South Carolina Weatherization Assistance Program

Policy and Procedures Manual

10/1/2026

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I. Policies and Procedures Introduction and Overview

This document is intended to serve as a reference for the proper procedures, policies, and processes of the South Carolina State Weatherization Assistance Program.

A. Definitions, Terms, and Acronyms

Terms used in this document:

Allowable Costs	Defined in 10 CFR 440.18
BPI	Building Performance Institute
Children	Under 18 years old
CAA	Community Action Agencies, also subgrantees
DBA FACSPro	On-line database for tracking weatherization clients (phasing out)
Disabled	As determined by governmental agency (award letter from Social Security, Vocational Rehabilitation, or Veteran's Affairs indicating disability or a letter from PEBA indicating the client is receiving a disability annuity). If the client is receiving Social Security and their Beneficiary Notice Code (BNC) is followed by DI, DS, DC, DIB, DWB, CDB, HA, W, W1, or W6 this serves as proof of disability. If the client is under 65 years old and is receiving Supplemental Security Income (SSI) payments, this also constitutes proof of disability. If you have questions, please contact OEO and review WAP-IM-2021-5 from November 9, 2021.
DOE	U.S. Department of Energy, also known as Grantor
ECM	Abbreviation for Energy Conservation Measure. For More on ECM, IRM, and H&S, see the section on type of work to be done and the Health & Safety Manual.
EPA	Environmental Protection Agency
Elderly	60 years of age and older
Families with Children	Households with children under age 18.
GHW	Abbreviation for General Heat Waste. South Carolina is authorized by DOE to install four types of GHW measures on homes (water heater tank wrap, water heater pipe wrap, low flow showerheads, and faucet aerators). The installation of these measures cannot exceed $250 of DOE money per dwelling (any amount exceeding $250 must be paid with LWAP funds).
Grantor	US. Department of Energy or DOE
Grantee	Office of Economic Opportunity (OEO)
HEB	High Energy Burden
HEU	High Energy User
High Energy Burden	At least 20 percent of the household income is utilized to pay for energy usage. The energy bill provided by the applicant must be within 60 days of the date of application for weatherization services. Only energy charges can be used to compute the burden (arrears and other charges cannot count towards this total). If a client has multiple energy bills (such as gas in addition to

	electric), the combined charges must be used to calculate the client's energy burden.
High Energy User	LIHEAP eligible household
Income	Cash Receipts earned and/or received by the applicant before taxes during applicable tax year(s) but not the Income Exclusions listed below. Gross Income is to be used, not Net Income
IRMs	Incidental Repair Measures
Large Multifamily	25+ units per building
LWAP	LIHEAP Weatherization Assistance Program
LIHEAP	Low-Income Home Energy Assistance Program
LITT	Web-based system used to conduct Energy Audits and track weatherization clients
LSW	Lead Safe Weatherization
MHEA	Manufactured Home Energy Audit
NEAT	National Energy Audit Tool – Site-built dwellings
OMB	Office of Management and Budget
OSHA	Occupational Safety Hazards Act
PPE	Personal Protective Equipment
POI	Pollution Occurrence Insurance
PY 2022	Weatherization Program Year April 1, 2022 – March 31, 2023
QCI	Quality Control Inspector
Recipient	A person receiving weatherization services
Relative	A child/adult residing in an employee's household; A spouse of an employee; An individual claimed by the employee or employee's spouse as a dependent for income tax purposes
SIR	Savings-to-Investment Ratio. SIR = lifetime of measure x (annual energy savings in dollars / investment) - where (Pre usage – Post usage) x cost per kWh = annual energy savings dollars
Small Multifamily	5-24 units per building, like an apartment building
SWS	Standard Work Specification, as outlined in the SWS Manual
Secretary	The Secretary of the US Department of Energy
Single Family residences	dwelling that shares no common wall, foundation, or other interconnection with another dwelling unit
State	The state of South Carolina
Subgrantee	Community Action Agency (CAA)
2-4 Unit Buildings	Residential buildings that contain between two and four units
WAP	Weatherization Assistance Program
Weatherization	The provision of both the materials for those services that will make their dwellings more energy efficient and the quality labor to install the materials appropriately. Note: Materials used must comply with DOE's approved weatherization materials list, unless there is a variance specifically allowed for the State of South Carolina or specified in the current South Carolina Weatherization Assistance Program State Plan.

WPN	Abbreviation of active DOE Weatherization Program Notices

B. Additional Documents to Reference

The following documents are expressly made a part of the grant agreement.

- South Carolina's Weatherization Policy and Procedures Manual;
- The current South Carolina Weatherization State Plan (including the Health and Safety Plan);
- Subgrantee's current Program Year Budget and Work Plan;
- Appendices;
- Subgrantee's Personnel Policies and Procedures;
- OEO Fiscal Guidance and Procedures Manual;
- South Carolina's Weatherization Field Guides (Site Built and Manufactured Homes);
- Active DOE Weatherization Program Notices / Memorandums; and
- Any applicable South Carolina Weatherization directives / memoranda

C. Appendices

The following appendices are to be signed by the Subgrantee's Executive Director and submitted with the signed Grant Agreement to the Office of Economic Opportunity.

- Appendix A – Contractors / Consultants List
- Appendix B – Drug-Free Workplace Certification
- Appendix C – Debarment, Suspension, Ineligibility & Voluntary Exclusion Certification
- Appendix D – Lobbying Certification
- Appendix E – Environmental Tobacco Smoke Certification

D. Purpose of the State Weatherization Assistance Program (WAP):

The purpose of the State Weatherization Assistance Program is to increase the energy efficiency of dwellings owned or occupied by low-income persons, reduce their total residential expenditures, and improve their health and safety, especially those who are particularly vulnerable, such as the elderly, persons with disabilities, families with children, high residential energy users, and households with high energy burdens. (See Table below Section A for definitions of these terms.)

E. Type of Weatherization Work to be Done

The type of weatherization work that is authorized to be done can be found in the Technical Guides and Materials listed below. Field guidance will concentrate on installation techniques, proper methods of testing, health and safety requirements, and data collection and submission.
Administrative guidance will concentrate on training plans and schedules, data collection and submission, and contract language and wording to communicate requirements and specifications.

1. Standard Work Specifications (SWS)

a. The Standard Work Specification (SWS) Field Guides for Site-Built and Manufactured Housing were approved by the Department of Energy on May 13, 2026. This field guide and all technical work is based on the updated version of the SWS. The Legacy SWS should not be consulted when installing measures.
b. All tasks performed on client homes will meet the specifications, objectives and desired outcomes outlined in the South Carolina Field Guide.

c. Additional language in Subgrantee Agreements to meet requirements within WPN 15-4.

2. Incidental Repairs (IRMs)

a. All tasks performed on client homes will meet the specifications, objectives and desired outcomes outlined in the South Carolina Field Guide.
b. Additional language in Subgrantee Agreements is to meet requirements within WPN 22-4.
c. Maximum amount of spending with DOE funds for incidental repairs is $500 per dwelling.
d. LWAP funds can also be spent on IRMs. There is no specific monetary limit on LWAP funds for incidental repairs, but the SIR must remain above 1.0 for DOE funds to be spent on the project.
e. Incidental repairs are necessary for the effective performance or preservation of newly installed weatherization materials that are not part of the standard installation for that measure. The accessor must annotate on the Recommended Measures, Work Order, or in DBA which ECM each IRM is associated with. Note that IRMs and Health and Safety Measures are not interchangeable. If a measure can be attached to an ECM, it must be an IRM.
f. The Total Cost of all IRMs, not to exceed $500 (in DOE funds) is added to the cost of the package of weatherization measures to calculate the whole unit Saving to Investment Ratio (SIR). If the IRMs cost causes the SIR to fall below 1.0, the home must be deferred or completed with all LWAP funds and no DOE funds (see section 300 on LWAP requirements).
g. Review WPN 19-5 for additional guidance from DOE on IRMs.
h. Ineligible measures that do not meet the incidental repair definition, includes Lead Safe Work and Testing; Asbestos testing, encapsulation, or mitigation; Removing pollutants; or Radon Testing.

3. Health and Safety

The Department of Energy allows subgrantees to use funds to address Health and Safety issues identified during weatherization.

a. These funds are considered a separate budget category and are excluded from ACPU calculations.
b. Maximum amount of DOE Health and Safety funds that can be spent on a dwelling is $1,500 ($1,050 for IIJA (BIL)).
c. LWAP also has a Health and Safety budget category. There is no cap on the amount of LWAP Health and Safety funds than can be spent on a dwelling.
d. See Health and Safety Plan for specifics on allowable Health and Safety measures.

F. Administration of the Weatherization Assistance Program (WAP)

The Administration of the WAP program in South Carolina is through the South Carolina Department of Administration, Office of Economic Opportunity (OEO). Throughout this document, this office may be referred to as 'the State' or 'OEO' interchangeably.

For clarity, the U.S. Department of Energy is denoted as the 'Grantor' and may also be referred to as 'DOE'. They are the funders for the program. The Office of Economic Opportunity is denoted as the 'Grantee'. The Grantee applies for and is responsible for the program and the funding. The local providers (of which there are eight in South Carolina) are denoted as the 'Subgrantees'. The Subgrantees receive funding from the Grantee for the work done on clients' homes.

To ensure that the Weatherization Assistance Program is efficiently administered and delivered from the Grantee/State to the Subgrantees/Local Community Action Agencies, the State of South Carolina enters into an agreement with the Subgrantees. This document is called the Grant Agreement. The Grant Agreement provides the funding allocated to the Subgrantee, along with the responsibilities of the OEO and the Subgrantee.

G. Selection of Area to be Served

All forty-six (46) counties within the State of South Carolina will be served by the eight (8) community action agencies (subgrantees). These Subgrantees are listed in the State Plan Annual File (section 101.3).

The Weatherization Assistance Program is to be administered locally by community action agencies, per South Carolina Code section 48-52-440. The local community action agency is responsible for administration and implementation of the program. Preference is given to any community action agency which has, or is currently administering, an effective program under 10 CFR 440 or under Title II of the Economic Opportunity Act of 1964. Funds are allocated based upon the most recent Census poverty population in the counties the subgrantees serves.

H. Population Priorities

Subgrantees must use the application prioritization system in DBA FACSPro and/or LITT which prioritizes program eligible persons based upon the following: age, disability status, residential energy use, residential energy burden, and status of children in the household. These categories are defined in Section A: Definitions and Terms.

Clients that are eligible for weatherization services that do not have high priority characteristics (for example do not meet any or many of the five priority categories) can have their homes weatherized using all LWAP funds or other alternative funds. If no DOE funds are used, the subgrantee can ignore the prioritization requirements of DOE funding. However, subgrantees must document the reason for using alternative funding (client on waitlist for extended period, not weatherizing home poses danger to client's health, etc.). Subgrantees must be prudent in utilizing this option and avoid any potential conflicts of interest (relatives, friends, or coworkers of agency staff). OEO expects homes that are weatherized fully with alternative funds to be rare occurrences.

Other Priority Considerations:

Agencies use DBA FACSPro and LITT to track clients in other programs they administer (LIHEAP, LIHWAP, CSBG, etc.). Information captured for these other programs (income and energy bills) can alter a client's priority point total after the fact. DBA does not keep a clear audit history of a client's point total. This has caused issues during monitoring visits with the point total changing from when weatherization services commenced. To avoid these issues, OEO recommends **printing out the client's point total** when weatherization services begin (the energy audit is conducted) and including this in the client file. This should not be an issue for clients in LITT.

I. Grant Period

The grant will go into effect April 1st of the program year (PY) and shall continue until March 31st the subsequent calendar year.

J. Provisions of the Grant Agreement

- OEO agrees to engage with Subgrantee and Subgrantee agrees to perform the services set forth in the agreement.
- Subgrantee agrees to perform the services in the 46 counties in the state of South Carolina, served by the 8 Community Action Agencies.
- Each **Subgrantee must expend the WAP allocation** and have completed the appropriate number of housing units according to the quarterly percentages.
- Any Subgrantee that does not expend the **minimum percentage of Program Operation funds** will be required to submit **a Plan of Action Report** within 10 days of receiving notification.
- Subgrantees who **fail to achieve the minimum production quota** agreed to may have the Department of Energy **administrative funding reduced** in the following program year.
- OEO reserves the right **to rebid the selected service area** if subgrantees fail to achieve production quotas for a period of two consecutive years.
- **Amendments** or modifications of this Grant Agreement shall be valid if in writing and signed by both parties hereto.

K. Electronic Signatures Policy

Due to COVID-19 (Coronavirus), the parties acknowledge and agree that notwithstanding any law or presumption to the contrary, an electronic signature (hereinafter, an "Electronic Signature") of any party or approver on this Agreement shall be deemed valid and binding and admissible by any party against any other party as if same were an original ink signature. The parties further acknowledge and agree that they (a) intend to be bound by any Electronic Signatures affixed to this Agreement, (b) are aware that the other party or parties will rely on any such Electronic Signatures, (c) such an electronically signed Agreement may not be denied legal effect or enforceability solely because it is in electronic form or signed with an Electronic Signature, and (d) the foregoing provisions regarding Electronic Signature apply solely to the execution of this Agreement, and shall in no event be deemed to amend any other written obligations of any party set forth in this Agreement.

L. Climatic Conditions

Climate is classified as humid sub-tropical. Temperatures vary seasonally, with summers generally hot and sultry while winters are mild. Precipitation is ample and well distributed throughout the year, but March and July are usually the wettest. The Weather Stations used in South Carolina are Greenville Columbia, and Charleston. Greenville has 2,158 of heating degree days and 2,099 cooling degree days. Columbia has 2,167 heating degree days and 2,250 cooling degree days. Charleston has 1,730 heating degree days and 2,278 cooling degree days.

M. Close-out of the Grant

1. General Requirements

- OEO will close-out the grant when it is determined that all applicable administrative actions and all required work of the grant have been completed by Subgrantee within the grant period.
- OEO will provide close-out procedures, which comply with 2 CFR §200.343, the Fiscal Guidance and Procedural Manual and the close-out memorandum.

2. Due Date for Reports

Subgrantee will submit all financial, performance, and other reports as required per the conditions of the grant no later than **forty-five (45) days after the end date** of the period of performance. As defined in Section One part I, the period of performance for the grant period will end March 31st.

3. Cost Adjustments, Funding, Refunding, and Other Payments

a. **OEO will adjust upward or downward to allowable costs based on the final close-out financial report.**
b. **Subgrantee shall, within the close-out period, refund to the OEO any balance of unobligated funds unless otherwise directed by OEO.**
c. **Subgrantee will make payment to OEO for all unallowable costs with thirty (30) days after being notified.**
d. **Inventory Cost Adjustment**

- Residual inventory funds (unused supplies) exceeding $5,000 in total value upon completion of the project or program year shall be purchased back by the agency using non-Federal funds at program year-end. In the subsequent program year, current year funds may be used to repurchase inventory back from Subgrantee so expenditures are recorded in the program year receiving the benefit.
- For inventory less than or equal to $5,000 in aggregate, Subgrantee is required to provide OEO with a Materials Inventory Recap sheet itemizing inventory by type, unit cost and total cost at the close of the program year-end. See CFR §200.343(d).

e. **Later Disallowed Costs and Adjustments**

Close-out of the grant does not affect the following:

- Grantee's right to disallow costs and recover funds on the basis of a later audit or other financial review;
- Subgrantee is obligated to return funds due to later refunds, corrections, or other transactions;
- Record retention as required in §VII, (B)(10)(c) of this Grant Agreement.

N. Legal Provisions

1. **Conformity with Law.** The provisions of this Grant Agreement and performance hereunder are subject to all applicable laws, regulations, ordinances, and code of Federal, State, and local governments. If it appears that the terms hereof are in conflict with such, then the terms hereof, which conflict therewith, shall be deemed inoperative and null and void to the extent of the conflict and shall be deemed modified to conform therewith. In the event the regulations contradict each other, State and Federally imposed regulations always supersede.
2. **Collected Information**. Pursuant to Section 30-2-40(B) of the S.C. Code of Laws, information collected by and/or provided to the Office of Economic Opportunity may be personal information as defined by "The Family Privacy Protection Act of 2002" (S.C. Code Section 30-2-10 etseq.) and subject to public scrutiny or release. This grant agreement and all materials associated with it may be released pursuant to FOIA or media request.
3. **Legal Services**. Subgrantee shall not use grant funds to engage an attorney-at-law pursuant to any term of the Grant Agreement unless OEO has provided written permission. Such permission will only be granted by OEO after consultation with the Attorney General of South Carolina.
4. **Non-Waiver of Breach**. The failure of OEO at any time to require performance by Subgrantee of any provision of this Grant Agreement shall in no way affect the right of OEO thereafter to enforce the same; nor shall the waiver by OEO of any breach of any provision hereof, be taken or held to be a waiver of any succeeding breach of such provision, or waiver of the provision itself.
5. **Statute of Limitations.** The Statute of Limitations applicable to this Grant Agreement is as stated in South Carolina Law.

6. **Venue of Actions**. All suits or actions for the enforcement of the obligations of this Grant Agreement and for any and every breach thereof may be instituted and maintained, at the option of OEO, in any court of competent jurisdiction in the State of South Carolina.
7. **Attorney Fees**. In the event OEO shall bring suit or action to compel performance of or to recover for any breach of any stipulation, covenant, or condition of this Grant Agreement, Subgrantee shall pay to OEO such attorney fees the court may adjudge reasonable in addition to the amount of judgment and costs.
8. **Non-Assignability.** No assignments of this Grant Agreement or of any rights hereunder by Subgrantee shall be valid without the prior written consent of OEO.

II. OEO Responsibilities Created by the Grant Agreement

Overview

The Office of Economic Opportunity is responsible for **applying for the weatherization funding** from the DOE. This is done by **completing the South Carolina Weatherization Assistance Program State Plan.** The Weatherization Assistance Program is then administered within the State based upon the plan, policies, procedures, budget, allocations, and production targets listed in the State Plan.

The OEO is also responsible for the **hiring of staff** for oversight of the Weatherization Assistance Program. This will involve **fiscal and technical reviews and monitoring of activities** at the Subgrantee level. A more comprehensive discussion of the State Plan is included later in this document.

A. The South Carolina Weatherization Assistance Program State Plan

The OEO is responsible for the completion of the South Carolina Weatherization Assistance Program State Plan. This is the application to the DOE to operate the program in South Carolina. There are two main sections to the State Plan, and both will be discussed in more detail later is this document. The first is the Annual File. This is information that will usually change from year to year. The State Plan includes the following documents:

1. **SF 424A Budget**
2. **Budget Justification**
3. **Annual File**
    1. The Program Budget (which includes the budget for the Grantee and the allocations to the Subgrantees),
    2. Budget Justifications (personnel costs, expected travel costs, expected supplies, contracts, subcontracts, and indirect costs),
    3. Subgrantee Allocations,
    4. Production Projections (based upon the Subgrantee Allocations),
    5. Policy Advisory Council Members and who they represent,
    6. Subgrantee Information,
    7. The Budget is the SF-424A and is not a part of the Annual File (it is a separate document)
    8. Projected energy savings and projected Average Cost Per Unit (ACPU
4. **Master File**

The second section is the Master File. This is information that will typically remain constant

from year to year. The State Plan Master File has information about:

1. Eligibility (includes determining eligibility, determining building eligibility, definition of children, and the State's approach to Tribal Organizations), (See Eligibility Section under The Work Process)
2. Selection of Area to be served, (See I. Brief Overview and Introduction)
3. Priorities (application prioritization system), (See I. Brief Overview and Introduction)
4. Climatic Conditions (See I. Program Overview Section L. of this document)
5. Description of Type of Weatherization work to be done (includes Technical Guides and Procedures, Energy Audit Procedures, and Final Inspection), (see I. Program Overview, section E of this document)
6. Weatherization Analysis of Effectiveness,
7. Health and Safety,
8. Program Management (includes Overview and Organization, Administrative Expenditure Limits, Monitoring Activities, and Training and Technical Assistance Plan),
9. Energy Crisis and Disaster Plan.

B. Contents of the State Plan Annual File

1. Program Budget

The program budget uses the funding amount received by the Grantor and breaks it out between five (5) different categories, with two being further divided between Grantee and Subgrantee.

a. Administration

- This category is defined as not being more than 15% of the total grant allocation from the Grantor. However, no more than 7.5% may be available for the Grantee administration and no less than 7.5% may be available for the Subgrantees administration. Subgrantees that received less than $350,000 total funding annually may have an additional 5% set aside for administration (12.5% total).
- Grantee Administration is the funding amount available to the Grantee for staff involved with administration, fiscal, and programmatic monitoring of the WAP at the state level.
- Subgrantee Administration is the funding amount available to the Subgrantees for administrative activities and staff at the local provider level, that are not involved directly with the WAP program.

b. Training & Technical Assistance (T&TA)

- The maximum amount available is included with the annual allocation program notice from DOE. This category is available to the Grantee (for personnel, state-wide trainings, monitoring, evaluation of program outcomes or conferences) and to Subgrantees (for client education and trainings, including Energy Auditor and Quality Control Inspector training). T&TA will also be used for comprehensive trainings that expand the knowledge base of the network that apply to their job functions. Refer to section 500 Training and Technical Assistance for additional information.

c. Health and Safety

- This category is made available to Subgrantees to address Health and Safety issues that may prevent weatherization work from being performed or issues that may have been caused by the weatherization work. A whole section on the South Carolina Weatherization Health and Safety Plan is discussed in section 102.7 and included with the South Carolina Weatherization Assistance Program State Plan.

- The budget amount for Health and Safety is calculated by multiplying a pre-determined percentage to the Program Operations funding. Typically, the State will determine the percentage of the Program Operations funding to be allocated for Health and Safety activities based upon historical expenditures in this funding category.

d. Program Operations

- This is where materials installed into customer's homes, the labor to install, local provider support costs (local program rent, utilities, vehicles, tools, equipment), contractor costs, and intake staff are charged. It is important to understand that the Program Operations encompasses more than the materials and labor installed into customers' homes.
- The Program Operations amount divided by the Adjusted Average Cost Per Unit (ACPU) will determine the number of units to be completed at the State level and at the Local Provider level.
- The budget amount for the Program Operations is calculated by subtracting the allocations for Administration, Liability Insurance, Training & Technical Assistance, and Health and Safety from the Total Allocation.
- The Average Cost Per Unit expenditure of financial assistance provided under WAP for labor, weatherization materials, and related matters cannot exceed $6,500, as adjusted (see 10 CFR §440.18(a) and (c)). The adjusted annual average cost per unit is determined by using the percentage increase in the Consumer Price Index (CPI) for the previous Fiscal Year or 3 percent, whichever is less. The Adjusted Average Cost per Unit is included with the annual allocation program notice from DOE.

e. Weatherization Readiness Funds

- Separate budget category specifically for pre-weatherization measures. See WRF section of manual for additional information.

f. Liability Insurance

- As allowable, liability insurance and financial audit costs are covered by indirect costs. Only when these costs are not included as part of the indirect cost rate agreement will costs be allocated to the liability line item in the budget.

2. Budget Justification

a. Personnel

- The expenses listed in this budget justification are for State staff that may be designated as full time (100% of their salary), or part time (less than 100% of their salary) paid from the Grantee Administration or the Grantee T&TA allocation.

b. Travel Expenses, Equipment, Supplies

- The expenses listed in this budget justification may include travel to Regional Meetings, Programmatic Monitoring visits, office supplies, or other operational costs.

c. Contracts and Subgrants

- The expenses listed in this budget justification are for contracts with the local Subgrantees, contracts to provide regional trainings, or contracts for software.

3. Subgrantee Allocation

- The funds are allocated to each subgrantee based on the 2020 Census data.

4. Policy Advisory Committee

- In South Carolina, the Policy Advisory Committee is called the Energy Advisory Council. The Energy Advisory Council advises and assists in the development and implementation of the Weatherization Assistance Program and advises the South Carolina Office of

Economic Opportunity on a broad range of issues relating to the Weatherization Assistance Program. The Council will review, comment upon, and vote on the South Carolina Weatherization Assistance Program State Plan prior to the plan being sent to the Department of Energy.

- The Policy Advisory Council includes representatives of electric utilities, subgrantees, social service agencies, and other governmental agencies.
- The Policy Advisory Council meetings are held at least two times annually. SC OEO retains the right to remove members from the Energy Advisory Committee if they are consistently unable to attend meetings and conference calls. To increase participation, OEO encourages members to attend Spring and Fall weatherization training conference.

