoors. (Options for accomplishing this goal, given Florida's unique sub-tropical climate, will be provided during further training by the State.)
- Controls must be labeled to their functions.
- Must prevent migration of contaminants to adjoining occupied spaces, including sealing of ducts in a garage.
- Whole building ventilation requirements may be satisfied by intermittent operation.
- 1 sone maximum for whole-building fans, continuous and intermittent. 3 sone maximum occupant-controlled fans. Existing fans and air handlers are exempt.
- CO alarms must be installed in every dwelling unit regardless of fuel source.

Required use of ASHRAE 62.2-2013 Ventilation Rate Calculator

All sub-grantees are required to use the online Residential Energy Dynamics (RED) ASHRAE 62.2-2013 Ventilation Rate Calculator to evaluate dwellings.

(http://www.residentialenergydynamics.com/redcalcfree/tools/ashrae6222013)
Required Documentation of the RED ASHRAE 62.2-2013 Ventilation Rate Calculation

All client files for weatherized dwellings must have a print out of the RED ASHRAE 62.2-2013, showing all applicable inputs, fields and the Whole Building Ventilation Results.

Sign for acknowledgement of receipt & understanding

_________________________________________ (Weatherization Sub-grantee Name), certify that we have read and understand the guidance contained in this notice. Signatures indicate receipt of this guidance and certify our sub-grantee will immediately begin adhering to the attached guidance.

_________________________________________ Executive Director ___________________________ Date

_________________________________________ WAP Coordinator ___________________________ Date

Please submit by email or fax to your DEO Grant Manager by Friday, June 19, 2015.
MEMORANDUM

TO: Florida Weatherization Subgrantees

FROM: Debbie Smiley, Manager
       Weatherization Assistance Programs

DATE: August 20, 2015

SUBJECT: State Weatherization Program Notice 15-08
          WAP Heating, Ventilating and Air Conditioning (HVAC) Equipment Policy

PURPOSE: To provide the Weatherization Assistance Program (WAP) network with policy and procedures for the replacement heating and cooling systems – window/wall (reverse cycle) units and central heating, ventilating, and air conditioning (HVAC).

SCOPE: The provisions of this guidance apply to all Sub-grantees awarded a weatherization assistance grant by Florida Department of Economic Opportunity (DEO) under the Department of Energy (DOE) WAP.

POLICY

The three conditions for replacement of existing heating and cooling systems:

1. The equipment is 10+ years old;

2. Central HVAC - The cooling component no longer functions; Window/wall Reverse Cycle – unit runs but no longer heats or cools;

3. Client requires a controlled environment, i.e. life-threatening cases – there must be adequate documentation provided by the client’s physician to support this criterion.
AUDIT PROCEDURES

The following decision steps should guide you in determining if the HVAC is a candidate for replacement:

Step #1: Is there an existing heating and cooling system(s)?

If the answer is, NO, then:

a. Does the client or any member of the household qualify for installation of a new heating and cooling system based on their documented, medically-required need for a controlled environment?

If YES, then Physician’s endorsement should contain the following:

i. Be on official letterhead
ii. Doctor’s name and contact information
iii. Patient name and information that corresponds to the application
iv. Statement: “This person is a patient under my direct care who has a diagnosed medical condition. The patient’s medical condition will worsen and could result in harm or death.”

If NO, then DO NOT PROVIDE A NEW HEATING AND COOLING SYSTEM(S).

If YES, then PROVIDE A NEW HEATING AND COOLING SYSTEM(S) AS A HEALTH & SAFETY MEASURE. Determine whether to run a NEAT or MHEA audit, or to use the applicable Priority List, based on other factors.

Step #2: If the dwelling contains a heating and cooling systems then:

a. Are the existing HVAC systems operable – i.e., do they provide appropriate heating/cooling/ventilation? Is the equipment operating safely?

If NO, then REPAIR OR REPLACE, AS APPROPRIATE, THE HEATING AND COOLING SYSTEM AS A HEALTH & SAFETY MEASURE. Determine whether to run a NEAT or MHEA audit, or to use the applicable Priority List, based on other factors.