5. Health and Safety Plan

The South Carolina Weatherization Health and Safety Plan is included with the South Carolina WAP State Plan at the time of submission. This provides information to DOE on the following issues:

a. General Information

- This will include the percentage of program operations funds that can be set aside for energy related health and safety repairs and the maximum amount of funds to be spent per dwelling.

b. Budgeting

- This designates that a separate Health and Safety budget is encouraged to be implemented by the subgrantees. A separate budget would isolate costs for evaluation purposes and would not be included in the average cost per unit calculation.

c. Health and Safety Expenditure Limits

- The Office of Economic Opportunity reviews historical expenditures of Health and Safety and sets an expenditure limit for the program.

d. Incidental Repair Measures

- Incidental Repair Measures (IRM) are installed with an Energy Conservation Measure (ECM) to ensure the proper performance or preservation of the weatherization measures and are not charged to the Health and Safety budget.
- Some measures that are installed may not be attached to an ECM, then must be charged to the Health and Safety budget. See Health and Safety plan for specifics.

e. Deferral / Referral Policy

- The Office of Economic Opportunity has developed a written deferral/referral policy that covers Health and Safety and other deferral reasons. The deferral/referral policy is included in the Master File section of the WAP State Plan.

f. Hazard Identification and Notification

- When a problem has been identified that will result in a home being deferred, the agency must either:
  - Complete The Deferral of Service Notification Form 107 in its entirety listing the specific reason(s) for deferral, indicating the actions the client must take to address the deferral issues, and the timeline for completing those actions.
  - Send a letter to the client outlining the specific reason(s) for deferral, indicating the actions the client must take to address the deferral issues, and the timeline for completing those actions.
  - Form 107 or the letter outlining the reason for deferral must be uploaded to LITT for all deferred clients.

C. Funding

OEO agrees to provide the Subgrantee with the PY allocation.

1. Limit of Payments

The total payment to Subgrantee shall not exceed the amount of funding.

2. Conditions of Payment

- OEO shall only make payment for allowable costs that are authorized while providing services pursuant to this Grant Agreement, unless they are specifically amended through the Weatherization State Plan.
- Allowable costs are defined in 10 CFR §440.18.
- OEO shall make payments on the condition that Subgrantee is in full and faithful compliance with the terms, conditions, covenants, and stipulations of this grant.

3. Payment Requests

- Subgrantees should request cash payments throughout the program year using the "Certification of Advancement of Funds" form. Advance payments must be limited to the minimum amounts needed and be in accordance with the actual, immediate cash requirements of Subgrantee in carrying out the purpose of the WAP program. A separate form is required for each grant.
- Cash payment requests should be made monthly but may be submitted as frequently as biweekly.
  In determining the cash request, Subgrantees should take into consideration:
  - The amount of funds that have been obligated.
  - Commitments and other funds needed to continue daily operations.
  - Time for OEO to process and release funds requested. It may take up to thirty (30) days for Grantee to process and release the requested disbursement.
- Subgrantees must maintain and demonstrate the willingness to preserve both written procedures that minimize the time elapsing between the transfer of funds and disbursement by Subgrantee, and financial management systems that meet the standards for fund control and accountability. As such, Subgrantees must continuously monitor grant funds received from OEO to ensure compliance with this requirement. OEO maintains the right to request additional information from Subgrantee prior to disbursing payments. LWAP and DOE funds must always be maintained in separate funds and be accounted for separately.

4. Recall of Funds

- OEO may direct the return of unexpended grant funds upon written notice to Subgrantee. The notice will indicate the allowable time for the return of the funds and stipulate causes. Per 2 CFR §200.343(d),
- OEO must promptly refund any balances of unobligated cash that OEO or Subgrantee paid in advance or paid and that is not authorized to be retained by OEO for use in other projects. See OMB Circular A–129 and see 2 CFR §200.345 Collection of amounts due for requirements regarding unreturned amounts that become delinquent debts.

D. Monitoring and Evaluation

South Carolina Office of Economic Opportunity (SC OEO) monitoring staff will conduct comprehensive monitoring of each subgrantee **at least once a year,** provide a written report to the subgrantee and maintain a file related to the monitoring. This file will be accessible by DOE during its monitoring visits.

The comprehensive monitoring will include the following areas:

- Eligibility
- Energy Audits
- Equipment/Inventory/Materials
- Feedback and Reporting
- Field Work
- Final Inspections
- Financial/Administrative
- Health and Safety
- Inventory
- Program Overview (Client File Review, Work Orders, etc.)
- Qualifications and Training
- Quality Assurance
- Rental
- SC OEO Programmatic and Management Monitoring Staff
- Subgrantee Review
- Training and Technical Assistance
- Weatherization of Units

OEO is responsible for monitoring grant, sub-grant, and contract supported activities to assure compliance with Federal and State requirements, and that performance goals are being achieved. Monitoring must cover each program, function, and activity. In a timely, complete, and accurate manner, Subgrantee shall report all data and information requested by OEO. Subgrantee agrees that OEO and its representatives may carry out monitoring and evaluation activities, including announced and unannounced activities. Subgrantee agrees to ensure the cooperation of all Subgrantee employees and board members and make all program records and facilities available to OEO to examine and copy to complete monitoring requirements (See 10 CFR §440.23 and 2 CFR §200.336). During the visit, OEO will contact clients and vendors, and review service delivery as specified in this Grant Agreement, as well as reviewing current monitoring reports for other programs administered by Subgrantee. In addition, internal program reviews shall be conducted by Subgrantee in accordance with all other procedures issued by Grantee.

A summary of each Subgrantee fiscal and program monitoring report shall be mailed to the Board Chairperson and the Executive Director; if issues are identified that could cause an agency to become at-risk, the entire board will receive a copy of the report and other correspondences.

Effective controls over and accountability for Federal funds require recipients to assure funds are used solely for authorized purposes, i.e., those activities that relate to the approved Budget and Work Plan. Subgrantee must review and document the client assistance file, as it is an effective tool in maintaining control and ensuring compliance over Federal funds.

The Office of Economic Opportunity uses a “team” approach to monitoring, with each Subgrantee having a Fiscal/Programmatic/Management review performed annually and a technical review performed annually.

Thirty (30) calendar days prior to each monitoring, OEO’s Attorney will send a Monitoring Details notification letter to the Subgrantee’s Executive Director and Senior Manager for WAP. Prior to the issuance of the notification letter, the Senior Manager for WAP must send for review and approval a copy of the Monitoring Details exhibits to OEO’s Attorney. A copy of a previous Monitoring Details letter

should include:

- OEO's programmatic and technical staff who will perform the monitoring.
- The place, dates, and time of the monitoring and any of the Subgrantees staff who are requested to attend.
- The number of dwellings that are to be physically inspected.
- The number of files, both electronic and physical, that are going to be inspected
- The date and location to which the requested files should be submitted.
- The place, date, and time of the Entrance Conference.

Prior to the start of the monitoring, OEO will conduct an Entrance Conference with the Subgrantee.

NOTE: Once a unit or client file has been scheduled for an inspection, the subgrantee is prohibited from completing additional work or modifying the client file. If the subgrantee is performing a follow up inspection or follow-up work after it has been chosen for an inspection, the completed unit should not have been submitted as being completed. Return visits by the subgrantee to pre-inspect units selected are not allowed. The intent of this advance notice is not to provide the subgrantee with the opportunity to prepare the unit or client file for OEO review.

1. **Areas of Review**
   - Appropriate and allowable materials;
   - Appropriateness and accuracy of the energy audits;
   - Blower Door tests to verify air-sealing work and assess indoor air quality issues,
   - Combustion analyzer and manometer to verify combustion safety testing;
   - Comprehensive final inspections;
   - Description of monitoring results and required follow-up procedures
   - Energy Audits
   - Exhaust Fan Flow meter to measure the exhaust air flow of exhausting equipment and to verify compliance with ASHRAE 62.2;
   - Financial / Administration
   - Health & Safety
   - Infrared Thermography camera to verify uniform insulation coverage and air sealing work;
   - In-Progress" units. These "in progress" units will be reviewed by OEO staff, but do not count towards the required percentage of completed units. They will provide the opportunity to assess:
   - Inventory
   - Performance testing of units. The following items will be used for performance testing:
   - Pressure Pan to verify duct sealing;
   - Program Overview (Client File review, Work Orders, etc.)
   - Qualifications & Training
   - Quality and compliance;
   - Quality Management Assurance
   - Safe work practices;
   - Staff or entity performing monitoring
   - Weatherization of Units
   - Other factors that are relevant to onsite work, as needed

2. **Inspection of Units**

   SC OEO's QCI certified inspectors will monitor (at least) 10 percent of the completed units and accompanying client files for each subgrantee until the subgrantee has in-place an independent QCI assessor and inspector. OEO will then monitor 5% of the completed units. Also, OEO

will review units in progress, but these will not count toward the 5 or 10%. If significant deficiencies are discovered, such as health and safety violations, poor quality installation of materials, major measures missed, SC OEO will require the subgrantee to take appropriate corrective action to resolve the outstanding issues within 30 days. As outlined in the SC WAP State Plan, these reworks and corrections must be completed with non-federal funds. SC OEO will conduct a follow-up monitoring visit and will inspect additional units until it can be assured that all deficiencies are resolved.

3. Exit Conference

Within 10 days of the monitoring visit, OEO WAP staff must conduct a follow-up **Exit Conference**. During the Exit Conference, OEO WAP staff should present all significant findings to the Subgrantee's staff. The Subgrantee's staff should be allowed to address any of the findings.

- WAP staff will email the Subgrantee's WAP Manager any information that was not provided to OEO during the monitoring and pictures of substandard work as noted by the OEO Quality Control Inspector, including corrective actions.
- OEO WAP staff must ensure that Subgrantee's WAP Manager submits the requested information and/or pictures of the completed work. OEO staff must completed and submit a Draft Monitoring Report identifying all issues found during the monitoring within 25 calendar days from the last date of the monitoring visit. A Draft Monitoring Report should include the 'Draft' watermark. It should be sent to only the Subgrantee's Executive Director and Senior Manager for WAP.
- Subgrantees have up to 10 calendar days after they receive the Draft Monitoring Report to submit their responses. OEO staff should review the responses and indicate if the responses were acceptable or unacceptable. OEO replies to unacceptable responses should include the reason for the denial, any actions required by the Subgrantee, and action that OEO intends to undertake in response to the finding. The Senior Manager for WAP must complete a final Monitoring Report with these responses incorporated in it.
- OEO will send the Final Monitoring Report to the Subgrantee's Board Chairperson, Executive Director, and Senior Manager for WAP within 20 business days of receiving the response to the Draft Monitoring Report.
- Sensitive or significant noncompliance findings, such as waste, fraud, or abuse must be reported to the DOE Project Officer team immediately.
- Subgrantee noncompliance or repeated unresolved findings (based upon 2 consecutive visits at a Subgrantee) must be reported immediately to the DOE Project Officer team.

4. Findings, Concerns, and Recommendations

a. Criteria for Findings:

- Identified non-compliance with a statutory and regulatory program requirement and must include the citation for the requirement.
- Repeated or previously identified concerns that remain unaddressed and cause non- compliance with a statutory or regulatory program requirement.

b. Criteria for Concerns:

- Inconsistencies between the Subgrantees current approved plan and actual implementation.
- Identified practices that, at present, may not be out of compliance with statutory or regulatory program requirements but do not reflect the safeguards/processes outlined in Program issued notices specifically designed to ensure compliance with statutory and

regulatory requirements.
- Identified non-compliance or omissions prescribed within the Subgrantee's current approved plan, policies, and procedures.
- Repeated program recommendations that remain unaddressed and can lead to potential non-compliance.

c. Criteria for Recommendations
- Suggested actions for consideration to improve merits of the Program, optimize policies and procedures, and/or incorporate a best practice.
- Identify options for Training and Technical Assistance.

5. Tracking and Analysis

- The Office of Economic Opportunity will track all monitoring results, including financial reviews, to the final resolution using an Excel spreadsheet.
- The tracking tool includes findings identified during on-site visits, concerns, recommendations, commendations, and best practices, deliverables, T&TA provided during the visit, and resolutions to any issues.
- Annually, the Office of Economic Opportunity summarizes each of the Subgrantees' financial reviews, program monitoring reports, and any outstanding issues. This Subgrantee Monitoring Analysis Overview identifies the needs, strengths, and weaknesses of the Subgrantee and is used for determining future training and technical assistance.

6. Reporting - Where from

A narrative report including successes and significant problems is submitted annually to DOE by the Office of Economic Opportunity as the Annual T&TA, Monitoring, and Leveraging Report.

- Only official visits are reported.
- The annual report is due 30 calendar days after the end of the reporting period.
- The report includes the following items pulled from the Excel tracking spreadsheet:
  - Subgrantees monitored
  - Any major findings (waste, fraud, abuse) and resolutions
  - Trends with respect to findings, concerns, or other issues
  - Identified T&TA needs (Programmatic/Administrative, Technical, Financial)
  - A list of Subgrantees that are considered high risk and a plan on how to resolve
  - Outcome of activities involving T&TA and monitoring

7. Training and Technical Assistance

Training and technical assistance needs are determined by state monitoring staff observations, workmanship standards on completed homes, participation during statewide training workshops, and feedback from the Technical Advisory Group (TAG).

a. Office of Economic Opportunity (OEO) Training

OEO staff will use the following methods to provide Training and Technical Assistance:

- OEO staff will use onsite, written, webinar and telephone communication to inform Subgrantee staff of a training issue.
- OEO staff or contractor will provide automated audit inspection procedures as a part of the regular on-site monitoring visits.
- OEO staff or contractor will provide on-site or off-site training and technical assistance as needed. The need may be identified by the Subgrantee, through a DOE monitoring visit,

or by OEO staff observing an issue or to provide an update.

- OEO staff and Subgrantee staff may participate in national activities.
- OEO management staff may attend DOE mandated, NASCSP events, State Weatherization Directors' meetings, National DOE sponsored conferences, and other staff development trainings.
- Annual training will be provided to Subgrantees, with topics ranging from fiscal to technical trainings. The annual trainings may be presentations at the CAP Conferences.
- Subgrantee's Energy Auditors are required to be Building Performance Institute (BPI) Energy Auditor certified.
- Subgrantee's Quality Control Inspectors are required to be Building Performance Institute (BPI) Quality Control Inspector certified.
- The Technical Advisory Group (TAG) will meet monthly to address areas of training. Feedback from these meetings may identify training and technical assistance needs. The is comprised of one voting person from each of the weatherization providers. The TAG shares innovative ideas and discusses new technologies and techniques. Also, the TAG will advise OEO on policies, procedures, development of specifications, and technical advances.
- Effectiveness of the training and technical assistance activities will be tracked through evaluations by participants.
- Annual grant closeout reports may also identify training and technical assistance needs based upon the expenditures of the subgrantee in relationship to the average statewide expenditures.

b. Comprehensive Training

Comprehensive training is aligned with the Job Task Analysis (JTA) for the job duties. The specific job duties include Quality Control Inspector (QCI), Energy Auditor (EA) and Crew Leader/Supervisor and Retrofit Installer/Technician.

- All new personnel that the subgrantees hires to be Energy Auditors or Quality Control Inspectors must be certified within 12 months of hire date.
- The Building Performance Institute (BPI) requires recertification for Energy Auditor and Quality Control Inspector on a 3-year cycle. The Preparatory trainings prior to sitting for the recertification exams are comprehensive trainings.
- In addition, the recertification process for EA and QCI requires that the individual obtain continuing education credits (CEUs). These CEUs can be obtained by attending BPI authorized trainings.

c. Specific Training

All new personnel and contractors that the subgrantees hire for the weatherization program must complete the following training courses within 12 months of hire date.

- * Lead Safe Weatherization (LSW) or EPA Renovate-Repair-Paint (RRP) course and certification– Retrofit Installer/Technician, Crew Leader, Program Management, Energy Auditor, Quality Control Inspector, Contractor
- * OSHA 10 Course – Retrofit Installer/Technician, Crew Leader, Energy Auditor, Quality Control Inspector, Contractor.

  Specific trainings will be provided on an as-needed basis.

Specific Training	Retrofit Installer Tech	Crew Leader	Prog Mgmt.	Energy Auditor	Quality Control Inspector	Contractor
*** OSHA Construction – 10 hours**	X	X	X	X	X	X
*** Lead Safe Weatherization or**	X	X	X	X	X	X
*** EPA RRP**	X	X	X	X	X	X
Manufactured Home Fundamentals	X	X	X	X	X	X
Envelope and Duct Leakage	X	X	X	X	X	X
ASHRAE 62.2 (2016)	X	X	X	X	X	X
Client Education	X	X	X	X	X	X
Blower Door Guided Air Sealing	X	X	X	X	X	X
EPA RRP (Refresher course) (every five years)	X	X	X	X	X	X
HVAC Fundamentals	X	X	X	X	X	X
Combustion Appliance Zone Testing (CAZ)	X	X	X	X	X	X
Floor, Wall, Attic Insulation	X	X	X	X	X	X
Weatherization Assistant (NEAT / MHEA)	X	X	X	X	X	X
Energy Auditor	X	X	X	X	X	X
Health & Safety	X	X	X	X	X	X

E. Weatherization Analysis of Effectiveness

The state requires that pre and post weatherization inspections to include use of diagnostic equipment such as a blower door, combustion analyzer, etc. Subgrantees must utilize ASHRAE 62.2 (2016) for determining the proper ventilation for single-family and manufactured dwellings. Subgrantees are not allowed to report units as completed until a final inspection is performed and the work has been accepted and approved by a Quality Control Inspector.

Program production, goal attainment, and expenditure costs will be tracked monthly for each subgrantee at the State level using DBA FACSPro and/or LITT. SC WAP will utilize DBA FACSPro and/or LITT to track weatherization work performed on dwellings. Also, OEO tracks subgrantees performance on the OEO Monitoring Summary Report. The Summary report tracks findings, trainings, contractor licenses/insurances, and requested training needs.

The routine monitoring process will confirm that measures are performed and tracked according to program standards, and that diagnostic and health and safety tests are performed and documented correctly on the Data Collection and Final Inspection Form 501.

SC WAP maintains files on the subgrantees that include the Grant Agreements, monthly financial status reports, and related information from which staff can obtain a current and complete financial picture

of the subgrantee. The information kept in the files provides an updated picture of how each subgrantee is meeting contractual responsibilities.

SC WAP compares productivity between subgrantees by monitoring the number of dwellings reported monthly. Subgrantees not meeting quarterly production goals are contacted by state staff and required to provide a production plan to support it meeting prescribed quarterly goals and ensuring completion of the contractually required number of DOE houses by the end of the program period. This plan will include any additional training or technical assistance needs that may hinder the subgrantee in meeting production goals.

Agencies who fail to achieve the production quota agreed to by the community action agency and OEO may have DOE administrative funding reduced in the following program year. This reduction will at no time reduce the allocation for administration below the DOE mandated 5%. Additionally, if agencies fail to achieve the production quota for a period of two consecutive years, OEO reserves the right to rebid the selected service area.

Training and technical assistance needs are determined during the onsite monitoring of each subgrantee. By compiling the results of the production and monitoring reports, the state office determines what T&TA activities can be provided through peer-to-peer coordination or made available statewide

III. Subgrantee Program Management Responsibilities

A. Provision of Services

Subgrantee certifies that it has the legal authority to apply for the grant and the capability to ensure proper planning, management, and completion of the program elements.

1. Performance

The services mentioned in Description of Services shall be provided and performed in accordance with the State Plan and all relevant Health and Human Services (HHS), Department of Energy (DOE), and Grantee's policy/fiscal memorandums.
All weatherization work will conform to the standards set forth in the SC Field Guides as provided by OEO.

2. Client Eligibility

Subgrantee shall provide weatherization services only to those applicants/clients whose eligibility is established in accordance with 42 U.S.C. 6862(7), 10 CFR 440.22, the South Carolina Weatherization Assistance Program State Plan, the South Carolina LIHEAP State Plan, and Grantee program directives, guidelines, and memorandums. For more information on the eligibility requirements of applicants, refer to the eligibility section of the work process.

3. Appeal and Fair Hearing

Subgrantee agrees to publicize procedures for an opportunity for a fair hearing for any applicant or recipient of services whose request for any service is not acted upon with promptness or is denied. This is pursuant to OEO's March 5, 2015, Program Memorandum no. W02-2015. There is further information on the appeal process in the appeals section.

B. Description of Services Provided

Subgrantee shall do, perform, and carry out, in a satisfactory manner, services that are set forth in the program elements described in the South Carolina Weatherization Assistance Program State Plan and approved Subgrantee Work Plan for implementation of program activities. These services are listed below:

1. Weatherization

- Assess eligible households and determine what services are allowable.
- Once the allowable services have been determined, provide materials for those services that will make their dwellings more energy efficient; and provide the quality labor to install the materials appropriately.

  NOTE: Materials used must comply with DOE's approved weatherization materials list, unless there is a variance specifically allowed for the State of South Carolina or specified in the current South Carolina Weatherization Assistance Program State Plan.

2. Administration

Provide organizational support for conducting and operating the Weatherization Assistance Program, including but not limited to program and fiscal support, technical assistance and training, program development and oversight for the program elements outlined in this section.

3. Training and Technical Assistance

Refer to section II.C.7 on Training and Technical Assistance.

C. Hiring Personnel

a. Subgrantee agrees to secure the personnel required to perform the services under this Grant Agreement.
b. Subgrantee should employ individuals who can demonstrate the knowledge and aptitude to serve recipients and achieve the performance targets, including fiscal requirements.
c. Personnel engaged by Subgrantee to perform the services under this Grant shall be employed in accordance with Federal and State laws and regulations, as well as Subgrantee's Personnel Policies and Procedures.
d. In the budget, the Subgrantee shall identify all positions to be funded by the Grant, full/part time and temporary, by providing the Employee ID and position title of each position and the percentage of salary.
e. If there are positions to be filled later, Subgrantee shall submit an updated, final list within ninety (90) days of the beginning of the grant or whenever all positions have been filled, or whichever is sooner.
f. All services required will be performed by Subgrantee or under the direct supervision of Subgrantee as approved by OEO.
g. OEO considers the Subgrantee's personnel Policy and Procedures as an integral part of the grant along with any amendments and will be reviewed during OEO monitoring.

D. Subcontractors

1. General

a. Subgrantees are authorized to procure subcontractors to perform weatherization services.

b. Subcontracts must be in writing.
c. Language must be included requiring subcontractor to comply with the SWS specifications for work quality and confirm that the subcontractor has received copies of the South Carolina SWS Field Guides for Single-Family and Manufactured Homes.
d. Subgrantee shall require subcontractors to comply with the provisions of the Grant Agreement.
e. Subgrantee shall be responsible for the performance of any subcontractor and shall monitor the performance of any subcontractor.
f. An employee of the Subgrantee is not eligible to provide services to clients as a subcontractor.
g. Applicable procurement laws and procedures as described in the OEO Fiscal Guidelines and Procedural Manual shall be followed in securing subcontractors.
h. Subcontractors shall be required to carry a minimum of one million dollars in liability insurance.
i. Subcontractors shall be paid for weatherization work by subgrantees only. Weatherization applicants are not allowed to pay contractors for additional weatherization upgrades. For example, if a refrigerator is installed as part of weatherization, clients cannot pay the difference between the model called for in the audit and their preferred model.

2. Reimbursing Contractors with Training and Technical Assistance Funds

DOE allows subgrantees to reimburse contractors with Training and Technical Assistance (T&TA) funds. However, subgrantees must adhere to these guidelines as outlined in section V8.4, Training and Technical Assistance (T & TA) Approach and Activities, of the annual Application Instructions when using T&TA funds to reimburse contractors.

1. The contractor must be selected in accordance with 2 CFR 200 and all applicable state procurement requirements (see OEO Fiscal Manual Page 30 Section 6 Weatherization Contractor Procurement).
2. Contractors can only be reimbursed for training that supports the four Home Energy Professionals occupations (Retrofit Installer Technician, Crew Leader, Energy Auditor, and Quality Control Inspector).
3. Reimbursement requirements must be clearly communicated to the contractor during the procurement process, so they are aware what to include in their bid package. Contractors will not be reimbursed up front. Reimbursement will occur after training.
4. **Subgrantees must execute a retention agreement with contractors that receive reimbursement.**
5. The reimbursement policies and procedures, including the rate, documentation requirements for reimbursement (verification of class attendance, etc.), and the expected turnaround time for reimbursement, must be included in the signed contract between the subgrantee and the contractor.
6. Contractors can only be reimbursed from T&TA funds (administration, health and safety, and program operations cannot be used).
7. Contractors will be reimbursed for the cost of the training course, the cost of exams, their time spent training, and travel.
    a. The cost for the training course including required course materials, will be reimbursed based on the actual cost of the training course and the number of members of

the contracting crew that attended. The contractor must provide an invoice of the training cost and verification of attendance from each crew member for which they are seeking reimbursement.

b. The cost of training exams will be reimbursed based on the actual cost of the exam and the number of members of the contracting crew sitting for the exam. The contractor must provide an invoice of the exam cost and verification of exam attendance from each crew member for which they are seeking reimbursement. If an exam is failed, subgrantees can pay for one exam retake. After two failed exams, contractors will not be reimbursed for any additional attempts.
c. Travel costs will be based on GSA rates for mileage ($0.625 per mile), hotels (if necessary), and meals (cannot receive reimbursement for meals provided by the conference). Subgrantees should use the GSA Per Diem Rates (https://www.gsa.gov/travel/plan-book/per-diem-rates) to calculate hotel and per diem reimbursement.
d. Reimbursement for air travel is allowed in the following situations.
    i. A contractor attends an approved out of state conference or training agreed upon with the subgrantee in advance.
    ii. An out of state contractor attends a conference or training held in South Carolina agreed upon with the subgrantee in advance.
    iii. A contractor operating in South Carolina cannot receive reimbursement for an in-state flight (both the initial and final destinations are both in South Carolina) under any circumstances.
e. Reimbursement for rideshare or taxi service from the airport to the hotel upon arrival and from the hotel to the airport upon departure is allowed in the following situations.
    i. A contractor attends an approved out of state conference or training agreed upon with the subgrantee in advance.
    ii. An out of state contractor attends a conference or training held in South Carolina agreed upon with the subgrantee in advance.
    iii. Reimbursement for other rideshares during the trip is not allowed.
    iv. Reimbursement for rental cars, trucks, or other automobiles is not allowed.
f. To receive reimbursement for mileage, contractors must attend an in-state training or conference more than sixty miles from their Work Location (see Contractor Supplemental Payment section where this term is defined). Contractors may receive mileage reimbursement for driving to an out of state training or conference in the following situations.
    i. The training is less than one hundred miles from their Work Location or
    ii. The training is more than one hundred miles from their Work Location, but more than thirty miles from the closest regional or international airport.
g. Mileage reimbursement is for round-trip distance.
h. To receive reimbursement for travel, contactors must provide relevant receipts (hotel and/or flight), GSA information for the zip code and month, and mileage print outs from Google Maps or other reliable web mapping tool. Reimbursement for hotels and per diem cannot exceed the GSA rate.

3. Contractor Supplemental Payment

Beginning January 1, 2024 OEO has implemented a new option to attract and retain quality contractors. Sub-grantees may pay an additional Contractor Supplemental Payment (CSP) when contractors perform weatherization work outside their general service area. The requirements and protocols for paying and documenting CSP are outlined below.

1. To be eligible for the CSP, contractors must identify the address of their Work Location(s).
    a. Contractors may have multiple work locations.
    b. If a contractor has multiple work locations, they must use the location closest to the destination (weatherization client's home) when determining their eligibility for the CSP.
        i. Example: Contractor has home base in Richland County and a satellite office in Greenville. Home is being completed in Spartanburg. Contractor must use Greenville office as starting point for calculation of mileage in determining eligibility for CSP.
2. The CSP is three flat rates as defined below.
    a. An additional $150 for weatherization work performed between 60-109 miles away (one way).
    b. An additional $250 work weatherization work performed between 110-160 miles away (one way).
    c. An additional $350 for weatherization work performed 161 or more miles away.
    d. Contractors are not allowed to round their milage up.
        i. Example: Contractor performs weatherization work 59.9 miles away from their Work Location. They would not be eligible for an additional CSP.
        ii. Example: Contractor performs weatherization work 160.9 miles away from their Work Location. They would be eligible for the $250 CSP.
3. Contractors qualify for the CSP on a per unit basis regardless of the amount of time it takes to weatherize the dwelling, the number of trips taken or the number of vehicles used.
    a. The CSP for multifamily projects will be determined by OEO based on the building construction and scope of work. Please contact OEO for a determination on allowable CSP amounts for multifamily projects.

4. Contractors **DO NOT** receive an additional CSP for rework. Contractors may receive the original CSP once their work has passed a quality control inspection, but they would not receive an additional stipend for any rework required by the grantee or sub-grantee.
5. Contractors must provide Google Maps (or equivalent) printout with mileage from Work Location to dwelling. The subgrantee should review the map to ensure the contractor has used the most direct route.
6. Contractors must submit a separate travel invoice with Google Maps printout. The invoice must clearly indicate it is for the CSP.
    a. Subgrantees must include the CSP invoice and Google Maps printout in the client file.

7. The CSP must be paid from program operations. The CSP should be listed under the line item for transportation in all budget and FSR submissions.
8. Subgrantees must pay their CSPs monthly (at minimum) and may pay per job (once the dwelling receives a passing Quality Control Inspection).
9. The CSP must be paid from Program Operations from DOE or DOE IIJA (BIL). If the job is DOE, it must be paid from DOE Program Operations. If the job is DOE IIJA (BIL), must be paid from DOE IIJA (BIL) Program Operations.
    a. Homes that are completed with LWAP money only (no DOE or DOE IIJA money used on the home) are not eligible for the CSP.
10. Subgrantees must track the CSP expenses in their general ledger.
11. Contractors are not allowed to receive the CSP on behalf of work they have sub-contracted out. For example, if a contractor does not meet the criteria for the CSP and sub-contracts out a portion of the work to a sub-contractor that is located at least 70 miles from the weatherization location, neither the contractor nor sub-contractor are eligible to receive the CSP.
12. The CSP replaces the Travel Stipend which went into effect June 28th, 2023 (see WAP-IM-2023-2).
13. Work completed before January 1, 2024 is not eligible for the CSP regardless of when the job is closed out.
14. Contractors that charge a service fee, out of area fee, or any additional charge not related to specific work measures are not eligible for CSP payments.

4. Contractor Reimbursement for Lost Wages During Training

Beginning April 1, 2025 Agencies will be able to compensate contractors for lost wages while they are attending approved training. The goal is to ensure that contractors can take leave from work to attend approved training without any harm to their business. The requirements and protocols for paying and documenting these reimbursements are outlined below.

1. **Eligibility:** Agencies must identify specific training and get OEO approval before sending contractors; and the contractor must have a signed retention agreement in place with the agency.
2. **Out-of- State Travel:** Contractors can be reimbursed up to $250 per attendee per day of training. This is for a full day training or a half day of training but does not apply to travel days where training does not occur.
3. **In-State Travel:** All training that takes place in South Carolina is considered in-state, regardless of the contractor's base of operation. Contractors can be reimbursed up to $35/hr per attendee with a maximum per day of $280 per attendee.
4. **Documentation**: To receive this reimbursement, contractors must submit an agenda outlining the dates and duration of the training as well as registration and travel costs to indicate their attendance. Visual confirmation of attendance by subgrantee or OEO staff can also serve as verification of attendance for in-state conferences. Contractors must receive written (email, correspondence on agency letterhead, etc.) permission to attend trainings.
5. **Paying the reimbursement:** Agencies are encouraged to agree on how to pay the reimbursement to ensure that the Contractors receive the training needed. Agencies can

divide the reimbursement evenly amongst the agencies that the contractor works for, or they may divide it based on the amount of work done for each agency; or they may come to some other understanding. If agencies have any issues regarding how to pay the reimbursement, please contact OEO. The object of these reimbursements is to get the network all the training it needs. This reimbursement along with other reimbursements for travel, lodging, registration, and per diem must be paid out of Training and Technical Assistance funds (either DOE, IIJA (BIL), or LWAP).

All reimbursements must be paid within 30 days of receipt of all the relevant information from the contractor.

E. Confidentiality and Safeguarding Information

- Any reports, information or data obtained by the Subgrantee, or prepared at the request of the OEO by the Subgrantee, shall not be made available to any individual or organization without the prior written approval of the OEO.
- Subgrantee shall not disclose any personally identifiable information (PII)of a client to any third party without the express written authorization of the client or of his/her guardian.
- Subgrantee shall safeguard the use and disclosure of information concerning applicants and recipients of services in accordance with Federal and State laws or regulations and shall restrict access or disclosure of such information. Any questions regarding access to information should be referred to the Grantee. Accessibility will be permitted only at the direction of the Grantee.
- Subgrantee must comply with 2 CFR 200.337 (Restrictions on public access to records).
- Subgrantee must develop and implement a confidentiality policy for all employees, consultants, subcontractors, and volunteers to sign and adhere to while working with personal information of household members being serviced.

F. Safety

- Subgrantee must take necessary steps to protect itself and its personnel while providing services.
- Subgrantee will comply with all applicable local, State, and Federal occupational and safety acts, rules, and regulations.
- Grantee assumes no responsibility with respect to accident, illness or claims arising out of any work undertaken with funds provided through this grant.

G. Time of Performance

- Subgrantee shall adhere to the schedule outlined for program components in the State Plan.
- WAP services shall be provided in such a manner to assure program completion in accordance with timelines, goals, and objectives, as stipulated in the approved Work Plan.

H. Maintenance of Client Files

- Subgrantee agrees to maintain client files that contain source documents that support client eligibility, that support costs are allowable and traceable to the accounting system, and are in

accordance with provisions of cost principles, conditions of the Grant Agreement, and 2 CFR 200.305(b).

- The review of client assistance files can be used to support future individual or agency training, employee performance evaluation and other human resource procedures.
- All data required to be maintained must be loaded into DBA FACSPro or LITT under the client folder.
- Subgrantee agrees to secure and protect client information collected, used, stored, and maintained in the execution of this grant.
- Subgrantees shall audit their work queues in DBA FACSPro or LITT monthly to ensure cases are in the appropriate stage of the case cycle. OEO will include cases that have been in queues more than one calendar year in their annual monitoring report and request written justification for these cases. The Waitlist Queue will not be included in the annual monitoring report as OEO recognizes cases may be in this queue for an extended period.

I. Work Plan

- Subgrantee shall immediately notify OEO of significant developments potentially impacting or changing the approved scope of work or in case of problems, delays, or adverse conditions which could impair the ability to meet the objectives of the award (refer to OEO Fiscal Guidance and Procedural Manual).
- The notification shall include a statement of the action to be taken or contemplated and identify any assistance needed to resolve the situation.
- Any revised Work Plan must be approved by the Grantee.

J. Budget

1. General Requirements

- Subgrantee must submit a budget package through DBA FACSPro, which has been approved by their Board of Directors.
- The budget must set forth a plan summarizing the financial aspects of their program, specifically stating the estimated revenues and expenses.
- Subgrantee also agrees to adhere to the cost principles set forth in 2 CFR §200 Subpart E.

2. Allowable Costs

- The general terms for what items are allowable costs are mentioned in 2 CFR 200.403 and the Department of Energy also has limitations listed in 10 CFR §440.18.
- When statutes, regulations, or state plans do not agree as to the use of the funds, the statutes, regulations, or state plan governing the federal funds will prevail.

3. Reasonable Costs

Pursuant to 2 CFR §200.404, a cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost.

4. Direct Cost

Pursuant to 2 CFR §200.413, direct costs are those costs that can be identified specifically with a

particular final cost objective, such as a grant funds, or other internally or externally funded activity, or that can be directly assigned to such activities relatively easily with a high degree of accuracy.

5. Indirect Cost

- Pursuant to 2 CFR §200.56, indirect costs are those costs incurred for a common or joint purpose benefitting more than one cost objective, and not be readily assignable to the cost objectives specifically benefitted, without effort disproportionate to the results achieved.
- Subgrantee shall establish an indirect cost rate in accordance with the cost principles and procedures by the cognizant agency. See 2 CFR §200.414(e)for requirements for development and submission of indirect cost rate proposals and cost allocation plans.
- Subgrantee shall provide documentation to substantiate an approved rate from the cognizant agency and provide subsequent re-issuance of such rate agreement to Grantee. Subgrantee shall utilize the approved Indirect Cost Rate in accordance with the cost principles and procedures set forth by the cognizant agency.

6. Allocable Costs

Pursuant to 2 CFR §200.405, a cost is allocable to a particular grant or other cost objective if the goods or services involved are chargeable or assignable to that grant or cost objective in accordance with relative benefits received. This standard is met if the cost:

- Is incurred specifically for the grant;
- Benefits both the grant and other work of Subgrantee and can be distributed in proportions that may be approximated using reasonable methods; and
- Is necessary to the overall operations of Subgrantee and is assignable in part to the grant funds in accordance with costs principles set forth in 2 CFR 200 -Subpart E.

7. Program Income

- Gross income earned by Subgrantee that is directly generated by a supported activity or earned because of the WAP funds during the period of performance. See 2 CFR §200.80.
- Program income that is earned may be retained and used to add to the funds committed to the project or program and used to further an eligible project or program directives. See Weatherization Program Notice (WPN) 18-1.

K. Maintenance of Financial Management System

1. General Requirements

- By accepting this grant, Subgrantee certifies that it has established an effective and efficient system of accounting and administrative internal controls to properly conduct this grant with full accountability for the resources made available.
- Subgrantee's financial management systems, including records documenting compliance with State and Federal statutes, regulations and the terms and conditions of this grant, must be sufficient to permit the preparation of reports required by general and program-specific terms and conditions; and the tracing of funds to a level of expenditures adequate to establish that such funds have been used according to State and Federal statutes, regulations and the terms and conditions of this grant.

2. Cash Management

- Subgrantee is required to comply with the Cash Management Act 31 CFR205 (amended

1992).

- The payment guidelines for the Subgrantee are set forth in 2 CFR §200.305(b).

3. Identification of Accounts

- Subgrantee must maintain a separate fund account for each of the funds utilized in weatherization and must be able to identify all grant funds received (i.e., WAP, LWAP) and expended and the programs under which they were received, as well as all assets (including cash) by federal award and FAIN.
- All assets (including cash) must be identified by the Federal Award and the Federal Award Identification Number (FAIN).
- Program and grant fund identification must include, as applicable, the CFDA title and number, grant identification number and year, name of the Federal Agency, and name of the pass-through entity, OEO.
- No portion of the funds awarded may be used for the purpose of making loans to employees or other programs within the agency, without approval from OEO and DOE or HHS.

4. Advancement of Funds

OEO will pay Subgrantee in advance, provided Subgrantee maintains both written procedures that minimize the time elapsing between the transfer of funds and disbursement, and a financial management system that meets the standards for fund control and accountability as established by 2 CFR §200.305. However, OEO is not required to advance payments if OEO has imposed certain special conditions or restrictions on Subgrantee. (See Section VIII of this Grant Agreement.)

5. Internal Control System

- Subgrantee agrees to establish and maintain effective internal control over the grant funds that provides reasonable assurance that the funds are being managed in compliance with Federal and State statutes, regulations, and the terms and conditions of this agreement. These internal controls must comply with applicable federal statutes and regulations, including 2 CFR §200.303.
- Subgrantee must take prompt action when instances of noncompliance are identified including noncompliance identified in audit findings and/or monitoring activities.

L. Procurement

1. Subgrantee shall follow the South Carolina Consolidated Procurement Code set forth in S.C. Code Ann. §11-35-10, et seq., in conducting procurements unless the proposed purchase is from a vendor that is selected from the current State Procurement Contract, which must be verified through the State's Materials Management Office (MMO). Subgrantee also agrees to follow the requirements set forth in 2 C.F.R. §§200.318 through 200.326, any applicable memorandums issued by the State and Grantee's Fiscal Guidance and Procedural Manual. Subgrantee's agreements and contracts with subcontractors shall follow the procurement guidelines.
2. All procurement transactions shall be conducted in a manner to provide, to the maximum extent practical, open, and free competition.
3. The Subgrantee shall be alert to organizational conflicts of interest and noncompetitive contract practices among contractors that may restrict or eliminate competition or otherwise restrain

trade.

4. Contractors that develop or draft specifications, requirements, statements of work, invitation for bid and/or requests for proposals shall be excluded from competing for such procurements.
5. Solicitations shall clearly set forth all requirements that differ and/or all the requirements the offer shall fulfill.
6. Any and all bids or offers may be rejected when it is in the Subgrantee's interest to do so.
7. The use of sole source contracting is discouraged. Sole source contracts will be awarded only under exceptional circumstances on a case-by-case basis and must be approved in writing by OEO each program year.
8. OEO will review Subgrantee's procurement procedures and purchases during their monitoring. Grantee may require Subgrantee, at any time, to provide justification and documentation supporting any purchase as a direct cost in this grant.
9. As stated in §507 of Public Law 103-333, to the extent practicable, all equipment and products purchased with grant funds should be American made. Subgrantees are also encouraged to utilize minority firms, women's business enterprises, and labor surplus area firms.

M. Maintenance of Program and Fiscal Records

1. General Requirements

- Subgrantee must maintain records which adequately identify the source and application of funds provided for grant activities. Subgrantee also agrees to prepare, retain, and permit OEO and its authorized representative(s) to inspect records as OEO deems necessary for monitoring purposes.
- In addition to inspections, per 10 CFR §440.24 and 2 CFR §200.336, OEO shall have access to the following records:
  - ✓ Fiscal transactions
  - ✓ Audits
  - ✓ Personnel
  - ✓ Administration
  - ✓ Programmatic
  - ✓ Any other record deemed relevant to Grantee.

2. DBA FACSPro or LITT

- Subgrantee must fully utilize the DBA FACSPro or LITT database system as prescribed by OEO.
- Subgrantee is required to ensure that all staff with access to the DBA FACSPro or LITT system remain current with access requirements and documentation (i.e., SANS Training and User Confidentiality Agreement).
- Subgrantee is also required to ensure that staff who will be given access to the DBA FACSPro or LITT system meet all requirements, documentation, and training.
- If Subgrantee determines a need to maintain client information outside of the DBA FACSPro or LITT system, Subgrantee agrees to appropriately protect the information, and dispose of the information in a manner that renders the information unreadable, indecipherable, and irrecoverable.
- Subgrantee shall maintain training records/certifications in DBA FACSPro or LITT for all weatherization staff. Also, contractor's current licenses, insurances, and trainings shall be entered.

- All information as required in the client weatherization file shall be uploaded to DBA FACSPro or LITT data system. This requirement is effective upon the execution of this Grant Agreement.

N. Budget and Financial Reporting Requirements

- Subgrantee will file all required reports using OEO's on-line Budget and Financial Status Reporting process. For further details, see OEO's Fiscal Guidance and Procedural Manual and Weatherization Policies and Procedures Manual.
- All required reports, fiscal and programmatic, must be sent to OEO in a manner acceptable to OEO. "Acceptable to Grantee" means that the work product was submitted accurately and complete within the required time frame and completed in accordance with generally accepted accounting principles and is consistent with the Budget, Work Plan and Grant Agreement. When OEO receives an incomplete report, Subgrantee shall provide additional fiscal and program records, updates, or information as maybe required by OEO.
- When work products are not submitted within the required time frame, nor completed in accordance with generally accepted accounting principles, not consistent with the approved Budget, Work Plan, or this Grant Agreement, the State may exercise its right to temporarily suspend funding. Among other required data, this includes program reports, quarterly reports, annual reports, budgets and budget revisions, Financial Status Reports, individual audits and/or monitoring's, close-out reports, Board Meeting Minutes and submission of carryover funds (when required). Failure to submit timely and accurate FSRs may result in delayed payments of advancements.
- Required reports, prescribed above, must be sent to OEO in a manner acceptable to OEO, or OEO may withhold further payments/funds until they are completed or may act as set forth in Section X – "Administrative Enforcement" of this Agreement.

1. Financial

- Subgrantee shall furnish OEO with the monthly Fiscal Status Report (FSR) no later than the 15th day of the following month.
- The FSR report shall include an accounting of all financial activity completed during the reporting period.
- A Final FSR report shall be required within forty-five (45) days after the completion of the grant period.
- The Final FSR shall be accompanied with a Trial Balance sheet, Fixed Asset Listing, Material Supplies Inventory, and Interest Income Worksheet.
- No revisions to the final FSR will be allowed after the close-out period. Any changes to fund balance after close-out will be collected during OEO's monitoring review. A summary of the agency's financial compliance will be included in the agency's monitoring report.

2. Programmatic

- Subgrantee shall not pay any subcontractor without a signed Final Inspection Certification Form approving the work completed for the dwelling.
  Multiple inspections are permitted to prevent delay of payment to a contractor that has finished their assigned work. For example, a contractor that insulated the dwelling and installed lighting fixtures does not have to wait for an HVAC company to service the heat pump to be paid provided their insulation and lighting work was approved and documented by the QCI.

However, the project cannot be reported as complete until all the work is completed and inspected.

- The Final Inspection Certification Form(s) is to be uploaded into the DBA FACSPro or LITT system.

3. Subcontractors and/or Consultants

- Subgrantee shall send OEO written notification identifying all subcontractors and/or consultants, funded in whole or in part by the grant.
- Subgrantee will maintain a file for each subcontractor with copies of all relevant contracts, business licenses, System for Award Management (SAMs) reports, insurance certificates of the subcontractors and/or consultants and certifications (if applicable). If a subcontractor contracts out a service (such as HVAC or plumbing), the subgrantee must provide a SAMs search for the additional subcontractor.
- Subgrantee must maintain all documents current for the duration of time the subcontractor works for the Subgrantee.

4. Property

- Property (according to 2 CFR 200. 1) means real property or personal property. Equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by Subgrantee for financial statement purposes, or $10,000.
- A fixed asset may be a tangible or intangible nonexpendable property having a useful life of more than one year such as equipment, machinery, vehicles, furniture, and real property. (2 CFR § 200.1, 45 CFR § 75.2) For OEO purposes, a fixed asset has an acquisition cost equal to or greater than the lesser of $5,000 or the Subgrantee's capitalization policy threshold.
- Subgrantee agrees to comply with guidance provided by OEO with regards to accounting for and controlling fixed asset and property with cost below $5,000 where specifically required by OEO Fiscal Guidance and Procedural Manual.
- Subgrantee must maintain property records that include:
  - ✓ a description of the property,
  - ✓ a serial number or other identification number,
  - ✓ the source of funding for the property (including FAIN),
  - ✓ who holds title,
  - ✓ the acquisition date,
  - ✓ the cost of the property,
  - ✓ the percentage of Subgrantee's participation in the project cost for the grant funds for which the property was acquired,
  - ✓ the location,
  - ✓ use and condition of the property,
  - ✓ and any ultimate disposition date (including the date of disposal and sale price of property).

5. Procurement of Vehicles and Equipment over $10,000

The Department of Energy (DOE) has provided guidance for vehicle and equipment purchases and disposition using Weatherization Assistance Program (WAP) funds for all WAP Grantees. Note that 'WAP

funds' means both DOE formula funds and DOE BIL/IIJA funds.

- Grantees must use, manage, and dispose of vehicles and equipment acquired under a federal award in accordance with federal and state laws and procedures per 2 CFR §200.313.
- Per 10 CFR §440.18(c)(3), for the purposes of determining the average cost per dwelling unit (ACPU), costs for the purchase of vehicles or other certain types of equipment may be amortized over the useful life of the vehicle or equipment.
- Any purchase of vehicles must receive prior approval from OEO and DOE per 10 CFR §440.18(d)(6).
- In addition to all vehicle purchases, all equipment purchases of $10,000 or more must also receive prior approval from OEO and DOE per 2 CFR §200.439(b)(1) and 2 CFR §200.1.

When submitting a vehicle or equipment purchase for prior approval:

- Provide a basis of cost (e.g., contractor quotes, catalog prices, prior invoices, etc.).
- Provide a vendor quote for all vehicles and/or equipment of $10,000 or more in price.
- If the vendor quote is not an exact price match, provide an explanation in the additional explanation section of the budget justification.
- Prior to submission, contact OEO for current requirements for approval.

NOTE: Budget acceptance by OEO does not exempt subgrantees from these requirements. All vehicle and all equipment purchases of $10,000 or more must receive individual approval separate from the submission and acceptance of the annual budget.

If you have questions, please contact OEO.

5. Disposition of Vehicles and Equipment

- When weatherization equipment or vehicles are no longer needed, the subgrantee must request disposition instructions from OEO.
- OEO will follow 2 CFR 200.313 and obtain disposition instructions from DOE and communicate the requirements to the subgrantee.