If YES, then determine the age of the HVAC system(s).

i. If one or both of the systems are more than ten years old, or if the age of either system cannot be determined, then a site-specific NEAT or MHEA audit must be run.

ii. If the system(s) are less than ten years old, then determine whether to run a NEAT or MHEA audit, or to use the applicable Priority List, based on other factors.
GENERAL POINTS FOR REPLACEMENT OF EXISTING HVAC EQUIPMENT

- The system must be verified as being operable during the pre-dwelling inspection process to determine if the system is to be considered as a candidate for replacement.
- When verification of the existing system’s operation is not possible, the unit may not be considered as a candidate for replacement. NOTE: “New Installation of a heating and cooling unit is not allowed under DOE rules.” However a life threatening condition may be an exception to be considered but requires a state waiver being issued prior to completing the Pre Work Order Agreement (PWOA) form.
- Subgrantees shall use the NEAT/MHEA audit tool to determine if an HVAC unit 10 years or older is a candidate measure for replacement.
- Replacement units – even if they are replaced for Health & Safety reasons – must be sized to the post weatherization home characteristics using the “ASHRAE Manual J” mechanical equipment-sizing criteria with a copy in the client file.
- Replacing central systems with one or more room air conditioners may be considered as a cost saving option where applicable, with a SIR of 1 or greater using the NEAT/MHEA audit tool;
- When installation of a new central system is technically infeasible or cost prohibitive, a window unit or room AC may be considered;
- Replacement of an operable HVAC unit or a window unit, which already exists in a dwelling automatically requires the use of either the NEAT or MHEA audit to determine the Savings to Investment Ratio (SIR) of that energy conservation measure;
- A maximum of three (3) window units in a dwelling receiving weatherization can be replaced
- **New systems** cannot be installed using weatherization funds if there is no existing system, except in life-threatening cases as discussed above;
- General weatherization activities such as – duct sealing, duct insulation, etc. should be conducted;
- Install set-back thermostats where appropriate;
- Replace filters and leave an extra set or provide a washable filter;
- Subgrantees must have an HVAC assessment in the client file to justify the replacement of the central system or any window/wall units.
- If the central system is going to be replaced, Subgrantees also need to have an accurate Manual J in the client file.
- Assessment justification must identify why the replacement is necessary and what process was used to make that determination.
- A copy of the audit’s Recommended Measures and the Input Report must be placed into the client file.

**Note 1:** Subgrantees may run audits on dwellings that contain an HVAC that is newer then 10 years old as per the housing stock within your geographical area. However, once the audit is run, if the SIR for the existing unit is 1 or greater, then weatherization work may proceed using the NEAT/MHEA audit results.
**Note 2:** If the age of the HVAC or window unit cannot be determined, an audit should be run.

- Regardless of the condition of the HVAC equipment, if the unit is 10 years or older, a NEAT or MHEA audit will be run to determine whether or not the unit is a candidate for replacement.
- If the audit recommends the HVAC replacement (SIR of 1 or more) the dwelling will be weatherized as per the audit recommendations and the priority list will not be used.
- If the audit does not recommend a replacement; the dwelling will be weatherized as per the NEAT/MHEA audit, not the Priority List.

*The remainder of this page deliberately left blank*
Sign for acknowledgement of receipt & understanding

______________________________ (Weatherization Sub-grantee Name), certify that we have read and understand the Guidance contained in this notice. Signatures indicate receipt of this guidance and certify our sub-grantee will immediately begin adhering to the attached guidance.

______________________________ Executive Director ________________________ Date

______________________________ WAP Coordinator ________________________ Date

If you have any questions or there is any confusion in regards to the guidance provided in this State Weatherization Program Notice, please include your comments on this page.

Please submit by email or fax to your DEO Grant Manager by Monday, August 31, 2015.

NOTES:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

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________________________________________________________________________

________________________________________________________________________
MEMORANDUM

TO: All Subgrantees

FROM: Debbie Smiley, Manager
Weatherization Assistance Program

SUBJECT: State Weatherization Program Notice 15-08A
Water Heater Repair or Replacement

DATE: October 12, 2015

POLICY:

1. Water heaters may be replaced when energy savings justify the replacement cost.
   - Water heater replacement must result in a savings-to-investment ratio (SIR) of 1.0 or greater.
   - The lifetime used in the SIR calculation should not exceed the manufacturer’s guarantee.
   - NOTE: Water heater replacements are generally not cost effective unless savings accrue for at least 10 years. Therefore, Subgrantees should purchase new replacement water heaters with at least a 10-year guarantee.

2. Water heaters may be replaced for related health and safety reasons.
   - When replacing water heaters for health and safety reasons, they must be brought up to code. (From “Water Heater Replacement into the Weatherization Assistance Program Information Tool Kit” by Jordan Kelso at D and R International, 2003).