6. Pollution Occurrence Insurance (POI)

- Subgrantee must certify that they have a valid POI Policy.
- It is recommended, but not required, that subcontractors and/or consultants also have a POI Policy.

O. Single Audit

- Subgrantees that expend $750,000 or more in a fiscal year in federal funds must have a single audit conducted for that fiscal year in accordance with 2 CFR 200 Subpart F – Audit Requirements.
- Within thirty (30) receipt of the independent audit report, or nine months after the period audited, whichever comes first, subgrantee must provide the Grantee with the following:
  - ✓ An electronic copy of the Independent Audit Report,
  - ✓ A Corrective Action Plan (required if any findings cited in report),
  - ✓ Any management letter resulting from the audit,

- ✓ Information that may be pertinent to the grant, and
- ✓ An explanation for differences between amounts reported on the FSR submitted to OEO and amounts reported in the audit report.

- Also, within thirty (30) receipt of the independent audit report, or nine months after the period audited, whichever comes first, subgrantee must electronically submit the completed data collection form and reporting package to the Federal Audit Clearinghouse as required by 2 CFR 200.512.
- OEO fiscal monitoring staff or its representative(s) will conduct fiscal field monitoring to determine that Subgrantee complies with financial management systems, internal controls, record maintenance and other programmatic requirements.

P. Energy Crisis and Disaster Plan

1. Policy

All Subgrantees of the Weatherization Assistance Program (WAP) must adhere to the following policy if requesting weatherization funding toward disaster planning and relief. Disaster relief funds are to be used only in the event of a declared emergency at the state or federal level and shall be used only to provide emergency services to low-income individuals and families in the designated disaster area. WAP has a very limited role in any disaster response plan.

DOE funds are very limited to eligible weatherization activities and the purchase and delivery of weatherization materials. To the extent services are in support of eligible weatherization (or permissible re-weatherization) work for eligible households, such expenditure is allowable. Allowable expenditures under WAP include:

- The cost of incidental repairs to an eligible dwelling unit if such repairs are necessary to make the installation of weatherization materials effective.
- The cost of eliminating health and safety hazards, elimination of which is necessary before the installation of weatherization materials.
- Weatherization personnel can be paid from DOE funds to perform functions related to protecting the DOE investment. Such activities include securing weatherization materials, tools, equipment, weatherization vehicles, or protection of local agency weatherization files, records, and the like during the initial phase of the disaster response.

2. Reprioritization of Weatherization Requests

For reprioritization of weatherization requests coming from the disaster area, WAP rules require that priority be given to identifying and providing weatherization assistance to elderly persons, persons with disabilities, families with children, high residential energy users, and households with high energy burdens (10 CFR 440.16(b)). However, it would be permissible to consider households located in the disaster area a priority if the households are eligible and meet one of the priorities established in regulation and are free and clear of any insurance claim or other form of compensation resulting from damage incurred from the disaster.

3. Re-Weatherization Due to Disaster

In the event of a declared federal or state disaster, weatherization crews may return to a unit reported as a completion to DOE that has been "damaged by fire, flood, or act of God, to be re-weatherized, without regard to the date of weatherization." 10 CFR 440.18(f)(2)(ii) Local authorities must deem the dwelling unit(s) salvageable as well as habitable and the damage to the materials is not

covered by insurance or other form of compensation.

If funding is available, SC OEO will consider all requests from Subgrantees for disaster relief funds that meet the outlined criteria.

The requests must include the following components:

- Overview of disaster
- Date disaster was declared a federal or state disaster
- Additional funding requested, if applicable
- How weatherization funds/weatherization work will be utilized to enhance disaster relief funds in the federal or state defined disaster area.
- Subgrantees must submit requests to the SC OEO. Once submitted, SC OEO will review with the assistance of the DOE.

  More information on this topic can be found later in this document.

Q. Funding for Disaster Planning and Relief

If OEO approves a subgrantee disaster plan, an agency can dedicate current year allocation and funding to the identified disaster area and serve that area as priority over others.

IV. Additional Subgrantee Funding Resources

A. LIHEAP WAP (LWAP)

- This program will be administered by the South Carolina Department of Administration, Office of Economic Opportunity.
- This program will mostly fall under the DOE WAP rules, with the LIHEAP rules taking precedent where the two programs differ.
  - Income Threshold will be at 200% of the HHS Poverty Income Guidelines since the household must be eligible for LIHEAP.
  - The LWAP work will not be subject to the DOE WAP maximum average cost per dwelling unit.
  - The LWAP work will not be subject to the DOE Saving to Investment Ration (SIR) standards.
- Agency LWAP maximum average per unit is $12,000. LIHEAP Weatherization measures include:
  - Weatherization needs assessments / audits
  - Caulking and insulation
  - Storm windows
  - Furnace/heating system modifications/repairs
  - Furnace replacement
  - Cooling system modifications/repairs
  - Water conservation measures
  - Compact fluorescent light bulbs
  - Energy related roof repair
  - Refrigerators
  - Windows/sliding glass doors
  - Doors

- Water Heater
- Cooling system replacement
- Other – LED Bulbs, HVAC Assessments
- HVAC registers can be replaced using LWAP funds either as an individual measure (when necessary) or included as a part of the replacement of the HVAC/Duct system.

- LWAP is not subject to the DOE Savings to Investment Ratio requirements. The minimum acceptable SIR to install a measure with LWAP funds is 0.5 provided the cumulative SIR of the dwelling is 1.0 or higher.

- There is an exception to the DOE SIR requirement. DOE funds can be used to pay for blower door guided air sealing measures (general air sealing or air sealing of windows) with an SIR of less than 1.0 provided the cumulative SIR of the dwelling is 1.0 or greater. LWAP funds also meet this exception and can be used for blower door guided air sealing measures that are below 0.5 SIR provided the cumulative SIR is 1.0 or greater. This exception is outlined in WPN 23-6. Note that the measure 'Weatherize Window' is different from air sealing and is subject to the standard DOE SIR requirement of all other ECMs.
- Subgrantees are required to spend DOE money on at least one ECM per dwelling to count it as a DOE completion. DOE money cannot be spent on Health and Safety Measures if no DOE money was spent on an ECM.
- If the cumulative SIR of a dwelling is below 1.0, subgrantees are allowed to weatherize the dwelling using only LWAP funds. If a dwelling will be weatherized with LWAP funds only, there is no individual measure SIR requirement. If the cumulative SIR of the dwelling is 0.5 or greater, LWAP only funds can be used to weatherize the dwelling. However, achieving the annual DOE quota should be the subgrantee's priority so OEO encourages subgrantees to weatherize dwellings using only LWAP funds sparingly.
- To count as an LWAP completion, LWAP funds must be spent on at least one measure in the dwelling. This can be an ECM, IRM, or Health and Safety Measure.

B. Infrastructure Investment and Jobs Act (IIJA) (Formerly BIL) Grants for WAP

The Infrastructure Investment and Jobs Act (IIJA), formerly known as BIL, provides additional DOE funding for the WAP. IIJA (BIL) funding is five-year grant that begins July 1st, 2022 and runs through June 30, 2029. IIJA (BIL) funds are subject to the same restrictions (SIR, IRM and Health and Safety maximums) as money received from DOE for the annual WAP. However, there are additional restrictions on the use of IIJA (BIL) funds.

- IIJA (BIL) funds cannot be used on a dwelling in conjunction with annual WAP funds. IIJA funds must be tracked separately. LWAP funds (regular or health and safety) can be used with IIJA funds to complete a dwelling. IIJA funds used to weatherize multifamily dwellings (five or more units) must comply with Davis-Bacon prevailing wage requirements.
- All materials purchased with IIJA funds (for contractors and crews) used on public buildings must be manufactured primarily in the United States.
- Initially, DOE set the ACPU for IIJA grants to align with the ACPU for Program Year 2022 which was $8,009 for the adjusted average expenditure limit and $3,929 for renewable energy systems. Upon further review and in consultation with General Counsel, DOE determined that because IIJA is a one-time funding action, where non-IIJA funding are 3-year awards with annual funding action, DOE can allow an average of the annual

ACPU over the period of grant award.

- For expenditure limits and renewable energy measures, IIJA funded grants will follow a 5-year average of annual ACPU limits from Program Years (PY) 2022-2026. DOE will track expenditures, production, and the ACPU throughout the life of the grant, but the ACPU for the award will be evaluated based on the final average ACPU. How averages will be calculated is outlined below.

Program Year	Total Allowable ACPU	Renewables ACPU (Renewables ACPU is part of the Total Allowable ACPU)
2022	$8009	$3929
2023	$8250	$4047
2024	$8497	$4169
2025	TBD	TBD
2026	TBD	TBD
BIL Grant Average	= Average of PY 2022 through PY 2026	= Average of PY 2022 through PY 2026

C. Weatherization Readiness Fund (WRF)

To address deferral issues, OEO will use the Weatherization Readiness Fund (WRF) as described below. Each sub-grantee will receive a WRF allocation proportional to their expected number of DOE completions.

1. WRF Maximum

Sub-grantees can spend no more than $10,000 of WRF money to prepare a dwelling for weatherization. If a dwelling requires more than $10,000 to prepare for weatherization, sub-grantees have three options. Sub-grantees can request permission to use additional WRF money from OEO. If sub-grantees have access to other non-DOE or non-LWAP money (Dominion Energy Settlement or other similar funds), they may combine them with WRF money. Otherwise, the dwelling must be deferred.

2. Prioritization of Dwellings

Sub-grantees should prioritize dwellings in need of WRF on a first come, first served basis. After clients are deemed eligible for weatherization services (including the prioritization of Elderly Persons, Families with Children, Persons with Disabilities, High Residential Energy Users, and High Energy Burden), they can be eligible for WRF on a first come, first served basis. For WRF money to be expended an Energy Audit must be performed on the dwelling. As such, issues dealing with the safety and well-being of the auditor or general inaccessibility of areas in the dwelling (clutter) cannot be addressed with WRF. Once an Energy Audit is performed and the home is determined to be eligible for DOE weatherization (SIR of 1.0 or greater), the Energy Auditor must determine **if both**:

- ✓ The dwelling would normally be deferred as structural, health and safety, or other issues outside the scope of weatherization exist.

and

- ✓ The dwelling can be made ready for weatherization with an investment of $10,000 or the

remaining balance in the sub-grantee's WRF, whichever is less.

If the dwelling cannot be made ready for weatherization, it should be deferred. If it can be made ready for weatherization, the sub-grantee should notify OEO in writing of their plans to use WRF money on the dwelling.

3. WRF Process

Once it has been determined that WRF money will be used on a dwelling, the sub-grantee must document the actions to be taken to make the dwelling ready for weatherization, the entity performing the work, and the cost of the work. The information will be documented on the new Form 120 Weatherization Readiness. All dwellings that receive pre-weatherization measures must receive an independent inspection to ensure the measures were installed correctly and the dwelling is safe. OEO anticipates this inspection will be conducted by a city or county inspector in the jurisdiction. If a city or county inspector is not available to conduct the inspection, the subgrantee may contract with a home inspector to conduct the inspection. The subgrantee must perform a SAMs search to verify the home inspector is not barred from receiving federal funds. A SAMs search is not required for city or county inspectors. Subgrantees must verify and document the inspector is credentialed and qualified to conduct the inspection. Subgrantees must include these credentials as well as copies of any paperwork used by the inspector (i.e., county inspection form) in the client file and complete Form 120 verifying the work done on the dwelling passed inspection. The contractor that performed the readiness work will not be paid until their work receives a passing inspection. Once the readiness work has been completed and the contractor has been paid, the sub-grantee should upload the relevant information (before and after pictures, contractor receipts, etc.) in LITT and notify OEO.

Once the readiness work receives a passing inspection, the sub-grantee should perform an Energy Review on the dwelling to ensure the entries in the Energy Audit have not changed before beginning weatherization work.

4. Restrictions on WRF Money

Any dwelling that receives WRF money must result in a DOE completion (either for the annual formula grant or IIJA (BIL)). This means at least one Energy Conservation Measure (ECM) using DOE funds must be installed in the dwelling. If WRF money is used on a dwelling and the dwelling does not result in a DOE completion, the sub-grantee must reimburse DOE the amount of WRF money spent on the dwelling with non-federal money.

WRF money must be tracked separately from other DOE funds. As such, WRF money cannot be spent on an ECM, Incidental Repair Measure (IRM) or other Health and Safety measure. WRF money must be expended before other weatherization measures (ECMS, IRMs, Health and Safety) are installed.

5. Repairs Eligible for WRF Money

The following is a non-comprehensive list of repairs that are eligible for WRF money. Items not on this list can be implemented based on the discretion of the subgrantee after discussions with OEO.

- ✓ Roof repair
- ✓ Wall repair
- ✓ Ceiling repair
- ✓ Floor repair
- ✓ Foundation repair
- ✓ Plumbing repair
- ✓ Electrical repair

Other repairs, specifically landscaping, asbestos remediation, and lead paint remediation are not

eligible for WRF money but can be completed with other non-federal funds at the discretion of the subgrantee.

6. WRF Tracking

WRF money will be tracked in two ways. OEO will track dwellings receiving WRF in real-time as they are notified by sub-grantees and LITT will track WRF money as jobs are completed and closed out.

OEO understands WRF measures can take time to install and may extend over multiple program years if the WRF project begins near the end of one program year. For WRF projects that begin in the final quarter (January, February, or March) of the current Program Year, sub-grantees will consult with OEO and determine if they can be completed before the current Program Year ends. If a project will extend into the following Program Year, it must be completed before the end of the first quarter of the new Program Year.

7. WRF Monitoring

OEO will collect and report the following information in its annual monitoring of subgrantees.

- Number of dwellings receiving WRF money by subgrantee and dwelling type (site built or manufactured
- Amount of WRF money spent by subgrantee and dwelling type
- Amount of WRF money spent per dwelling by subgrantee
- Nature of repairs (roof, plumbing, floors, electrical, etc.) by subgrantee and dwelling type
- For site-built dwellings, the year constructed
- Other funds used to ready dwellings for weatherization where applicable.

Pursuant to WPN 23-4, WRF can now be combined with DOE IIJA (BIL) funds. OEO will ensure each dwelling that receives WRF money results in a DOE completion.

D. Dominion Energy Settlement Funds (SC E&G)

To address deferrals, health and safety issues, and install other weatherization measures, OEO will allocate Dominion Energy Settlement (DES) funds to local Community Action Agencies (CAA). CAAs should follow the policies and procedures outlined in this document to spend those funds.

Background

Pursuant to Dominion Energy South Carolina, Inc.'s (Dominion Energy) electric rate comprehensive settlement agreement (Public Service Commission of South Carolina Order No. 2021-570), OEO will receive $15 million from Dominion Energy through the company's commitment "to fund a combination of energy-efficiency upgrades and critical health and safety measures that may be required in order for a home to receive energy efficiency upgrades." These funds will be used to augment the Weatherization Assistance Program (WAP). While the WAP can make low-income dwellings more energy efficient, there are limitations to the program. Because each CAA has different needs, OEO will give them options in how they use these DES funds. This document outlines how the settlement funds will be allocated, spent, tracked, and reported on.

Six subgrantees serve Dominion Energy electric customers. The Order specifies that only Dominion Energy electric customers may benefit from the settlement funds. As such, five[1] subgrantees will receive DES allocations. The subgrantees that will receive allocations are Aiken-Barnwell, Carolina,

[1] Because the allocation to Wateree was less than $10,000, those funds were disbursed to Aiken-Barnwell.

GLEAMNS, Lowcountry, and Palmetto. OEO shall initially retain $150,000 (1% of the total $15 million DES funds) to contract with and pay a third-party CPA firm to conduct fiscal monitoring of the DES funds. Any unspent funds will be distributed to the participating Subgrantees as agreed upon by OEO and Dominion Energy.

The estimated[2] allocations are outlined below

Subgrantee	**Dominion Energy Settlement Allocation**
Aiken-Barnwell Counties Community Action Agency	$7,076,603
Carolina Community Action, Inc.	$73,968
Charleston County Human Services Commission dba Palmetto CAP	$7,031,142
GLEAMNS Human Resources Commission, Inc.	$311,227
Lowcountry Community Action Agency, Inc.	$357,060
OEO/Third Party CPA – Fiscal Monitoring Funds	$150,000
Total	$15,000,000

Spending Options

Based on discussions with CAA representatives, OEO has identified two broad spending categories for DES funds:

1. Pre-weatherization
2. Weatherization

Subgrantees can use funds at their discretion and an eligible dwelling could potentially receive DES funds in both categories.

1. Pre-Weatherization ($20,000 cap per project)

DES funds spent on pre-weatherization measures will serve to prepare a dwelling for weatherization and will address issues that would normally result in a deferral. DES funds can be used to address roofing repairs or replacement and plumbing or sewage issues. If a subgrantee has a unique deferral issue (other than those listed here) they would like to address with DES funds, they should contact OEO to receive written approval before proceeding.

a. Maximum Spent Per Dwelling

Subgrantees may spend up to $20,000 of DES funds to prepare a dwelling for weatherization. If a dwelling requires more than $20,000 of DES funds to prepare for weatherization, the subgrantee will need to obtain written approval from OEO to spend additional DES funds.

[2] The allocations awarded to a subgrantee may be reduced and reallocated if the requirements set forth in OEO and the subgrantee's agreement are not met.

b. Prioritization of Dwellings

Subgrantees should use the existing points-based prioritization system (which awards points for Elderly Persons, Families with Children, Persons with Disabilities, High Residential Energy Users, and households with a High Energy Burden) to prioritize dwellings that have already been deferred due to issues outside the scope of weatherization. Subgrantees should review dwellings in the Deferral Queue in LITT and schedule time to conduct an evaluation of the dwelling. Before evaluating a dwelling, the subgrantee must confirm the applicant has electric service through Dominion Energy. If they do not have electric service through Dominion Energy, DES funds cannot be used to prepare the dwelling for weatherization. If the applicant does have electric service through Dominion Energy, and it was deferred for a reason that can be addressed with DES funds, the dwelling is eligible for DES funds.

New weatherization applications that are at risk of deferral and may benefit from DES pre-weatherization funds should also be prioritized based on the existing point system. An energy audit should be scheduled to determine if the dwelling can be brought up to the standard to weatherize the dwelling using DES funds. If so, and if the client has electric service through Dominion Energy, the dwelling is eligible for DES funds. If not, the dwelling should be deferred and the reason for deferral must be documented in the client file.

c. Using DES Funds

Once it has been determined that DES funds will be used on a dwelling, the subgrantee must document the actions to be taken to make the dwelling ready for weatherization, the entity performing the work, and the cost of the work. The information will be documented on the new Weatherization Readiness Form 120. The subgrantee must also notify OEO in writing of their desire to use DES funds to prepare a dwelling for weatherization. Once the work has been completed, the dwelling must receive an inspection from a qualified outside entity to determine if the work done passes inspection and if weatherization work can commence. The inspection will also be documented on Form 120. The contractor that performed the initial work will not be paid until their work receives a passing inspection. Once the readiness work has been completed and the contractor has been paid, the subgrantee should upload the relevant information to LITT and notify OEO.

Once the work receives a passing inspection, the subgrantees should perform a second Energy Audit on the dwelling. If any data entries have changed (ex. blower door numbers), they should be updated to ensure the entries in the audit reflect the updated status of the dwelling.

d. Restrictions on DES Funds

Dwellings that receive DES funds will typically result in a DOE completion. This means at least one Energy Conservation Measure (ECM) using DOE funds will be installed in the dwelling. However, OEO understands there may be some circumstances where dwellings that receive DES funds need to be completed with LWAP funds due to the cumulative Savings to Investment Ratio (SIR) falling below 1.0. OEO expects these situations to be rare.

e. DES Tracking

DES funds will be tracked in two ways. First, OEO will track dwellings receiving DES in real-time in an Excel spreadsheet as they are notified by subgrantees. Second, LITT will track DES funds as jobs are completed and closed out.

f. DES Monitoring

OEO will collect and report the following information in its annual monitoring of subgrantees and quarterly/annual reports to Department of Administration and Dominion Energy management.

1. Number of dwellings receiving pre-weatherization DES funds by subgrantee and dwelling type (site built or manufactured)
2. Amount of pre-weatherization DES funds spent by subgrantee and dwelling type
3. Amount of pre-weatherization DES funds spent per dwelling by subgrantee
4. Types of pre-weatherization work completed using DES funds
5. For site-built dwellings, the year constructed
6. Other funds used to ready dwellings for weatherization where applicable
7. A brief annual summary at the end of the program year

OEO also requests each subgrantee include at least one dwelling pre-weatherized with DES funds in the group of dwellings selected for annual monitoring where possible.

g. Contractor Requirements

Subgrantees must follow all current federal, state, and OEO procurement guidelines and laws when securing the services of contractors to provide these pre-weatherization services. Subgrantees must also document evidence these contractors are licensed to perform work in their field, carry sufficient insurance as required by OEO, and are bonded. Subgrantees must also verify these contractors pull all necessary permits to perform pre-weatherization work. Subgrantees must also conduct a search for the contractor on the System for Award Management (SAM) website to confirm the contractor is eligible to be receive federal contracts and sub-contracts. Subgrantees must provide this documentation to OEO when they secure a contractor to provide pre-weatherization services and during annual monitoring visits.

h. Inspection Requirements

All dwellings that receive pre-weatherization measures must receive an independent inspection to ensure the measures were installed correctly and the dwelling is safe. OEO anticipates this inspection will be conducted by a city or county inspector in the jurisdiction. Subgrantees must obtain written approval from OEO to use an entity other than the county or city inspector to conduct the inspection. Subgrantees must verify and document the inspector is credentialed and qualified to conduct the inspection. Subgrantees must include these credentials as well as copies of any paperwork used by the inspector (i.e., county inspection form) in the client file and complete Form 120 verifying the work done on the dwelling passed inspection. Pre-weatherization contractors cannot be paid until their work receives a passing inspection from the independent inspector.

i. Client Files

For clients that have pre-weatherization measures installed in their homes, their files must contain the following information:

1. Before, after, and in progress pictures document the progress of the dwelling. It is important these pictures provide context and document the status of the dwelling at different points in the weatherization process. Pictures should be clear and labeled with comments where appropriate. Pictures should be original color pictures and not xerox copies.
2. Contractor invoices defining the work that was done on the dwelling
3. Inspector credentials (authority and certification to conduct inspections in the jurisdiction)
4. Any documentation the inspector used during the inspection (notes, city/county forms, etc.)
5. An invoice for payment to the inspector
6. Signed Form 120

j. Permitting and Other Requirements

Local jurisdictions (cities, counties, or other municipalities) may require homeowners to complete an application for permits needed for pre-weatherization measures (ex. roof replacement). Sub-grantees can assist homeowners in completing these forms. As each jurisdiction will have different forms and requirements, OEO is unable to provide definitive guidelines for completing these applications. Sub-grantees should contact OEO if they have specific questions when attempting to secure permits or adhere to other requirements required by these local jurisdictions.

k. Assisting Subgrantees with Pre-Weatherization Measures

Pre-weatherization measures will often require contractors and expertise outside the realm of weatherization. To assist subgrantees with administering this portion of the program, OEO authorizes subgrantees to contract with 'prime contractors' to handle many duties associated with preparing homes. This includes procuring and vetting contractors, scheduling and coordinating inspections, and signing off on the completed work. Subgrantees have autonomy to delegate their choice of duties to these prime contractors. However, these duties must be clearly defined in the contract with the prime contractor. Subgrantees should follow federal, state, and OEO procurement guidelines and laws when securing a prime contractor and notify OEO when a contract with one has been initiated. Subgrantees should also provide OEO with the signed copies of the contract with the prime contractor.

2. Weatherization Measures ($20,000 cap per project)

DES funds spent on weatherization measures shall be limited to approved Health and Safety measures and one Energy Conservation Measure.

The approved Health and Safety measures are:

- HVAC repair and replacement (to also include duct repair and replacement and any electrical upgrades necessary to support the new unit). Replacement HVAC units must meet minimum federal SEER requirements. See https://seer2.com/region-southeast.html for requirements.

- Water heater replacement
- ASHRAE and bath fan installation
- Door repair and replacement
- Window repair and replacement
- Plumbing leaks
- Gas stove replacement[3]
- Vapor barrier
- HVAC registers can be replaced using DES funds either as an individual measure (when necessary) or included as a part of the replacement of the HVAC/Duct system.

If a subgrantee has a unique Health and Safety issue (other than those listed here) they would like to address with DES funds, they should contact OEO to receive written approval before proceeding.

The approved Energy Conservation measure is:

- Refrigerator replacement

To replace a refrigerator with DES funds, subgrantees must follow DOE rules. If an audit is run on the home, the Savings to Investment Ratio (SIR) of the refrigerator must be 1.0 or higher. If the Regional Priority List is used, subgrantees can replace one refrigerator in the dwelling if the old refrigerator was manufactured before 2001 or uses more than 1000 Kilowatt Hours per year (based on metering or industry accepted resources). The new refrigerator must have a label rating of 400 Kilowatt Hours per year or less and a maximum cost of $850.

a. Maximum Spent Per Dwelling

Subgrantees may spend up to $20,000 of DES funds on approved Health and Safety and Energy Conservation Measures for each dwelling. If a subgrantee wants to spend more than $20,000 of DES funds on approved Health and Safety and Energy Conservation Measures, the subgrantee will need to obtain written approval from OEO.

b. Using DES Funds

Health and Safety measures installed using DES funds are also installed using other Health and Safety funds (DOE and LWAP). Subgrantees should follow current policies and procedures and the most recent Health and Safety plan when installing these measures with DES funds. For example, HVAC replacements require Manual J calculations to determine the correct system size and ASHRAE installations require RED Calc models to determine the appropriate number of fans.

As subgrantees already perform these services, they likely have existing contracts with HVAC and other specialty contractors to install these measures. If additional contractors are required, subgrantees should follow state procurement practices and provide OEO copies of their contracts with these contractors as well as verification of their appropriate insurance coverages and a clean SAMs search.

[3] OEO and Dominion will monitor the number of gas stove replacements and reserves the right to remove this from the list of approved weatherization measures based on environmental impact.

c. Restrictions on DES Funds

Dwellings that receive DES funds to cover approved Health and Safety weatherization measures must result in a DOE completion. This means at least one Energy Conservation Measure (ECM) using DOE funds will be installed in the dwelling. If a home appears as if it will fall below the Savings to Investment Ratio (SIR) requirement of 1.0 to use DOE funds, the subgrantee can request approval to use DES funds on a home that is weatherized entirely with LWAP funds.

d. DES Tracking

DES funds will be tracked in two ways. First, OEO will track dwellings receiving DES in real-time in an Excel spreadsheet as they are notified by subgrantees. Second, LITT will track DES funds as jobs are completed and closed out.

e. DES Monitoring

OEO will collect and report the following information in its annual monitoring of subgrantees and quarterly/annual reports to Department of Administration and Dominion Energy management.

1. Number of dwellings receiving DES funds for Health and Safety or Energy Conservation Measures by subgrantee and dwelling type (site built or manufactured)
2. Amount of DES funds spent on Health and Safety or Energy Conservation Measures by subgrantee and dwelling type
3. Amount of DES funds spent on Health and Safety or Energy Conservation Measures per dwelling by subgrantee
4. Types of Health and Safety or Energy Conservation Measures installed using DES funds
5. For site-built dwellings, the year constructed
6. A brief annual summary at the end of the program year

OEO also requests each subgrantee include at least one dwelling where DES funds were used to pay for Health and Safety or Energy Conservation Measures in the group of dwellings selected for annual monitoring where possible.

3. Other Concerns

a. Administrative Expenses

OEO understands the allocation of DES funding will impose administrative burdens on subgrantees. As such, OEO authorizes 7.5% of the total allocation (in line with the Department of Energy's limit on administrative expenses) to subgrantees to be used for administrative activities. This includes hiring additional staff and contracting out inspection services. Distributing bonuses to staff with DES funds is prohibited.

b. Funding Allocation

OEO will allocate a percentage of DES funds to each subgrantee on April 1, 2023, by way of an

agreement between OEO and the subgrantees. OEO will disburse a one-time advancement of funds representing the first two to four (2-4) months of expenses of the grant which will be calculated based on each subgrantee's allocation and grant award for the respective program year. Initial disbursements are subject to change at the discretion of the OEO. Additionally, OEO will monitor how DES funds are spent, but it is the subgrantee's responsibility to track their expenditures and submit disbursement requests subsequent any initial disbursements The allocations awarded to a subgrantee may be reduced and reallocated if the requirements set forth in OEO and the subgrantee's agreement are not met.

c. Inventory

DES funds must not be used to purchase inventory. Subgrantees should use DOE annual grant and DOE IIJA (BIL) grants funds to make inventory purchases.

d. Amendments

OEO may amend these policies and procedures. Subgrantees shall read any subsequent amendments and are responsible for complying with any subsequent changes.

e. Client File Maintenance

OEO will update the Client File Checklist (Form 1) when the program is implemented. The updated checklist will include any additional forms and documents created for the DES program.

f. Client Eligibility

Pre-weatherization and weatherization services using DES funds can only be provided to clients that are eligible for the Weatherization Assistance Program as defined in 42 U.S.C. 6862(7), 10 CFR 440.22, and the South Carolina Weatherization Assistance Program State Plan.

V. Additional Subgrantee Restrictions and Requirements

A. Political Activities

Subgrantee agrees that no funds shall be utilized, nor services provided, or personnel assigned in a manner supporting or resulting in the identification of such programs with:

- ✓ Any partisan or nonpartisan political activity or any other political activity associated with a candidate, or contending faction or group, in an election for public or party office;
- ✓ Any activity to provide voters and prospective voters with transportation to the polls or to provide similar assistance in connection with any election;
- ✓ Any voter registration activity; or
- ✓ Any political activities as set forth in the U.S. Code, Title 5, Chapter 15, Section 1502(a)(i)(2) and (3).

B. Nondiscrimination

- No persons shall because of race, color, national origin, or sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available through this grant.
- Any prohibition against discrimination on the basis of age under the Age Discrimination Act of 1975 (U.S.), or with respect to an otherwise qualified disabled individual as provided in Section 504 of the Rehabilitation Act of 1978(U. S.), and Americans with Disabilities Act of 1990 (U.S.) shall also apply to any such activity conducted under the provisions of this Grant Agreement.

C. Investigations

- Subgrantee will permit and cooperate with any Federal investigation undertaken by the Secretary, Comptroller General, or any State investigation to determine compliance with the provisions of this Grant Agreement.
- Subgrantee will make available any books, documents, papers, and records to any authorized representatives for examination, copying, or mechanical reproduction on or off the premises of Subgrantee based upon a reasonable request.

D. Limitations of Construction

Funds made available under this grant may not be used by Subgrantee for improvement of land or the purchase, construction, or permanent improvements (other than low-cost residential weatherization or other energy-related repairs) of any building or other facility. The Secretary only may waive this limitation.

E. Professional Services

- Costs of professional and consultant services rendered by persons who are members of a particular profession or possess a special skill, and who are not officers or employees of Subgrantee, are allowable when reasonable in relation to the services rendered and when not contingent upon recovery of the costs from Grantee.
- Subgrantee must comply with 2 CFR §200.459.

F. Copyright / Publications

- Except as otherwise provided in the terms and conditions of this Grant Agreement, a Grantee or a Subgrantee paid through this grant, is free to copyright any books, publications or other copyrightable materials developed in the course of or under this grant. However, the Federal awarding agency and State funding agency (SFA) reserve a royalty-free, non-exclusive, and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, for Federal government and SFA purposes:

✓ The copyright in any work developed under this grant, or through a contract under this grant; and,

✓ Any rights of copyright to which a Subgrantee purchases ownership with grant support.

- The Federal government's rights and the SFA's rights identified above must be conveyed to the publisher and the language of the publisher's release form must ensure the preservation of these rights. See 2 CFR §200.315.

G. Information related to Illegal Acts

- Subgrantee shall furnish Grantee information about all illegal acts/criminal activities discovered or alleged.
- Any attempt to conceal illegal acts/criminal activities, withhold information from Grantee or otherwise obstruct justice will be cause for enforcement action, which may result in suspension or termination of this Grant Agreement.

H. Certification

Subgrantee, subgrantee staff and/or their subcontractors must maintain the following:

- ✓ Certified Firm in Lead Renovation
- ✓ Certified Lead Renovator (at least one worker on job site)
- ✓ Certificate of Attendance for a Lead Safe Weatherization class or OTJ training with a Certified Lead Renovator
- ✓ Building Performance Institute (BPI) Energy Auditor certification
- ✓ Building Performance Institute (BPI) Quality Control Inspector certification

Subgrantee employees and subcontractors conducting official Energy Audits on behalf of the subgrantee are required to have at minimum a Building Analyst (BA), Building Analyst Technician (BA-T), or Building Analyst Professional (BA-P) certification.

I. Insurance

Subgrantee shall provide adequate insurance coverage for all assets, real property, and equipment acquired with or improved by OEO funds in compliance with 2 CFR200.310.

J. Utilization of Minority Business

Subgrantee is encouraged to utilize minority firms, women's business enterprises and labor surplus area firms where cost and performance of major grant work will not conflict with funding or time schedules, per 2 CFR 200.321.

K. Americans with Disabilities Act of 1990 (ADA)

Subgrantee shall comply with the Americans with Disabilities Act of 1990 (ADA), as applicable.

L. Section 504 of the Rehabilitation Act of 1973 (Disabled)

All recipients of federal funds must comply with Section 504 of the Rehabilitation Act of 1973 (U.S.), and Americans with Disabilities Act of 1990 (U.S.) shall also apply to any such activity conducted under the provisions of this Grant Agreement. Therefore, the recipient of federal funds, pursuant to the requirements of The Act, hereby gives assurance that no otherwise qualified disabled person shall, solely by reason of disability, be excluded from the participation in, be denied the benefit of or be subject to discrimination, including discrimination in employment, in any program or activity that receives

or benefits from federal financial assistance. The recipient agrees it will ensure that requirements of The Act shall be included in the agreements with and be binding on all of its Subgrantees, contractors, assignees, or successors.

Coordination

Subgrantee agrees to coordinate any program activities conducted through this grant with other anti-poverty programs in the area to avoid duplication of services and to expand customer outcomes.

M. Disclosure of Federal Participation

In compliance with Section 623 of Public Law 102-141, Subgrantee agrees that no amount of this award shall be used to finance the acquisition of goods and services (costs for construction services are unallowable) for the project unless Subgrantee:

- ✓ Specifies in the Budget, with board approval, for the procurement of the goods and services involved (costs for construction services are unallowable) the amount of Federal funds that will be used to finance the acquisition; and
- ✓ Expresses the amount announced pursuant to paragraph (1) as a percentage of the total cost of the planned acquisition.

N. Mandatory Disclosures

Subgrantee must disclose, in a timely manner, in writing to Grantee all violations and investigations of State and Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the award. See 2 CFR §200.113.

O. Conflict of Interest

Subgrantee must disclose in writing to Grantee any potential conflict of interest in accordance with applicable policies. Personnel and other officials connected with this Grant shall adhere to the policies given below:

1. Appearance

In the use of these grant funds, officials or employees of the State or a local unit of government and non-governmental Subgrantees shall avoid any action which might result in, or create the appearance of:

- ✓ Using an official position for private gain;
- ✓ Giving preferential treatment to any person;
- ✓ Losing complete independence or impartiality;
- ✓ Making an official decision outside official channels; and/or
- ✓ Affecting adversely the confidence of the public in the integrity of the government or the program.

2. Advice

No official or employee of the State or a unit of local government or of non-government Grantees/Subgrantees shall participate personally through decision, approval, disapproval, recommendation, the rendering of advice, investigation, or otherwise in any proceeding, application, request for a ruling or other determination, contract, grant, cooperative grant, claim controversy, or other particular matter in which these funds are used, where to his knowledge their immediate

family, partners, organization other than a public agency in which he is servicing as officer, director, trustee, partner, or employee or any person or organization with whom he is negotiating or has any arrangement concerning prospective employment, has a financial interest.

3. Nepotism

- Subgrantees are restricted from the hiring of family members in accordance with the Ethics, Governmental Accountability and Campaign Reform Act of 1991 and to further restrict the hiring of relatives within the same office, program area, or the equivalent work unit.
- In accordance with the Ethics, Governmental Accountability and Campaign Reform Act of 1991 (Ethics Act), no supervisory employee of the agency may cause the employment, appointment, promotion, transfer, or advancement of a family member to a position in which the employee supervises or manages. Employees may also not participate in an action relating to discipline of their family members.
- Definitions: The Ethics Act defines family member as an individual who is the (a) spouse, parent, brother, sister, child, mother-in-law, father-in-law, son-in-law, daughter-in-law, grandparent, or grandchild; or (b) a member of the individual's immediate family.
  Immediate family is further defined as follows:
  - A child/adult residing in an employee's household;
  - A spouse of an employee;
  - An individual claimed by the employee or employee's spouse as a dependent for income tax purposes.

OEO has defined relative as: spouse, parent, sibling, child, parent in-law, grandparent, grandchild, sibling in-law, grandparent in-law, step-grandchild, stepchild, child in-law, aunt, uncle, niece, or nephew of the employee or a member of the employee's household. OEO, recognizes common-law marriage and the relationships that are created as a result. This policy also applies to all members of the Board of Directors. See 2 CFR §200.112.

P. Fees for Service

No fees shall be imposed by Subgrantee upon any eligible person for services described in this Grant Agreement. Any attempt to collect such fees shall be grounds for termination of this grant

Q. Acknowledgment

Subgrantee shall announce or print the following information when conducting any public relations activities associated with the grant. "Funded in whole or in part (whichever the case may be) by the Department of Administration, Office of Economic Opportunity, through funding from the U.S. Department of Energy."

R. Drug-Free Workplace

- Subgrantee shall establish and implement policies, procedures, and programs in accordance with the Certification Regarding Drug-Free Workplace Requirements as set forth in Appendix B to the grant agreement.
- Subgrantee must submit to the Grantee a completed Place of Performance, Drug-Free Workplace Certification, contained in Appendix B within 30 days of the beginning of this grant.
- Compliance with Public Law 103-227, Part C – Environmental Tobacco Smoke, also known as the Pro-Children Act of 1994.

- This Act requires that smoking not be permitted in any portion of any indoor facility owned or leased or contracted by an entity and used routinely or regularly for the provision of health, day care, education, or library services to children under the age of 18 if the services are funded by Federal programs either directly or through State or local governments. Federal programs include grants, cooperative agreements, loans, or loan guarantees and contracts. The law does not apply to children's services provided in private residences, facilities funded solely by Medicare or Medicaid funds, and portions of facilities used for inpatient drug and alcohol treatment.
- By signature, Subgrantee certify accordance. Failure to comply with the provisions of this law may result in the imposition of a civil monetary penalty of up to $1,000 per day.

S. Lobbying

- Subgrantee certifies that no Federal funds have been paid to any person for influencing or attempting to influence an office or employee of any agency, member of Congress, an office or employee of Congress, or an employee of a member of Congress in connection with awarding of any Federal contract, making of any Federal contract, or the making of any Federal loan, the entering into any of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- Subgrantee certifies that no Federal grant funds may be used to support lobbying activities to influence proposed or pending Federal or State legislation or appropriations.

T. Religious Activity

Direct grants, sub-awards, or contracts under this program shall not be used to support inherently religious activities such as religious instruction, worship, or proselytization.
Therefore, Subgrantees must take steps to separate, in time or location, their inherently religious activities from the services funded under this program.

VI. Remedies for Noncompliance

If Subgrantee fails to comply with Federal and/or State statutes, regulations or the terms and conditions of a Federal Award, OEO may impose additional conditions, as described in §VIII of this Grant Agreement. If OEO determines that noncompliance cannot be remedied by imposing additional conditions, OEO may take one or more of the following actions, as appropriate in the circumstances:

- Temporarily withhold cash payments pending correction of the deficiency by Subgrantee;
- Disallow all or part of the cost of the activity or action not in compliance;
- Wholly or partly suspend or terminate the grant agreement;
- Initiate suspension, debarment, or termination of the grant agreement;
- Withhold further grant agreement funds for the project or program; and/or
- Take other remedies that may be legally available. See 2 CFR §200.339-343

A. Corrective Action and Suspension of Funding (Hearings & Appeals Procedure)

In administering this section, OEO will comply with 2 CFR § 200.205 – 207, and §200.338. OEO must evaluate the risks posed by Subgrantee. If OEO determines Subgrantee poses a risk, OEO may impose additional specific conditions that correspond to the degree of risk assessed.

1. **Special conditions and/or restrictions may be imposed when Grantee determines that Subgrantee:**
    a. Is not financially stable;
    b. Has a management system and ability that does not meet the management standard set forth by OEO;
    c. Has a documented history of unsatisfactory performance;
    d. Has not complied with the general or specific terms, conditions, covenants, or stipulations of previous grant awards; OR
    e. Is otherwise not responsible.
    f. See 2 CFR §200.205 and 200.207(a).
2. **Special conditions and/or restrictions OEO may impose include, but are not limited to the following:**
    a. Payment to Subgrantee on a reimbursement basis;
    b. Withholding authority to proceed to the next phase until receipt of evidence of acceptable performance within a given funding period;
    c. Requiring additional detailed financial reports and/or data;
    d. Additional project monitoring and interim audits;
    e. Requiring Subgrantee to obtain technical and/or management assistance;
    f. Establishment of additional prior approvals;
    g. Establishment of additional constraints as necessary and appropriate in the circumstances; AND/OR
    h. Require Board acknowledgement of agency's status. See 2 CFR §200.207(a).
3. **If OEO decides to impose such special conditions and/or restrictions, OEO will notify Subgrantee as early as possible, of the following:**
    a. The nature of and reason for the special conditions and/or restrictions;
    b. The corrective actions which must be approved by Grantee and completed by Subgrantee prior to the removal of the special conditions and/or restrictions;
    c. The time allowed for completing the corrective actions, if applicable;
    d. The method of appeal for reconsideration of the imposed conditions/restrictions; and
    e. The training and technical assistance Grantee is offering to Subgrantee, if appropriate, to help correct the deficiency. If training and technical assistance are not appropriate, Grantee will include an explanation detailing the reason(s). See 2 CFR §200.207(b).
4. **Grantee will remove any special condition and/or restriction once the conditions prompting them have been corrected. See 2 CFR §200.207(c).**

B. Administrative Enforcement

The enforcement remedies identified in this agreement do not preclude the Subgrantee from being subject to "Debarment and Suspension" as prescribed by Grantee. When Subgrantee fails to comply with the terms of this Agreement, as outlined in Section IX of
this agreement, and/or grant requirements/reports are not submitted within the required time frame, nor completed in accordance with the generally accepted principles, nor consistent with the approved budget, Work Plan or Grant Agreement; a temporary suspension of funding for enforcement purposes may be instituted but shall not constitute a statutory termination or reduction of funding.

1. **Effects of Suspension (2 CFR §200.342)**

Costs incurred by Subgrantee during a suspension or after termination of the Grant Agreement are

not allowable unless Grantee expressly authorizes such in the "Notice of Suspension or Termination." Other Subgrantee costs during suspension or termination, which are necessary and not reasonably avoidable, are allowable if:

- ✓ The costs result from obligations which were properly incurred by Subgrantee before the effective date of the suspension or termination are non-cancelable; and
- ✓ The costs would be allowable if the grant was not suspended or expired normally at the end of the funding period in which the termination takes effect and Subgrantee has written permission from OEO to incur such costs.

2. Relationship to Debarment and Suspension

If this grant exceeds $25,000 or if Subgrantee has critical influence on or substantive control over the transaction completion of the grant, completion of the Debarment, Suspension, Ineligibility & Voluntary Exclusion Certification, which is included in Appendix C to this Grant Agreement, is required. Subgrantee is responsible for completing the Debarment, Suspension, Ineligibility & Voluntary Exclusion Certification, monitoring the submission, and maintaining the official document.

C. Termination

Termination is defined as the permanent withdrawal of funding by the state administering authority of an eligible entity's authority to obligate previously awarded funds before that authority would otherwise expire, or the refusal of the state to continue funding to the eligible entity. A temporary suspension of funding for administrative enforcement purposes shall not constitute a statutory termination or reduction of funding.

Termination of this Grant Agreement may be initiated by OEO, Subgrantee, or by mutual agreement of both parties as prescribed herein. The following shall apply to the termination of this Grant Agreement:

1. Termination for Lack of Funds

The parties hereto covenant and agree that their liabilities and responsibilities, one to another, shall be contingent upon the availability of funds, Federal or State, for the funding of DOE and LIHEAP Weatherization activities. This Grant Agreement shall be terminated if such funding ceases to be available. Grantee shall have the sole authority for determining the lack of availability of such funds. Grantee shall immediately notify Subgrantee of any cutback in funds of which it becomes aware.

2. Termination for Breach of Grant

This Grant Agreement may be suspended or terminated by OEO at any time within the grant period whenever it is determined by OEO that Subgrantee has breached or otherwise failed to comply with its obligations.

3. Termination for Breach of Previous Contracts and Grants or Non-Payment of Previous Audit Disallowances.

This Grant Agreement may be suspended or terminated by Grantee at any time within the grant period if Subgrantee has failed to make payment in full to OEO for audit disallowances pursuant to any previous Contract or Grant Agreement between the parties or Subgrantee has failed to comply with the maintenance and inspection of records requirements of any previous Contract or Grant Agreement between the parties.

4. Termination by Subgrantee

Subgrantee may terminate this Grant Agreement by giving OEO a thirty (30) day written notice of intent to do so. Expenditures legitimately incurred by Subgrantee prior to the date of termination of

this Grant Agreement will be permitted providing they are in accordance with provisions of this Grant Agreement.

5. Termination for Convenience

OEO and the Subgrantee may mutually agree to terminate the grant in whole or in part. The two parties shall agree upon the termination conditions, the effective date, and in the case of partial termination, the portion to be terminated.

6. Termination for Insolvency

Grantee may immediately terminate the grant if the Subgrantee becomes insolvent, including the filing of proceedings in bankruptcy.

7. Termination by Department of Energy (DOE)

This Grant agreement is subject to immediate termination by OEO upon notice that Subgrantee has lost or been denied funding from DOE.

8. Notice of Termination

In the event of grant termination, the party terminating the Grant Agreement shall give notice of such termination in writing to the other party. Notice of termination shall be sent by certified mail, return receipt requested, and shall be effective thirty (30) days after the date of the receipt, unless otherwise provided by law; provided however, if terminated pursuant to Section 211, Paragraph A. F.or G, said termination shall be effective upon receipt of such notice.

9. Process for Termination

The following steps are to be taken when OEO believes cause for termination exists:

- If Subgrantee fails to correct all deficiencies identified during a corrective action plan or if based on the seriousness of any of the deficiencies, OEO determines Termination is appropriate, a certified letter will be sent from OEO's Director to Subgrantee's Board Chairperson advising him/her of OEO's recommendation to terminate the grant, along with the reasons for this recommendation. Within fifteen (15) days of receipt of this recommendation, Subgrantee may request a hearing in writing to appeal this recommendation.
- If Subgrantee appeals Grantee's recommendation, the Department of Administration's Chief Legal Counsel will select a Hearings Officer to conduct the hearing within thirty (30) days of receipt of the letter of appeal, utilizing informal hearing procedures. All proceedings will be recorded.
- The decision of the Hearing Officer will be the final decision of OEO.
- In the event funding termination occurs, OEO shall either extend the geographic service area of an eligible entity or submit a Request for Proposal and bid for a new eligible entity. This will be done, as necessary, to provide services to the low-income population in that service area and shall be administered in accordance with existing Federal and State legislation. See 2 CFR 200.338-342

10. Return of Data upon Termination

In the event of a termination of the grant, OEO shall immediately revoke Subgrantee's access to the DBA FACSPro Weatherization system and the LITT system. Subgrantee shall return all relevant records to OEO, including electronic and paper records. The transfer of records must be done in a secure manner to ensure confidentiality.

VII. The Weatherization Work Process

Application Effective Date

To comply with DOE requirements and to ensure audit integrity, it is important to define key terms, timelines, and procedures related to the application process. DOE and OEO require tasks to be completed and eligibility to be

determined within a certain timeframe. Therefore, an Application Effective Date (AED) must be determined. The AED is the date the client signs the application regardless of when it was received by the agency.

Income and Energy Bills

When determining client eligibility, verification of income to determine eligibility for Weatherization and an energy bill to determine a client's energy burden must be provided. These items must be provided within two months (on either side) of the AED. If a client applied for services on 7/1, they would need to provide income for a one-month period between 5/1 (two months before) and 9/1 (two months after). The energy bill would also need to be provided for this same window. If a client is eligible for Weatherization due to receiving SNAP, they must provide verification of receiving SNAP within this same window. If a client is eligible for Weatherization due to receiving SSI or TANF, they would need to provide verification of someone in their household receiving these benefits within 12 months of their AED.