3. Water heaters should not be replaced based on age.
   - The age of the water heater does not provide an accurate indication of whether it should be replaced.” (Kelso, 2003).
   - Water heaters must have an SIR of 1 or greater. Install energy star water heaters with an Energy Factor of .67 or above.

4. There are three categories for water heaters that have problems or issues:
   - Category 1- Problems that pose an immediate threat to the occupants. These are Health and Safety measures.
     Examples: High-CO readings, exposed electrical wires, flame roll-out or back-drafting (add combustion air), no pressure relief valve, no safety discharge pipe (in a living area, laundry area, or any conditioned space), or improper flue venting (Combustion Appliance Zone worst case test failure).
• **Category 2- Problems that potentially pose a future threat to the occupants.**
  
  ○ *Examples: Improperly installed relief valves (that may vent toward residents), water leaks that will likely cause mold or deterioration to structure, water heaters that are not at the required height off the ground. Improperly installed discharge piping. No safety discharge pipe (in a mechanical closet or outside vestibule). Improper vent type. If repair a water heater then you must bring it up to code.*

• **Category 3- Problems or issues that do not appear to pose a future threat to the occupants.**
  
  ○ *Examples: Water heaters that have been installed with piping that is too large or is not run (installed) properly. Rusty exteriors. Missing drain pan.*

5. **There are 3 approaches to weatherization efforts that involve water heaters:**

• **Replacement.**
  
  ○ If a unit is replaced then the entire unit must be brought up to the IRC code (or more stringent local code). Note, this does not include piping, electrical wiring, gas lines beyond the immediate connection to the water heater unit unless there is a category 1 or category 2 issue with the piping, gas lines, or electrical wiring, etc.

• **Modification of existing water heater.**
  
  ○ If an existing water heater is modified and is in category 3 then only the modifications themselves need to be up to code.

  *For example, if an existing water heater is "wrapped" with an insulating blanket and/or pipe insulation is performed, and issues with the unit do not appear to pose a future threat (category 3) to the occupants (e.g. drain line is metal instead of PVC plastic piping), then the existing unit does not need to be brought up to code.*

  ○ If an existing water heater is modified and is in category 1 or category 2 then the entire water heater must be brought up to code. Include photos and good documentation explaining why the water heater is a current or future threat to the occupants; document your thought process in the file.

  *Example- if there is a small leak from the water heater, and this poses a long-range moisture/mold potential future threat to the residents (category 2), then in this case the issue should be addressed and the unit brought up to code.*

• **Inspection of water heater as a part of the whole house assessment/audit.**
  
  ○ If the pre-existing water heater is inspected and falls in category 1, then the issue must be corrected (through repair, or if necessary replacement) and the entire unit brought up to code.

  ○ If the pre-existing water heater is inspected and is in category 2 or 3, then the unit does not need to be brought up to code because the unit was not modified and there is no immediate danger to the occupants. If, however, the water heater is in category 2 then the client must sign and be given a copy of a document that notifies them of the concern because it is a possible future concern to the occupants.
Use your best judgment, applying building science to each decision; however, remember that in the end, the local code enforcement official is the authority having jurisdiction. In most cases, where there is no municipal code jurisdiction, the 2009 IRC applies to weatherization efforts in Texas as outlined in this best practice.

ALLOWABLE COSTS:

- Water heater repair and replacement are allowable costs under the WAP.
- Repair and replacement must be included in the SIR calculation and in the per home expenditure average—or-
- Repaired and replaced for health and safety related reasons.

ADMINISTRATIVE PROCEDURES:

- Client files must include the following documentation:
  - Verification that the installed measure has an SIR of 1.0 or greater if it is based on energy efficiency.
  - Written justification and photographs if health and safety-related; and within what category the issue falls.
  - Worst-case depressurization test results as applicable.
  - Cost comparison documentation.
  - Proof of delivery of owner's manual/operating instructions for replacement units installed.
Sign for acknowledgement of receipt & understanding

__________________________________________ (Weatherization Sub-grantee Name), certify that we have read and understand the Guidance contained in this notice. Signatures indicate receipt of this guidance and certify our sub-grantee will immediately begin adhering to the attached guidance.

__________________________________________ Executive Director  __________________________ Date

__________________________________________ WAP Coordinator __________________________ Date

If you have any questions or there is any confusion in regards to the guidance provided in this State Weatherization Program Notice, please include your comments on this page.

Please submit by email or fax to your DEO Grant Manager by Monday, October 26, 2015.

NOTES:

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