One-Year Eligibility

Clients are eligible for weatherization services for one year. The one-year timeline begins with the AED. If an Energy Audit has not been performed within one year of the AED, the client must be recertified. However, reverification should not occur until the agency is ready to perform an Energy Audit. Recertification involves verification of income, energy use, and household composition. Use the Recertification Form 112 to capture this information. The date the client signs the Recertification Form is the new AED.

Energy Audits

An Energy Audit performed on a dwelling is good for six months. However, in most circumstances, OEO expects work to begin on the home within 3 months of the Energy Audit. If work has not started on the home within 6 months of the Energy Audit, a new Energy Audit must be performed. The client file in LITT should contain documentation for all completed Energy Audits. If a home received multiple Energy Audits, there should be copies of the 501 Form for each Energy Audit in the file. All energy audits must be included in the client file and LITT documents. The new Energy Audit should include updated photographs of any changes to the dwelling that would alter the audit or scope of work (electrical structural, plumbing, etc..) in addition to the original photographs and photographs of new testing (blower door, pressure pans, combustion testing, CAZ testing, zonal testing, etc..).

Deferrals

Deferrals can happen at any point in the application process. If a home is deferred after an Energy Audit has been completed, a new Energy Audit must be performed on the home once it is no longer in deferral status.

Timeline Example

See below for examples of timelines and acceptable documentation based on a specific AED.

Client applies for weatherization services. Client signs the application on July 1. Agency received the application on July 15.

- The AED is 7/1
- Income must be provided for a one-month window between 5/1 and 9/1 (two months on either side of the AED)
    - For unearned income like Social Security, a statement identifying the client's monthly benefits for the current year are sufficient (even if the letter is not within the two-month window on either side of the application).
    - For earned income like wages, the client should provide 4 pay stubs (weekly), 2 pay stubs (bi-monthly or bi-weekly), or 1 pay stub (monthly) depending on the frequency of their compensation.
- The energy bill must be between 5/1 and 9/1 (two months on either side of the AED). OEO allows some leeway in this situation. If the bill date or billing period is within this window, it is acceptable.
- If the client is eligible for weatherization, they will remain eligible until 7/1 of the following year.
- An Energy Audit is performed on the home on 3/1 of the following year. The Energy Audit is good until 9/1. If work has not started by 9/1, a new Energy Audit will need to be performed, **and** the client will need to be recertified (since their original AED was 7/1). However, if work starts before 9/1, the client

will not need to be recertified since the Energy Audit was started before their one year of eligibility expired.

- An Energy Audit is performed on the home on 3/1 of the following year. The home is deferred. The client corrects the issues that caused the deferral on 8/1. The client would need to be recertified (more than one year has elapsed from AED) and a new Energy Audit would need to be completed (deferred for more than 30 days).

A. Intake Process: Eligibility

When an applicant applies for weatherization services, they should also be referred to other services provided by Community Action Agencies for which they may also be eligible (SCBG, ESG, LIHEAP, etc.) The sub-grantee will develop internal processes for referring clients to other programs.

Some clients may need the help of a third party to complete the application process. It is important that agencies maintain the privacy of clients and their information. OEO encourages agencies to either obtain a power of attorney or verify the third party in person with the client present. To prevent undue hardship and remove barriers to applying for Weatherization services, on a case-by-case basis and using the agency's best judgment, agencies are allowed to receive information from a third party. It is not acceptable to give any information to an unverified third party. This includes but is not limited to information about social security numbers, income, drivers' licenses, disability status, what measures are being installed, or the condition of the dwelling or client.

1. Determining Client Eligibility

- ✓ **HUD-Program qualification** - OEO will follow WPN 22-5 and deem applicants eligible for means-tested HUD programs as income eligible for weatherization. An applicant providing documentation they have received services through a means-tested HUD program in the previous 12 months shall serve as verification of income eligibility. An example of documentation would be a Section 8 certificate or voucher. If you have specific questions regarding what verifies eligibility for a HUD means- tested program, contact OEO.
- ✓ **SSI and TANF** – A household with a member receiving SSI or other cash assistance payments under Title IV or XVI of the Social Security Act at any time during the 12-month period preceding the determination of eligibility for weatherization assistance is income eligible for weatherization assistance.
- ✓ **SNAP –** A household with one or more individuals receiving payments through SNAP is income eligible for weatherization services. Client must currently be receiving SNAP benefits at time of application for weatherization.
- ✓ Households in which one or more individuals are receiving payments under **section 415, 521, 541, or 542 of title 38, United States Code, or under section 306 of the Veterans' and Survivors' Pension Improvement Act of 1978** are income eligible for services.
- ✓ **Income** - At or below 200 percent of the federal poverty guidelines (as updated in the annual federal poverty guidelines).

Note that a household that qualifies based on the receipt of SSI or TANF (other government benefits) will not require verification of the income of any other members. Take the following steps to document SSI or TANF income in LITT.

1. On the Income Screen in LITT, select the Household Member that is receiving SSI

or TANF.

2. Click the 'New' button.
3. Enter 'SSI' or 'TANF' as the income description.
4. Select 'Supplemental Security Income (SSI)' or 'TANF' from the Income Type drop down.
5. Select 'Monthly' from the Pay Cycle drop down.
6. Enter '$0' in the Pay 1 field.
7. Click the 'Save' button.
8. Upload proof of the SSI or TANF income to LITT.
9. When verifying the Customer Records, you will receive a message stating 'There are issues with Customer Records. Do you wish to override and mark file verified?' Click 'Yes'.

Take the following steps to document SNAP eligibility in LITT.

1. On the Income Screen in LITT, select the Head of Household.
2. Click the 'New' button.
3. Enter 'SNAP' as the income description.
4. Select 'Non-Cash Benefits' from the Income Type drop down.
5. Select 'Monthly' from the Pay Cycle drop down.
6. Enter '$0' in the Pay 1 field.
7. Click the 'Save' button.
8. Upload proof of current SNAP benefits to LITT.
9. When verifying the Customer Records, you will receive a message stating 'There are issues with Customer Records. Do you wish to override and mark file verified?' Click 'Yes'.

a. Definition of Income

Income means Cash Receipts earned and/or received by the applicant before taxes during applicable tax year(s) **but not** the Income Exclusions listed below. Gross Income is to be used, **not** Net Income.

b. Income Inclusions

The following are considered to qualify as income for program-related purposes: 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 (gross amount before any deductions), railroad retirement, unemployment compensation, strike benefits from union funds, worker's compensation, severance pay, veteran's payments, training stipends, alimony, military family allotments, private pensions, government employee pensions (including military retirement pay), regular insurance or annuity payments, dividends, interest, net rental income, net royalties, periodic receipts from estates or trusts, net gambling, or lottery winnings. Non-self-employed clients receiving a 1099 (independent contractors) will have their income verified the same as clients with employment income.

Self-Employment. When an individual is self-employed and operating a business outside of the home, they must provide the most recent signed Federal Tax Form pertaining to the

business (e.g., 1040 Schedule C of Profit or Loss or 1040 Schedule C-EZ). To calculate monthly income from Form 1040 schedule C, use total from line 31(Net Profit) and divide by 12.

- If using form 1040 schedule C-EZ, line #3 should be used. Other IRS forms include Form 1065 Partnership Return of Income (request Tax Schedule K-1 Form 1065 Partner's Share of Income, Deductions, Credits), Form 1120S (request Tax Schedule K-1, Form 1120S). When an individual is self-employed, operating an in-home business, such as childcare, use the gross income. An individual must provide the entire signed Federal Tax Form pertaining to the business.
- If an applicant attests to be recently self-employed and have not filed taxes for their new business, they must provide a copy of their business license and quarterly or monthly tax statements from the South Carolina Department of Revenue. If the self-employed individual does not file his/her taxes quarterly, they must provide a copy of the business license and Declaration of Zero Income form. To calculate monthly income from the quarterly taxes, divide the most recent quarterly amount by 3.
- If an applicant attests to have terminated their business, they must provide certification verifying termination (state certification of termination or another document).
- For clients who claim self-employed status but are unable to satisfy the documentation listed in the "Determining Eligibility" section of S.C. WAP Policy and Procedure manual, Agencies may contact OEO for determination on a case by case basis.

c. Income Exclusions

The following are NOT considered to qualify as income for program-related purposes: 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 member of the household or person who is in temporary financial difficulty, tax refunds, gifts, loans or lump-sum inheritances, college scholarships, one-time insurance payments, or one-time lump sum payments as 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, negative income (also known as tax loss or negative taxable income), federal noncash benefit programs as Medicare, Medicaid, food stamps, school lunches and housing assistance, combat zone pay to the military, reverse mortgages, payment for care of foster children. Earned income or unemployment compensation for minors under the age of 18 (or full-time high school students) is not considered when determining the income eligibility of a household unit.

In addition, child support payments, whether received by the payee or paid by the payor, are not considered sources of income to be added to the payee income (see Income Exclusions) or deducted from the payor income for the purposes of determining applicant eligibility.

Additional Income Exclusions: A member of the Household is receiving one of the following during the previous 12 months:

- Cash assistance payments under Title IV (FIP, also known as TANF)
- Cash assistance payments under XVI of the Social Security Act (SSI)

d. Income Calculation

To determine the income that should be entered into LITT, use the following formulas based on how often the income is received:

Weekly: ((amount 1 + amount 2 + amount 3 + amount 4) / 4) *4.33

Bi-Weekly (the client is paid every two weeks – 26 total pay stubs in one year): ((amount 1 + amount 2) / 2) *2.165

Semi-Monthly (the client is paid twice a month – 24 total pay stubs in one year): amount 1 + amount 2

Monthly: amount 1

Zero Income: An entry of zero income needs to be saved in the income screen in LITT for the client to receive all available priority points.

e. Zero Income

Household members who report no earned income or monthly benefit (such as Social Security) must complete the Declaration of Zero Income form.

2. Determining Building Eligibility

- Structures eligible for weatherization include single family, manufactured housing (mobile homes), and both small Multifamily (5-24 units per building) and large Multifamily (25+ units per building), or if there are central mechanical systems serving more than one dwelling unit/building. Two-to-four-unit buildings are counted as Single Family residences in DOE reporting.
- All structures must be stationary and have a specific mailing (street) address. Campers and nonstationary trailers are not eligible.
- All dwellings to be weatherized must be owner or renter occupied and occupied by a household whose income is at or below 200 percent of the poverty level established by the U.S. Department of Health and Human Services.
- If energy savings cannot be realized due to the condition of a home, these conditions shall be documented in the LITT, and the home shall not be weatherized. Such energy audit conditions shall be brought to the attention of the client with referrals to other agencies that may be able to assist (United Way, HUD, etc.). For more on this process, see the section on deferrals.
- Shelters may be weatherized. The cost per unit is based on the shelter regulations detailing that a provider may count each 800 square feet as a dwelling or each floor level as a dwelling.

Rental Units/Multifamily Buildings

- Single family rental dwellings and buildings with up to four units are addressed using LITT.
- Multifamily housing containing five or more units will be addressed by the subgrantee submitting a proposal to DOE through OEO providing the project details. The subgrantee should consult the WAP Multifamily Case by Case Project Submittal Checklist from DOE.
- Subgrantees will ensure a Homeowner, Fuel Release form 101 is completed for each building containing a dwelling unit to be weatherized.

- Document how tenants will be notified of the WAP and the Health and Safety requirements (lead, mold, radon, and other health and safety issues).
- Ensure notification to the landlord and tenants that the rent for the weatherized home cannot be increased for a period of at least one year.
- Ensure notification to tenants of the formal complaint process.
- Obtain a commitment letter from the property owner/landlord showing the possible owner contributions:
  - If owner/landlord is responsible for paying heating costs or the units are master- metered, owner/landlord may be required to contribute up to 15 percent of the total weatherization work.
  - If the tenant is responsible for paying heating costs, the owner/landlord may be required to contribute up to 10 percent of the total weatherization work.
  - In addition, if the heating/cooling systems are being replaced, the owner/landlord must contribute 25 percent of the replacement cost of the heating/cooling system.
  - The contribution may be met in the following ways:
    - Cash contribution.
    - Rebate or rent reduction (rebate cannot exceed one year).
    - Donation of weatherization materials.
    - An exception is made for owners/landlords who themselves are eligible for the weatherization program. These owners are not required to make a contribution.
- Ensure notification to tenants of the owner contributions in the form of rebates and rent reductions when applicable.

3. Eligibility Documentation

- Income eligibility is determined by Subgrantees using the statewide LITT database system.
- Household eligibility documentation is available through the LITT system and Subgrantee's records.
- No dwelling unit may be weatherized without documentation that the dwelling unit is an eligible unit.

The applicant must provide the following documentation:

- **Photo identification** (government or state-issued) for each adult in the household. Note the identification can be expired provided the client's identity can reasonably be determined from the expired identification. If you have specific questions regarding an expired government or state-issued identification, contact OEO. If an elderly (aged 75 or older) or disabled applicant does not have a government or state-issued photo identification card, an expired photo identification card with a clarifying statement, or a picture of the applicant and a copy of the applicant's birth certificate will suffice. If an elderly or disabled applicant does not have a birth certificate, a letter from the Department of Health and Environment Control (DHEC) stating that the client does not have a birth certificate on file can be used. The address listed on the government or state-issued ID should match the address of the dwelling being weatherized for all household members. If it does not match one of the members, have them sign a statement indicating they live at the dwelling that is being weatherized. They should include in the statement the length of time they have lived there and their intent to remain in the dwelling. If the client lives in a housing

complex and the address on their ID does not match, their address can be verified by the housing authority. For specific questions regarding documentation the housing authority can use to verify the client's address, contact OEO.

- **Social security cards** for all members of the household. In situations where clients may not have Social Security cards for all members of the household, they may provide a government document (tax form, Social Security letter, etc.) with the Social Security Number listed on it. The client must also sign a statement indicating they do not have a physical copy of the Social Security card for that household member.
- **Energy bill** within 60 days of the date of application or recertification for weatherization services.
  - **Calculating Energy Burden**
    The standard methodology for calculating a client's Energy Burden is to divide their monthly energy costs (typically in the form of a bill from a utility or electric co-op) by their gross income. However, there may be situations where a client purchases energy for several months at once. For instances, a client may initiate a bulk purchase of propane to heat their home during winter months. In situations where a client makes bulk purchases of heating fuel, divide the total cost of the fuel by **3** to determine their monthly costs. Keep in mind, this cost will be in addition to any energy bills they receive from their electric provider.
  - **Other Energy Bill Considerations**
    The energy bill should be in the name of the applicant (or other household member) applying for services. OEO understands there may be extenuating and rare circumstances that prevent the applicant from having the energy bill in their name. In these instances, the applicant must write and sign a statement indicating the reason the energy bill is not in their name. In addition, the person whose name the energy bill is in (usually the landlord), must also write and sign a statement indicating the applicant lives in the home that is intended to be weatherized.
- **Proof of income eligibility** and associated documentation must be included in the client file.
- **Proof of eligibility** if the applicant is not an American Citizen. WAP services can be provided to qualified aliens. Qualified aliens include:
  - Legal permanent residents
  - Asylees
  - Refugees
  - Aliens paroled into the United States for at least one year
  - Aliens who deportations are being withheld
  - Aliens granted conditional entry (prior to April 1, 1980)
  - Battered alien spouses, battered alien children, the alien parents of battered children, and alien children of battered parents who fit certain criteria
  - Cuban/Haitian entrants
  - Victims of a severe form of trafficking

  Benefits can be provided to households with ineligible members. In this instance, the income of the ineligible members is counted. However, the ineligible members are not counted in determining the household size. Please contact OEO with specific questions regarding qualified aliens and ineligible household members.

B. Intake Process: Special Considerations

1. Protocols and Procedures for Selecting Clients for Weatherization

Prior to conducting a Field Audit, the agency must determine the next eligible client to serve using the priority points recorded in LITT. Clients must be given a reasonable opportunity to respond once the agency attempts to contact them.

Agencies must attempt to contact the client for five (5) consecutive working days. If these attempts are not successful, the agency can move to the next client on the priority list on the sixth working day. Once a Field Audit has been conducted, clients should not be passed by new applicants with more priority points unless their dwelling is deferred, or the client becomes unresponsive to communication from the agency.

If a client becomes unresponsive to agency communication once the weatherization process begins, take the following steps before moving on to the next client:

1. Attempt to contact the client for five (5) consecutive working days.
2. If contact cannot be made with client, send a certified letter on agency letterhead informing them to contact the agency within ten (10) days or they will be placed back on the Waitlist.
3. If the client does not contact the agency by the appointed time, place them back on the Waitlist.

Document each attempt to contact the client, upload a copy of the certified letter to the client file in LITT, and update the Notes section of LITT with details regarding the case.

2. Recertification

Recertification of the client needs to be completed if work has not begun on the dwelling within 1 year of the application date. Agencies should not take action to recertify a client until they are ready to provide weatherization services (see WAP-IM-2021-6 released in November 2021).

During the recertification process the agency should take care not to place undue burden on the client. This means that the original documents in the file are all still valid with the exception of the clients income documentation, the clients energy bills, a reverification of the household make-up (have household members moved in or out of the home, and are they minors, or do they have income changes), and the outdated Energy Audit (both the original Energy Audit and the new Energy Audit should be included in the documents section of LITT).

To document the recertification the agency will need to complete the recertification Form 112.

3. . Realistic Timeline for the Weatherization Process

It is important to have a realistic timeline for the Weatherization process to keep the wait times to a minimum and to maintain production. The timeline process starts with the Energy Audit and is a minimum suggested timeline. Agencies are encouraged to serve customers in an accelerated timeline.

If the dwelling is having WRF work the clock starts at the completion of the 3rd party inspection and goes directly to the new Energy Audit.

Action	Timeline	Next Action

3rd party inspection (WRF)	30 days	Energy Audit
Energy Audit	3 Months	Wx Work Starts
Work Starts	2 Months	Work Completed
Work Completed	1 Month	QCI

OEO understands that some dwellings may fall outside this timeline. If a dwelling falls outside this timeline the agency should document the reasons for the extra time in the comment section on the final page of for 501, after sections T-25 & T-26.

4. Historic Preservation Review

It is important to have a realistic timeline for the Weatherization process to keep the wait times to a minimum and to maintain production.

Undertakings that involve properties greater than fifty (50) years old or those where the date of construction cannot be determined and are not listed below, shall complete a Project Review Form 106 and submit to SHPO for approval to weatherize the dwelling. The written approval must be retained in the client file to document the review process and capture any categorical exemptions and changes required based on the assessment. Weatherization cannot commence without this review and the approval in writing from the SHPO. If the home is more than fifty years old, but it is exempt from SHPO review due to the work being performed, include Form 106 in the client file and write 'Exempt from SHPO' on the form and complete questions 1, 2, 3, and 7 on Page 1. Note that SHPO does not apply to manufactured homes.

WAP Undertakings Exempt from Historic Preservation Review

a. Exterior Work

- Air sealing of the building shell, including caulking, (except caulking horizontal joints in wood siding), weatherstripping, and other air infiltration control measures on windows and doors, and installing thresholds in a manner that does not harm or obscure historic windows or trim.
- Thermal insulation, such as non-toxic fiberglass and foil wrapped, in walls, floors, ceilings, attics and foundations in a manner that does not harm or damage historic fabric.
- Removable film on windows (if the film is transparent and not significantly tinted or reflective), solar screens or window louvers, in a manner that does not harm or obscure historic windows or trim.
- Reflective roof coating in a manner that closely resembles the historic materials and form, or with materials that restore the original feature based on historic evidence, and in a manner that does not alter the roofline, or where not on a primary roof elevation or visible from the public right-of-way.
- Storm windows or doors, and non-historic wood screen doors in a manner that does not harm or obscure historic windows, doors, or trim.
- In-kind repair of existing windows, doors, including frames, or compatible replacement of windows, doors, and frames not visible from the public right of way. Compatible replacement means matching: the pattern and size of the openings; proportions of the frame and sash; configuration of windowpanes; muntin profiles; characteristics of the glass; and associated details such as arched tops, hoods, or other decorative elements.

- Repair of minor roof and wall leaks prior to insulating attics or walls, provided repairs closely resemble existing surface materials.

b. Interior Work

(1) Energy efficiency work within the building shell:

a. Thermal insulation in walls, floors, ceilings, attics, crawl spaces, ducts, and foundations.

b. Plumbing work, including installation of water heaters in areas that are not primary interior spaces (entrance halls, parlors, courtrooms, corridors, etc.).

c. Electrical work, including improving lamp efficiency.

d. Sealing air leaks using weatherstripping, door sweeps, and caulk and sealing major air leaks associated with bypasses, ducts, air conditioning units, switch plate insulation gaskets, and chimney balloons, etc.

e. Repair or replace water heaters in areas that are not primary interior spaces (entrance halls, parlors, courtrooms, corridors, etc.).

f. Adding adjustable speed drives such as fans on air handling units, cooling tower fans and pumps.

g. Install insulation on water heater tanks and water heating pipes.

h. Install solar water heating systems, provided the structure is not visible from the public right-of-way.

i. Install waste heat recovery devices, including desuperheater water heaters, condensing heat exchangers, heat pump and water heating recovery systems, and other energy recovery equipment not visible from the public right-of-way.

j. Repair or replace electric motors and motor controls like variable speed drives.

k. Incorporate other lighting technologies such as dimmable ballasts, day lighting controls, and occupant-controlled dimming provided that such changes do not alter the visual character of historic light fixtures in primary interior spaces (entrance halls, parlors, courtrooms, corridors, etc.).

(2) Work on heating and cooling systems excluding changes to primary interior spaces (entrance halls, parlors, courtrooms, corridors, etc.):

a. Clean, tune, repair or replace heating systems, including furnaces, oilers, heat pumps, vented space heaters and wood stoves.

b. Clean, tune repair or replace cooling systems, including central air conditioners, window air conditioners, heat pumps and evaporative coolers.

c. Install insulation on ducts and heating pipes.

d. Conduct other efficiency improvements on heating and cooling systems, including replacing standing pilot lights with electronic ignition devices and installing vent dampers.

e. Modify duct and pipe systems so heating and cooling systems operate efficiently and effectively, including adding return ducts, replace diffusers, registers, replace air filters, install thermostatic radiator controls on steam and hot water heating systems.

f. Install programmable thermostats, outdoor reset controls, UL listed energy management systems or building automation systems and other HVAC control systems.

(3) Energy efficiency work affecting the electric base load of the property excluding historic light fixtures in primary interior spaces (entrance halls, parlors, courtrooms,

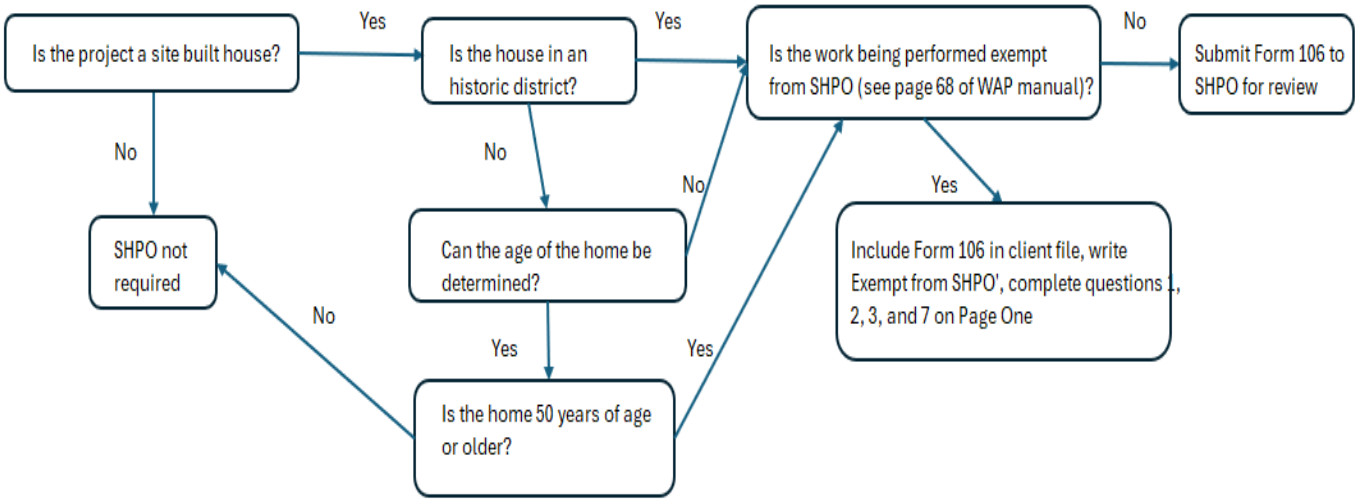
corridors, etc.):

a. Convert incandescent lighting to LED lighting.
b. Add reflectors, LED exit signs, efficient HID fixtures, and occupancy (motion) sensors.
c. Replace refrigerators and other appliances.

(4) Health and safety measures:

a. Installing fire, smoke, or carbon dioxide detectors / alarms.
b. Repair or replace vent systems on fossil-fuel-fired heating systems and water heaters to ensure that combustion gasses draft safely to outside.
c. Install mechanical ventilation, in a manner not visible from the public right of way, to ensure adequate indoor air quality if house is air-sealed to building tightness limit.

If you have questions regarding SHPO, use the decision tree below to determine the proper SHPO outcome or contact OEO.



5. <u>Inaccessibility</u>

While not rising to the level of deferral, some measures may not be able to be completed because of accessibility issues. For example, belly insulation for a manufactured home may not be possible if the clearance under the home does not allow for safe entry, movement, and exit. In this situation, the inaccessible areas of a dwelling, while included in the overall model in NEAT/MHEA would not be modeled for an upgrade. This would prevent the measure (belly insulation in this example) from appearing as an Energy Conservation Measure. Sub-grantees should contact OEO for a comprehensive review of the dwelling before engaging in these modeling practices and the justification for the modeling adjustments must be included in the client file.

6. <u>Tribal Organizations</u>

Low-income members of Native American tribes will receive benefits equivalent to the

assistance received by other low-income persons within the state.

7. Re-weatherization

- Dwellings may be re-weatherized fifteen (15) years after the initial completed weatherization date if the household is currently eligible and a current energy audit shows that cost effective work can be performed. For those clients who apply after their 15 year window has elapsed the new application date for the client must be at least 15 years and one day after the completion date of their prior weatherization.
- In the event of a declared federal or state disaster, weatherization crews may return to a unit reported as a completion to DOE. If the local authorities deem the dwelling unit(s) salvageable as well as habitable and the damage to the materials is not covered by insurance or other forms of compensation.

8. Previously Weatherized Dwellings

- Subgrantees to verify through LITT and DBA FACSPro database.
- Subgrantees to verify using Excel listing of previously weatherized dwellings since 1997 provided by OEO.
- During the assessment/audit of the dwelling, inquire of the applicant whether the home was previously weatherized.
- During the assessment/audit of the dwelling, inspect the attic for evidence of a posted insulation certificate indicating previous weatherization date and agency.
- During the assessment/audit of the dwelling, look for signs of previous weatherization such as a wrapped water heater or carbon monoxide monitor.

9. Fuel Switching

As outlined in WPN 23-6, South Carolina requires all instances of fuel switching that are completed with DOE funds to receive prior approval. Sub-grantees should submit these fuel switching requests to OEO. OEO will track and submit the requests to DOE for approval. All requests submitted to OEO must include the following:

1. Description of the proposed fuel switch (electric to gas, gas to electric, etc.)
2. Complete energy audit of the dwelling including the completed 501 Form, Recommended Measures Report, and Work Order
3. Relevant photos of the dwelling (appliances that will be replaced with the fuel switch)
4. Additional supporting documentation (doctor's note if switching is being done as a Health and Safety measure)

Fuel switching may be done as either an Energy Conservation Measure or Health and Safety measure. However, if done as an ECM, any ancillary costs must be included in the ECM evaluation (new utility line installation, upgraded electrical equipment, etc.). If done as a Health and Safety measure, review the latest Health and Safety Plan to be sure the measure is allowable. Sub-grantees should not proceed with the project until receiving written approval from OEO.

If fuel switching will be completed with alternative funds (LWAP, DES, etc.) the sub-grantee can proceed without approval from OEO or DOE. The overall project can have DOE funding (for example, DOE funds are used to air seal, blow insulation, and install smoke detectors), but if

the specific fuel switching will be completed with other funds (for example using LWAP or DES to switch from a gas pack to a heat pump) no prior approval from OEO or DOE is required.

C. Deferral Process

Deferrals may take place during any phase of the weatherization process, including but not limited to: Intake/eligibility, Pre-weatherization inspection/walkthrough, Energy Audit, In- progress weatherization activity. 'Drive By' deferrals are not permitted. If a dwelling is not deferred during the initial Intake/eligibility phase, an in-person visit to the dwelling to document the reason for deferral is required. The notes functionality in LITT must be utilized to document the reason a dwelling is deferred.

All clients must be notified in writing of the reason their home has been deferred. This can be done via the OEO provided Deferral Form 107 or a letter to the client from the weatherization agency. Form 107 or the letter must also indicate the actions the client can take to address the deferral issues and the timeline for completing those actions. Either document must be uploaded to LITT for all deferred clients. The reason for deferral must also be listed in LITT (outside the scope of weatherization is not an acceptable response).

Postponement of work is advisable until problems can be resolved and/or alternative sources of assistance are identified. Existing conditions under which a dwelling unit can be deferred until certain corrective actions occur include, but may not be limited to, the following:

1. **Deferral issues that would not be helped with additional funding:**
   - Building for sale or foreclosure.
   - Remodeling work in process that prohibits weatherization.
   - Health may be negatively affected by installation.
   - Refused installation of weatherization measure.
   - Illegal activity concerns.
   - Threatening or uncooperative behavior.
   - Refusal of ASHRAE 62.2 2016 ventilation requirements.
   - Refusal to remove unsafe combustion appliances.
   - Giving false information on application to qualify.
   - Refusal of any cost effective major measure.

2. **Deferral issues that could potentially be fixed with additional funding.**

   Sub-bullets indicate underlying issues the repairs are necessary to correct.

- Roof repair needed.
  - Mold/moisture
  - Sewage
  - Pest infestation
  - Prohibits effective weatherization
  - Structurally unsound
  - Other (explain in notes)
- Ceiling repair needed.
  - Mold/moisture
  - Sewage
  - Pest infestation
  - Prohibits effective weatherization
  - Structurally unsound
  - Other (explain in notes)
- Wall (interior and/or exterior) repair needed.
  - Mold/moisture
  - Sewage

  - Pest infestation
  - Prohibits effective weatherization
  - Structurally unsound
  - Other (explain in notes)
- Floor repair needed.
  - Mold/moisture
  - Sewage
  - Pest infestation
  - Prohibits effective weatherization
  - Structurally unsound
  - Other (explain in notes)
- Foundation or subspace repair needed.
  - Mold/moisture
  - Sewage
  - Pest infestation
  - Prohibits effective weatherization
  - Structurally unsound
  - Other (explain in notes)
- Plumbing repair needed.
  - Mold/moisture
  - Sewage
  - Pest infestation
  - Other (explain in notes)
- Electrical repair needed.
  - Prohibits effective weatherization (e.g., cannot insulate walls due to knob & tube wiring)
  - Safety hazard
  - Other (explain in notes)
- Cleanup or remediation required beyond scope of weatherization.
  - Mold/moisture
  - Sewage
  - Suspected Asbestos Containing Materials (indicate attic, walls, etc.)
  - Lead Paint
  - Pest infestation
  - Clutter restricting access to necessary areas
  - Other (explain in notes)
- Exterior drainage repairs needed e.g., landscaping or gutters
  - Mold/moisture
  - Sewage
  - Other (explain in notes)

When possible, subgrantees are encouraged to make referrals or collaborate with other programs. However, it is the client's responsibility to correct the condition(s) causing the deferral for weatherization services to proceed. When the conditions causing the deferral have been addressed, clients are asked to contact the subgrantee to reevaluate the home. If the home has been evaluated and weatherization work can proceed and the client's weatherization assistance application date is within the past year, they are then given top priority to receive services and are not placed back on the wait list. However, if more than one year has passed since their weatherization assistance application, they will need to re-certify. Regardless of the time elapsed, after the homeowner or Agency has completed the repairs needed, a new energy audit needs to be completed (both the original and new energy audit should be uploaded to LITT). Specific documentation regarding the reason for deferral is required in the client file ('beyond the scope of weatherization' is not an acceptable reason), and subgrantees are encouraged to collaborate with their state technical monitor to make decisions regarding deferral.

Vermiculite policy

When vermiculite (ACM) is suspected, in the home, the blower door test will not be conducted.
The house will be deferred until the customer can provide documentation that a certified professional validates the suspected material is either free of asbestos or has been properly remediated.

Using DOE WAP H&S funds for general abatement/removal/or replacement of asbestos siding, thermal system insulation (TSI) or Transite, or vermiculite is prohibited.

3. Client-Elected Termination of Services

a. Client No Longer Desires Services

A client may desire to terminate services after the work process has already begun. When this becomes apparent, it is first important to provide the client with time and education to make a measured and informed choice that is best for their home and household. Once they are certain they want to cease weatherization services, determine how much of the weatherization process has been completed in the home. Subgrantees should make every effort to never leave the home in a state that could cause danger, such as leaving a dryer un-vented or leaving a water heater without pressure relief. Once a decision to terminate weatherization services is finalized, conduct a QCI on the installed measures. Then fill out Form 111 indicating any potential hazards that exist (bath fans not installed, fire alarms not installed, etc.) and have the client sign the form indicating their election to terminate Wx services. Close the case out and pay the contractors for the work that has been completed. Make sure to pay them with LWAP money or another non-DOE source if available. Do not spend any DOE money on the home. Make notes in the client file regarding the situation.

b. Client Leaves the Dwelling

While rare, clients may move out of the dwelling before weatherization services can be completed. This situation would most likely occur if the client were renting the property. If this happens, cease all weatherization immediately unless doing so would leave the home unsafe for habitation. Initiate a Quality Control Inspection for the measures that have been installed. If the home passes the Quality Control Inspection, pay the contractor with LWAP funds, and document the situation in the Notes section of LITT. The unit will not count as a DOE completion.

c. Other Circumstances

There are many ways a client's choices can interfere with the completion of the weatherization process. Regardless of circumstance, subgrantees must make every effort to insure the home is not left in an unsafe state. If a situation that is not addressed in this document arises, contact OEO for guidance.

D. Energy Audit Procedures

1. Field Audit Introduction and NEAT/MHEA Introduction

The Field Audit is when data on the home is collected by the Energy Auditor or Quality Control Inspector and recorded on the South Carolina Data Collection / Final Inspection Form (form 501). The data can then be used (1) to determine cost effective retrofits for the customer's home; (2) to ensure that in- process work is being completed in a manner that meets the requirements of the program; and (3) to determine that all cost- effective work activities have been performed and the home has been completed in a quality manner.

For the Energy Auditor, the data being collected during the initial visit to the home will be used to determine the work to be performed. Most of the data will be input into the *Weatherization Assistant* (WA) software to provide a recommended measures list of cost-effective items to be installed. The two computerized energy audits within the WA software are, the National Energy Audit Tool (NEAT) for site-built homes and the Manufactured Home Energy Audit (MHEA) which is used for manufactured homes. The Audit

Procedures and Field Protocols section will discuss the data that is being collected (either visually or through diagnostic testing), where it should be entered into the computerized audits, and will point out situations where additional data will need to be collected by the Energy Auditor to input into the *Weatherization Assistant* software audits. Subgrantee employees and subcontractors conducting official Energy Audits on behalf of the sub-grantee are required to have at minimum a Building Analyst (BA), Building Analyst Technician (BA-T), or Building Analyst Professional (BA-P) certification.

For the Quality Control Inspector, the data being collected during the final visit to the home is a verification that the work has been completed and has met the acceptable standards stated in the SC Field Guide.

For the Energy Auditor, the QCI, and the contractor it is important to document the state of the dwelling prior to work, the work to be done, any issues or special circumstances, and the completed work with pictures. Clients may make changes to their home after weatherization work is complete. Therefore, it is imperative that agency auditors and monitors document the state of the dwelling after weatherization is complete.

The Quality Control Inspector must ensure that the workmanship by the installers has been done in a professional manner; that the energy audit software inputs are accurate; that the customer has had all their questions about the work answered, and that no cost-effective measures were missed or not addressed.

In addition, the Quality Control Inspector must verify that applicable documents are completed and in the customer's file, verify that costs for Incidental Repair Materials (IRMs) and Health and Safety measures did not exceed the limits of expenditure for the designated funding source, and if applicable, document with pictures and in writing any deficiencies that must be addressed to allow the weatherization work to pass the inspection. Referencing other documents for guidance regarding limitations of expenditures for LWAP and DOE funds is recommended. The Grantee/Subgrantee Agreement is one such document.

As you can see, there are many critical steps in the Field Audit process where useful and necessary data can assist the work, the workers, and the customer in achieving a cost-effective and quality completed job performed on the home.

2. **Single Family Buildings**
   - National Energy Audit (NEAT) approved August 26, 2024.
   -
3. **Manufactured Housing**
   - Manufactured Home Energy Audit (MHEA) approved August 26, 2024.
   -
4. **Multifamily**
   a. **Addressing Multifamily Weatherization**

      DOE requires grantees to ensure weatherization services are provided to eligible persons that live in all housing types. The process for weatherizing multifamily buildings is outlined in this section.

b. **Definitions**

There are three types of multifamily housing. It is important to understand the type of housing as there are differences in the eligibility and audit requirements of each type.

1. Two-Four Unit Buildings – As the name implies, these are residential buildings that contain between two and four units.
2. Small Multifamily or Low-Rise Multifamily Buildings – These are residential building that contain between five and twenty-four units and are three stories or fewer in height. OEO will use the term Small Multifamily in this document, but when reviewing DOE correspondence, note the Low-Rise Multifamily term may also be used.
3. Large Multifamily Buildings – These are residential buildings that contain 25 or more units or are more than three stories in height.

c. **Income Eligibility Guidelines**

Subgrantees should review the HUD and USDA lists of eligible multifamily buildings. Potential clients in buildings on these lists have been determined eligible for other means-tested programs and are thus deemed eligible for WAP. For buildings not on these lists, the income requirements as the same as site built single family and manufactured housing (200% of the Federal Poverty Level). However, each unit does not have to be eligible for the entire building to be weatherized.

- For Two-Four Unit Buildings, at least 50% of the units must be income eligible.
- For Small Multifamily Buildings, at least 66% of the units must be income eligible.
- For Large Multifamily Buildings, at least 66% of the units must be income eligible.

d. **Documentation of Income**

If the building is on the HUD or USDA list, the subgrantee does not need to collect income information from. However, a screenshot or print out of the building's presence on the HUD or USDA list must be included in the client file.

If the building is not on the HUD or USDA list, income information must be collected for each unit being weatherized. For easy reference. subgrantees should include notes in the client file and DBA detailing the percentage of units in the building that are income eligible.

e. **Prioritization of Multifamily Buildings**

Subgrantees must prioritize multifamily buildings according to DOE requirements with special consideration given to the elderly, persons with disabilities, families with children, high residential energy users, and households with high energy burdens. For multifamily buildings, the entire building will be awarded the priority point total of the unit with the highest point total. See below for examples.

Example 1:

Two-Four Unit Building has four units. One unit has 20 points, one unit has 40 points, one unit has 60 points, and one unit has 80 points. For prioritization purposes, the Two-Four Unit Building has 80 points.

Example 2:

Small Multifamily Building has 12 units. Six units have 20 points. Five units have 40 points. One unit has 60 points. For prioritization purposes the Small Multifamily Building has 60 points.

f. **Auditing Tools**

Two-Four Unit Buildings align with single family auditing tools and protocols. The

standard NEAT tool in Weatherization Assistant can be used. No further auditing approval is required when dealing with this multifamily building type.

For Small Multifamily Buildings, Subgrantee must provide a **preliminary assessment** of the building and submit the request to OEO. OEO will then review/submit the plans and request permission from the DOE Project Officer to proceed.

The preliminary assessment should include the following:

- Identify the certified multifamily Energy Auditor(s) and QCI(s).
- Identify the proposed multifamily energy audit program.
- Document how tenants will be notified of the WAP and the Health and Safety requirements (lead, mold, radon, and other health and safety issues).
- Notification to the landlord and tenants that the rent for the weatherized home cannot be increased for a period of at least one year.
- Notification to tenants of the owner contributions in the form of rebates and rent reductions when applicable.
  - Notification to tenants of the formal complaint process.
- A commitment letter from the property owner/landlord showing the possible owner contributions:
  - If owner/landlord is responsible for paying heating costs or the units are master- metered, owner/landlord may be required to contribute up to 15 percent of the total weatherization work.
  - If the tenant is responsible for paying heating costs, the owner/landlord may be required to contribute up to 10 percent of the total weatherization work.
  - In addition, if the heating/cooling systems are being replaced, the owner/landlord must contribute 25 percent of the replacement cost of the heating/cooling system.
  - The contribution may be met in the following ways:
    - Cash contribution.
    - Rebate or rent reduction (rebate cannot exceed one year).
    - Donation of weatherization materials.
    - An exception is made for owners/landlords who themselves are eligible for the weatherization program. These owners are not required to make a contribution.

Large Multifamily Buildings will not be weatherized in South Carolina at this time.

Subgrantees are not authorized to use the Regional Priority List (see Section VI.D.11) for any type of multifamily dwelling.

5. Property Documents to be covered during Preliminary Process

- LITT Application for all eligible households.
- Homeowner/Fuel Release Form #101 for all eligible households.
- Detailed scope of work highlighting the proposed weatherization measures and any energy problem areas.
- Matching funds, if applicable for weatherization work.
- Description of other funds the owner may be using for other repair and/or renovations.

- Project schedule.
- Net energy savings / benefits potential. This is based upon historical or expected energy savings or benefits, prior to the actual audit being completed on the building.
- The Energy Audit must be completed before Work Orders can be generated and assigned to contractors. A separate Work Order needs to be created for each contractor/subcontractor that is assigned any work on a dwelling that is being weatherized; as well as a separate Work Order for a crew if the Agency is crew based. Each Work Order for a contractor/ subcontractor must be signed, dated, and include the contractor's license number, excluding the crew work order.

6. Customer Education

a. Customer and/or Building Owner Engagement During the Initial Energy Audit

The Energy Auditor has arrived at the scheduled time to perform the audit and diagnostic testing of the home for weatherization activities. However, there are steps that must be completed prior to getting tools and equipment out of the vehicle. This initial customer engagement should address the following:

- Explain the weatherization process to the customer. The following is a limited list of questions the customer may have or that should be discussed with them.
  - What things will be tested by the Energy Auditor?
  - What will happen after the initial Energy Audit has been completed?
  - What are the funding sources that are making this work possible?
  - How did the customer's household get chosen to have this work done?
- Acquire necessary signatures on required documents (if not already done by Intake staff) and provide the customer with valuable educational information about their home. These documents and information will include:
- The Homeowner, Fuel Release Agreement Form (form 101);
- The State Historic Preservation Office Project Review Form (form 106), if necessary, for homes over 50 years old;
- The Lead Hazard Education Form (form 103A) and EPA's *Lead-Safe Certified Guide to Renovate Right*, if necessary, for homes built before 1978;
- The Certified Renovator Compliance Form (Form 103) for homes built before 1978 (many Weatherization activities have the potential to disturb lead based paint. If the home was built before 1978 the Agency should include this form for the safety of the client, Agency employees, sub-contractors, and neighbors. Weatherization work that that may disturb lead based paint includes, but is not limited to, door and window repair, any demolition or construction, Air sealing, ASHRAE instillation, and floor and wall repair);
- For homes built before 1978, it should be assumed that lead paint is present and lead safe practices must be followed;
- The Radon Informed Consent form (form 108) and EPA's *A Citizen's Guide to Radon*.
- Gather preliminary information about the occupants, the home, and their energy usage:
  - The Client Interview form (form 100) should be completed;

  - If previous fuel consumption data is available, discuss with the customer their previous usage. Ask the customer if they feel that their fuel consumption is high and what they feel may be the cause.
  - Look for indications of existing health or breathing issues that the occupants may have that can become exacerbated with dust from insulation;
  - Look for potential issues with pets. Ask the customer if the pets can be restrained while the Energy Audit is being performed.
- Make the decision that the project cannot move forward until certain items that the Auditor has visually identified as being a Health and Safety issue for themselves,
  the workers, and for the customer have been addressed and corrected. This may occur in rare instances.
- Look for deteriorated walls (potential for lead), sewer issues, roof leaks;
- Be aware of mold, rotting wood, unsanitary conditions;
- Complete the Deferral form (form 107) or send the client a letter specifying the reasons for deferral, the actions that can be taken to address the deferral, and the timeline for taking those actions. Form 107 or the client letter outlining the reason for deferral must be uploaded to LITT for each deferred client.

It is important to make a good impression with the customer regarding the work to be done, the workers, the providing agency and the Energy Auditor. Throughout the initial Energy Audit of the home, the Energy Auditor must be honest and feel comfortable discussing issues with the customer. It is not easy to tell a person that "they have an infestation of roaches" or "that their cookstove is so greasy that it is a fire hazard" or there are other Health and Safety items, but it must be done in a respectful and considerate manner. Throughout the initial Energy Audit process, the customer must be made aware of situations when a Health and Safety issue has been identified. Items such as fuel leakage, an unsafe heating appliance, or unsafe electrical wiring must be brought to the attention of the customer, immediately.

After all diagnostic testing, visual inspecting, and measuring of the home has been completed, the Energy Auditor must discuss with the customer what was found and what weatherization retrofits can be accomplished on their home. Discuss with the customer the expected work that will be performed on their home and what the workflow will be.
Answer any questions that the customer may have about the following:

- Who will be contacting them?
- Estimated time frame for someone to be contacting them.
- Estimated length of time for the work to be completed.

Acquire signatures on additional documents that are needed. These documents include:

- The Weatherization Services Agreement (form 105)
- It is important to set reasonable expectations for the client. Be sure appropriate weatherization measures are identified on the form and explained to the client if necessary.
- The Mold and Moisture form (form 102);
- The Unvented Space Heater – Site Built or Manufactured Home forms

(form 104A or 104B),
- And The ASHRAE 62.2-2016 Notification form (form 109).

b. Customer Engagement during the Work Process (Contractors / Crew Leaders)

The Contractor / Crew should provide the Customer with information that is occurring on their home. It is not possible or feasible to discuss everything that is being accomplished, but it is necessary to relay the information that "rooms will be sealed off while we work Lead Safe insulating the walls" or "we will have the power off while we connect the new exhaust fan".

The Customer should receive all Owner's Manuals for items installed into their home. This includes, but is not limited to:

- Smoke Alarms
- Carbon Monoxide Detectors
- Heating Appliances
- Thermostats
- Water Heater
- Refrigerator,
- Light bulbs,
- Exhaust Fans

When working Lead Safe, the Contractor / Crew Leader must ensure that the Lead Certified Renovator form (form 103) is completed. Any other necessary documentation should also be completed and submitted as part of the customer file, such as pictures of wipes after clean-up, pictures of the Lead Containment (barriers, signs, covered belongings and floors, work area entry), and all pictures should include project number.

When insulation is added to a home, it is necessary to leave original copies of the Insulation Certificate (form 200). This indicates where and how much insulation was installed. The crew/contractor makes two originals and leaves one original affixed to the electrical panel or the attic dam the day the work is completed. The second original is turned in with the paperwork on the job. From that job packet one is kept in the customer file, and another is given to the QCI to give to the customer for their records at the final QCI. At the end of the project, complete the CAZ Worst Case Test (T16) of the Data Collection / Final Inspection Form to ensure that any combustion appliances in the home are operating safely. Test for spillage, Carbon Monoxide – Air Free, and Carbon Monoxide – As Measured for each combustion appliance.

If an exhaust system was installed to meet the ASHRAE 62.2 requirement, complete the Ventilation and Your Home (form 110) and provide to the customer. A copy of this form should be included in the Customer's File. This form will provide information to the customer about the new fan, such as Fan Type, Location, Operating Time, Ventilation Rate, Type of Controller, and the Location of Controller and Service Switch. Any warranty information can be noted and should be left with the customer.

Before leaving, ask the customer if they have any questions regarding the work that was completed. Discuss with the customer about the importance of the work that was completed along with measures that they can do to preserve it. Clients shall be instructed regarding replacement times for

furnace filters, how smoke and carbon monoxide detectors work, the operation of any exhaust fans that were installed, and the operation of any new appliances (furnace, water heater, refrigerators) as a part of the Client Education portion of South Carolina's Weatherization Assistance Program.

c. Customer Engagement during the Quality Control Inspection

The Quality Control Inspector will discuss with the Customer their experience with the Weatherization Assistance Program. This experience started with the Intake component and extends to the end of the installation of materials component and will be documented in the Client Review document (form 400) that is filled out. When feasible, the Quality Control Inspector should not not the same individual as the Energy Auditor. In addition, the Quality Control Inspector must not have performed any of the work as a Contractor / Crew technician. The Quality Control Inspector should not be reviewing their own work (whether it is the Energy Audit or actual retrofits on the home). In some instances, the Quality Control Inspector is a third-party contractor.

The Quality Control Inspector will re-test, re-diagnose, and possibly, re-measure the home to ensure accuracy in the data collected and the invoice(s) from contractors / crew. The Quality Control Inspector should discuss with the Customer the results of the inspection and if there are callbacks or additional work that will be needed. The Quality Control Inspector should also discuss with the Customer any measures that they can continue to do or can begin to perform to make the home comfortable and safe. These measures may include changing the furnace filter regularly, along with the size of the filter, try to use LED light bulbs as much as possible when old bulbs need replaced, clean the lint from the dryer after each load, or set-back your heating unit thermostat 3^0 to 5^0 when you are away from home or sleeping. Again, this educational component is a part of the Client Education portion of South Carolina's Weatherization Assistance Program.

7. Energy Audit / Data Collection

All data must be collected to complete the Data Collection Form 501. This will include Table A (General Data), Table B (H&S/IRM) and then Table C (Photo Checklist) before starting with AIR/DUCT LEAKAGE & VENTILATION T1 – Blower Door Test Data and ending with COMBUSTION APPLIANCE DATA T19 – Dryer.

However, it is highly recommended that the Energy Auditor determine the most effective method of collecting and retrieving the data for herself/himself by re-arrangement of the tests. For example, starting with COMBUSTION APPLIANCE DATA T16 – CAZ Worst Case Test, before T15 - Heating Systems and collecting data on all the appliances. OR, collecting Shell Data (especially T9 - Attics) before performing the T1 - Blower Door Test (to ensure that there is no vermiculite present in the Attic).

Adjustments and rounding data:

OEO understands that some measurements and data may need to be adjusted to more accurately record the actual conditions of the dwelling and its components. The only items that can

be adjusted are the derating of insulation, rounding of the amount of time lights are being used per day, and averaging the depth of the crawl space when the crawl space is not level. All of these adjustments require pictures, if applicable, and a narrative explaining the thinking used to arrive at the final data. Other items in the dwelling need to be recorded accurately based on the data collected by measurements, data plates, databases, etc… Appliances such as, HVACs need to be modeled based on verifiable data in a like-new status. This status needs to be justified with pictures of data plates, databases, internet searches, etc..

a. Updating Cost Libraries

Because of regional variations, inflation, and other factors, the cost libraries in NEAT/MHEA may not reflect the actual costs an agency incurs when providing weatherization services. If an agency needs to increase or decrease the cost of a measure, they should send OEO justification for the revised cost. This can include detailed pricing from invoices or work orders from the contractors an agency uses or pricing from a local big box store database. Please contact OEO with specific questions regarding other items that can serve as justification for price adjustments.

b. Cover Page: Priority List Checklist – Region 1 (Single Family and Manufactured)

Review the questions for site-built and manufactured homes to determine if the dwelling is eligible for the Regional Priority List (RPL). If the dwelling is not eligible for the RPL, an energy audit via NEAT or MHEA in the Weatherization Assistant must be used. If the dwelling is eligible for the RPL, see the RPL section of this document for policies and procedures.

c. TABLE A – GENERAL DATA

Record the data being requested regarding, Client Name, Site Address, Phone #s, Auditor, Audit Date, Year Built, # of Bedrooms, # of Occupants, # of Full Baths, # of Conditioned Floors, Area of Conditioned Floors (ft^2), Volume of Conditioned Space (ft^3), and Conditioned Above Grade Footage (ft).

Check the appropriate box for House Type, Foundation Type, Attached Garage, Heating System Location, Heating Fuel, Domestic Water Heater Fuel, A/C Existing, Smoke Alarm(s) needed, Carbon Monoxide Alarm(s) needed, and the Indoor Ambient Carbon Monoxide level.

Note that when selecting Housing Type, for modeling purposes modular homes installed on a permanent foundation are site-built homes.

d. TABLE B – H&S / IRM

Enter (Y) Yes or (N) No for the items that may involve Health and Safety issues or may be an Incidental Repair Measure. The measures include Lead, Presumed Asbestos Containing Material/Vermiculite, Unsafe Electrical Junctions, Unvented Heater (Primary or Secondary), Mold/Mildew, Structural Problems, Biological Hazard, Pest Intrusion, Combustion Venting Issues, Gas Leak (any Fuel Leak), Plumbing Leak, Roof Leak, Standing Water, Open Sump Pit, Bare Dirt Floor, Biological Hazard, Pest Intrusion, Combustion Vent Issues, Water Staining, Humidifier in Use, and Inaccessible Areas.

Entering Incidental Repair Measures (IRM) in LITT

Any IRMs recorded in LITT must be entered via the 'Measure' button via the Housing Item the IRM is associated with. There is one exception to this rule that will be discussed later in this section. To enter all other IRMs into LITT, follow the steps outlined below.

1. Click the 'Measure' button on the appropriate Housing Item screen.
2. Click the 'New' button.
3. Use the radio button to select either 'WAPLink Measure' or 'Manual Measure'.
    a. If 'WAPLink Measure', use the dropdown menu to select the appropriate measure.
    b. If 'Manual Measure' is selected, type the measure in the 'Measure Description' field. Be sure to use the prefix 'IRM' so it can easily be identified on the audit.
4. Check the 'Include in SIR' checkbox.
5. Check the 'IRM' checkbox.
6. Enter the IRM cost in the 'Cost' field. The total cost can be entered in the 'Cost' field. The cost does not have to be broken down by material and labor cost.
7. Enter the energy savings of the IRM in the 'Energy Savings' field. This value must always be '0'.
8. Enter the Energy Conservation Measure the IRM will be related to in the 'Connected to ECM' field.
9. Click the 'Save' button.

The one exception to this rule is Air Sealing as the Air/Duct Leakage Housing Item does not have a corresponding 'Measure' button. To enter an IRM that is related to air sealing (for example, an attic hatch) follow the previously outlined steps and enter the measure in the 'Wall' Housing Item screen.

e. TABLE C– WEATHERIZATION READINESS

Check the box if the dwelling received Weatherization Readiness or other funds to prepare it to be weatherized.
Indicate the area of the dwelling where the repairs were made.
Indicate the funds used to prepare the dwelling for weatherization (WRF, Dominion, or Other).
Enter the date the readiness process was completed.

f. TABLE D – IDENTIFIED ISSUES /COMMENTS / H&S CONCERNS

Enter any information the contractor, subsequent energy auditors, or quality control inspectors should know about.

g. AIR/DUCT LEAKAGE & VENTILATION T1 Blower Door Test Data
Setting an Air Sealing Target

See Air Sealing Process below for setting an achievable air leakage target. Use an achievable target given the state of the individual house, the level of air sealing details gathered by staff during the initial assessment, plus the actual effectiveness of the contractor's air sealing ability.

Air sealing installation crews shall utilize a blower door to guide their efforts. When the target is easily reached, additional air sealing is encouraged. When air sealing efforts fail to reach the target and the allotted cost for the measure is exhausted, monitoring the time spent by the workers and tracking the resulting infiltration reductions, provides the data to determine an appropriate stopping point.

The SIR for general air sealing or window sealing does not have to meet the typical standard of 1.0 to be paid for with DOE funds. General air sealing or window sealing can be paid for with DOE funds regardless of the SIR provided the cumulative SIR of the dwelling is 1.0 or greater. See matrix for guidelines on air, duct, and window sealing.
Air Sealing Matrix (matrix assumes cumulative SIR is 1.0 or greater)

	Air Sealing	**Duct Sealing**	**Window Sealing**
SIR greater than or equal to 1.0	Use DOE or LWAP Money	Use DOE or LWAP Money	Use DOE or LWAP Money
SIR greater than or equal to 0.5, but less than 1.0	Use DOE or LWAP Money	Use LWAP Money	Use DOE or LWAP Money
SIR less than 0.5	Use DOE or LWAP money	Measure cannot be installed	Use DOE or LWAP Money

- Enter the Air Sealing Target. This number should be determined after diagnostic testing is conducted incorporating all relevant circumstances found during the assessment.
- Enter (Y) Yes or (N) No if the test will be a Depressurization test.
- Set up the Blower Door and the house for winter conditions. The Blower Door should be in an exterior doorway that is not blocked. The basement door should be opened if the subspace is used as a living area or is a heated (conditioned) part of the home. Enter (Y) Yes or (N) No if the Basement is included in the Envelope.
- Record the indoor and outside temperatures.
- Allow the digital gauge to determine the Baseline pressure within the home. With the DG- 700 as an example, insert the hose on the Reference Tap (bottom tap) on side A and the other end of the hose to the outside, approximately 5 feet away from the fan's air flow. Click on the BASELINE button and then the START button. The side B will start showing the number of seconds the BASELINE is operating. Usually, 60 to 90 seconds is adequate.
  Click on the ENTER button and record the Baseline pressure on the A side. The gauge is ready for operation.
- Insert a separate hose from the Input Tap (top tap) on side B and the other end of the hose to the tap on the fan assembly. Determine if a ring will be needed or if the fan will operate in the OPEN configuration. See the TEC Blower Door Instruction manual for more details about the need to add rings onto the fan.
- For a Depressurization Test, turn on the fan and take the pressure up to about 25 pascals (on the A side). Perform a walk-through of the home to ensure that no problems exist (dropped ceilings are not about to fall, old plaster is not falling, all windows have been closed, etc..) and to identify leakage sites. A thermal imaging camera can be useful in these efforts. Record any leakage sites that have been identified along with any issues concerning the home that may be found.
- For a Pressurization Test, the walk through of the home is not necessary since any potential leakage site would have air movement going out of the home.
- Ramp the fan up to -50 pascal (or to a close proximity of +/- 5 pascal) on the A side. Record the

House Pressure (on the A side) and the Fan Pressure (on the B side). A computer application will be needed to convert the House Pressure and Fan Pressure to achieve the CFM@50 pascal reading.

- Or you can set the MODE button to read PR / FL@50, then the B side will give you the CFM@50 pascal reading. Even if the A side goes above or below -50.0 pascals, the B side will still be accurate as the CFM@50 value.
- Perform the above test with the Basement Door Closed and with the Basement Door Open. If there is little change between the CFM@50 for the two tests, the Basement should be considered within the Envelope.

h. AIR SEALING CHECKLIST

OEO offers this list as a general guide to air-sealing. It has been constructed with cost-effectiveness in mind for maximizing CFM reduction in an average Weatherization-eligible dwelling. It can serve as a checklist of issues to look at or the order in which air-sealing should be addressed. Each house is unique and may have individual circumstances that alter the order of importance for the lists provided. Budget and customer concerns may also guide the air-sealing process for each dwelling. We recommend this as a guide to air-sealing and not a definitive list. A detailed documentation of the tasks completed in written and picture form, in particular contractor pictures of inaccessible spaces, should be included on the 501 Form and photo upload.

It is important to show a reduction in CFM's where possible. Caulking and weatherstripping are two simple and effective air-sealing techniques that offer quick returns on investment, often one year or less. Reducing the amount of air that leaks in and out of a dwelling is a cost-effective way to cut heating and cooling costs, improve durability, increase comfort, and create a healthier indoor environment.

Perform air leakage testing and evaluation before beginning air sealing or duct-sealing work. Always evaluate ventilation and perform combustion-safety testing as a part of air sealing a building. However, don't limit air sealing by ventilation requirements, but only by the cost effectiveness of air-sealing efforts. See "ASHRAE Standard 62.2–2016 Ventilation" in the SWS.

Note: See Air Sealing Matrix in section "h" and refer to The SWS and The South Carolina Field Guide for information on Technical and programmatic aspects.

(1) Air Sealing Best Practices

- Blower door guided air sealing is the standard. Contractors should own, or have access to, a blower door and know how to use it. The blower door should be used in conjunction with an infrared camera for best results.
- If an infrared camera is not available, puffers/smokers are recommended for finding trouble spots that are not easily identifiable by the naked eye or feel.
- Chimney ballons are approved for air sealing the flue, and switch plate insulation gaskets are approved for air sealing sockets and switch plates.
- Following the air sealing matrix can simplify the process and help standardize the process for contractors/crews and across agencies.

Please refer to section VII. Subsection v (t-11 Windows) for more detailed information on window sealing.

(2) Air Sealing Process

- To ensure uniformity across the network and get better results for weatherization recipients OEO has instituted the following guidelines for the air sealing process. A new Air Sealing section has been added to the 501 to execute this new process. There are now mandatory air sealing targets and required additional air sealing opportunities that must be documented on the 501 and in LITT with pictures. All this information will be given to the contractor in the contractor packet. OEO has also added an $800 cap on Air Sealing. If the air sealing requires more funds the agency will need to contact OEO for approval. If the dwelling's initial blower door reading is 1000 cfm, or less, agencies should bypass the "mandatory" air sealing measures for the dwelling type; and proceed with air sealing on a case-by-case basis taking into consideration the health and safety of the client.

- **Site-Built:** It is now mandatory for the top plates and bottom plates on site-built homes to be sealed and for weather stripping to be applied to windows labeled loose or very loose and doors labeled loose. Auditors must document all air sealing opportunities including the top plates, bottom plates, and all identified opportunities with pictures. For dwellings with preexisting blown insulation during the energy audit the Auditors must move the insulation back to check in multiple locations that the top plates are properly sealed and record this with pictures. The Auditor must also identify any remaining air sealing opportunities, a minimum of 4, on the 501 Form air sealing section and include pictures. This information is then given to the contractors in the contractor packet.

- **Manufactured:** It is now mandatory for the marriage wall and plumbing penetrations to be air sealed and for weatherstripping to be applied to windows labeled loose or very loose and doors labeled loose and documented with pictures. The Auditors must also identify any remaining air sealing opportunities, a minimum of 4, on the 501 Form air sealing section and include pictures. This information is then given to the contractors in the contractor packet.

- If a dwelling possesses both manufactured and site-built components you would need to follow the corresponding rule for each component, if applicable.

- **Targets:**

EA CFM's	Reduction Target
Up to 1500 CFM	5%
1501 to 2000 CFM	10%
2001 to 3000 CFM	15%
3001 to 4000 CFM	20%
4001 to 5000 CFM	25%
5001 to 6000 CFM	30%
6001 CFM & UP	35%

- The additional targets should be selected with the blower door guided method. During the EA process the auditor should leave the blower door running and walk around the dwelling to identify the largest air infiltrations. The use of infrared

cameras and smokers is encouraged, as well as feeling for moving air with a naked hand. While 4 additional opportunities are required that does NOT mean that Auditors should stop at 4 additional air sealing opportunities. It is the goal of the weatherization program to air seal homes as much as possible. Weatherstripping is a part of air sealing/window sealing and a cost-effective way to reduce the CFM reading on dwellings. QCI's should be checking the mandatory and identified air sealing opportunities to make sure that they have been properly repaired.

(3) Contractor Packet

Agencies are required to convey information to the contractors in a Contractor Packet. The minimum information that must be included in this communication are the complete 501 Form, the complete Work Order, and the complete air sealing document with pictures (which is now a part of the updated 501 form). This information can be relayed via paper copies or electronic means. More information is encouraged. This could include additional photos, notes about unique issues, client preferences or anything that might deviate from the normal process.

i. T2 Exhaust Ventilation

Calculating for the Ventilation needs of the home is required to follow ASHRAE 62.2 – 2016 and to be performed:

(1) during the Initial Energy Audit;
(2) during the QCI (1);
(3) and, during the QCI (2) follow-up, if applicable.

Use the ASHRAE 62.2-2016 application in the RED CALC. A printout of the results from the Energy Auditor and the Quality Control Inspector are to be included in the customer file.

Using the RED CALC Free (or the RED CALC PRO) the following information must be entered.

- Is the unit being tested as a New or Existing Construction? For WAP units, the unit is an Existing Construction.
- Is the unit Attached or Detached from other dwelling units?
  If the unit is Attached to other dwelling units, then the tool will ask if the units have only walls in common with other dwelling units.
  - If NO, then the Infiltration Credit will not be applicable.
  - If YES, then the area of common walls in square footage needs to be calculated.
  - The area of the envelope that adjoins a garage needs to be calculated in square feet.
  - The area of all envelope surface area for the dwelling unit (not included in 'Area of common walls' or 'Envelope area adjoining garage') needs to be calculated in square feet.
  - The tool will then calculate the square footage of the envelope for the designated unit as a percentage of the Total Envelope Area. This percentage will be the amount of the Infiltration Credit allowable for the designated unit.
- If the unit is Detached from other dwelling units, the Infiltration Credit may be used. The Infiltration Credit will be using the height of the dwelling and the Blower Door reading.
- Determine the Closest Weather Station (country, state, and city) from the drop-down boxes.
- Calculate the square footage of the floor area. This is defined as all enclosed above- and below grade finished areas suitable for year-round use. Include basements if they are deemed to be within the thermal/pressure boundary.
- Determine the number of occupants. This is the number of bedrooms plus 1 or the actual number of occupants, whichever is greater.
- Determine the height of the dwelling from the highest conditioned point in the house to the

lowest above grade conditioned point in the home. Note that if the foundation is within the pressure boundary, the bottom edge of any door or window that opens directly to the outside is considered the low point from which the height is calculated. This is true even if the door is cutout from the earth and technically below grade. Do not calculate an average if part of the home is one story and another part is two story.

- Determine the Measured Leakage @50Pa. If this calculation is being performed during the Initial Energy Audit, this is the Blower Door Target Reduction value (the Initial Blower Door reduced by 30%). The Energy Auditor should be calculating the need for ventilation within the home based upon the final expected weatherized configuration of the home.
- If the home is Existing, click and open the USE LOCAL VENTILATION ALTERNATIVE COMPLIANCE area. This allows the input of existing exhaust equipment (in kitchen and bathrooms) along with a deduction for having an openable window in these rooms. Click the box next to Kitchen and enter the number of Bathrooms.

NOTE: ASHRAE 62.2 does not require half baths without a tub or shower, to be ventilated. Do not include their possible exhaust flow in the RED CALC calculation. However, it is important to inventory the exhaust flow of any exhaust fans in half baths onto the Data Collection form since they may be used to comply with the code. This will be explained later.

- Measure and record the fan flow (in CFM) of each exhaust fan. Use an Exhaust Flow Meter and the Digital Gauge to measure the pressure and flow. The Exhaust Flow Meter has a chart on the side that can be used to determine the CFM flow based upon the pressure and the sliding door opening on the meter.
  - Using the DG-700 as an example, the A side can measure PR (pressure). This can be set using the MODE button. Then the DEVICE button is pressed until you have the EXH (exhaust), and the sliding door is determined by the CONFIG button as A1, B2, or C3.
  - Insert the hose onto the Input Tap (upper tap) of the A side. Achieve a pressure reading on the A side and correspond that pressure reading on the chart along with the door opening, to determine the exhaust flow.
  - Or the auditor can use excess hose and a tee connection and construct a hose that can be connected to the Exhaust Flow Meter and then runs to both the A side and the B side of the gauge. Using this method, the gauge will provide the Pressure and the Flow of the Exhaust equipment.
  - Again, using the DG-700 as an example, the A side can measure PR (pressure) and the B-side can measure FL (flow). These different readings can be set using the MODE button. Then the DEVICE button is pressed until you have the EXH (exhaust), and the sliding door opening is determined by the CONFIG button as A1 (E1), B2 (E2), or C3 (E3).

Testing the Kitchen exhaust fan can be a little difficult in some instances. A template (made of thin plywood, composite board, foam board or cardboard) can be designed to cover the entire bottom of the range hood. The size of the template (30” x 17.5”) will fit many different range hoods, however, it would be beneficial to have a smaller section available for a range hood that may be longer than 30”. A square opening approximately (8.5” x 8.5”) is cut into the center. The template is held up against the range hood with the fan in operation, and the Exhaust Flow Meter is pressed against the template covering the square opening. A reading can be achieved of the range hood exhaust flow.

NOTE: Please keep in mind, the ASHRAE 62.2-2016 code states “If there is no exhaust device or if the existing device can neither be measured nor rated (some documentation of the fan’s label or other paperwork that states the rated cfm airflow), the exhaust device air flow shall be assumed to be

zero" (section A3.1)

Once all the exhaust fan flows and openable windows have been measured and recorded, the *Required Mechanical Ventilation Rate* will be calculated in the Dwelling-Unit Ventilation Results section of the RED CALC application. Any *Required Mechanical Ventilation Rate* less than 15 cfm does not require the installation of an ASHRAE system.

To determine how tight to get the home and at what CFM@50 level would require the installation of an exhaust appliance, the Dwelling-Unit Leakage Rate Solver can be used. Enter the value of 15 into the Target Mechanical ventilation rate and the application will provide the Corresponding Leakage CFM@50 Pa.

This is a very important aspect of the RED CALC Free and PRO versions, because the Energy Auditor can run the calculation and determine that the home may not need any exhaust appliances installed. But if the home was being air sealed, the Contractor / Crew would know what CFM@50 level would require an exhaust appliance. As the Contractor / Crew is performing their work, they can realize that they may tighten the home more than the 30% reduction and may be in the range of possibly requiring an exhaust fan. It is best to know this before attic insulation is installed, rather than having to install an exhaust fan after the insulation has been installed.

If the Required Mechanical Ventilation Rate for a home was found to be 20 CFM and a measured existing fan in a bathroom was measured with the Exhaust Flow Meter as having an exhaust of 90 cfm and a sone rating of 1.0 or less, a control, either external or internal to the fan, can be installed and set to achieve the necessary 20 CFM of continuous exhaust. In the Dwelling-Unit Ventilation Run-Time Solver, enter Fan Capacity of 90 CFM, the application will show the Fan run-time per hour of 13 minutes. In this case, a control is needed to be installed on the bathroom exhaust fan so that it will operate intermittently for 13 minutes every hour.

To explain the reason that all exhaust fans within a home should be inventoried with their exhaust flow, let's use the previous example. If the *Required Mechanical Ventilation Rate* for a home was found to be 20 CFM and a measured fan in a half bathroom was measured with the Exhaust Flow Meter as having an exhaust of 40 cfm. In the Dwelling-Unit Ventilation Run-Time Solver, enter Fan Capacity of 40 CFM, the application will show the Fan run-time per hour of 30 minutes. In this case, the exhaust fan in the half bathroom would bring the home into compliance with ASHRAE 62.2 -2016 with only having to install a control switch and not having to install an additional exhaust fan.

The Contractor / Crew Leader shall complete form 110 (Ventilation and Your Home) and provide a copy to the Customer and insert a copy into the Customer's File. This form will document information about the fan, the operating time, the speed setting, the type and location of the controller and the location of the service switch. This form complies with ASHRAE 62.2 – 2016.

j. T3 Zone Testing PA WRT House @ -50 PA

- Prior to performing the Blower Door Test in T1, prepare the home for the Zone Testing of different areas within the home. Insert a hose into areas of the home that may or may not be within the Envelope of the home. These areas would include the Attic(s), the Basement or Crawlspace, and the Garage. There are rows for other areas to be tested if they are identified on

the Data Collection Form.

- With the Blower Door operating at (or close to) -50.0 pascal, disconnect the hoses being used for the Blower Door Test (or use a separate gauge) and test the areas previously mentioned.
- Insert the hose placed into the Attic, Basement/Crawlspace, or Garage onto the Input Tap (uppertap) of the A side. The Reference Tap (bottom tap) on the A side can remain open if the gauge is within the House.
- If the reading is between -45.0 and -50.0 pascal, then the area being tested should be sealed off from the rest of the conditioned space and insulation installed. This high of a reading means it is closer to being outside than within the conditioned space of the house.
- It is especially critical that the reading between the Garage and the Living Space is more negative than -45.0 pascal since any connection between these two areas may be a Health and Safety issue. Fumes from vehicles, stored gasoline or paint has the potential of entering the home if there are bypasses for air to communicate between the two areas.
- If the reading is less between -45.0 pascal and -5.0 pascal, there may be thermal bypasses between the area being tested and the Living Space that should be addressed. A decision will need to be made as to sealing off the area from the conditioned space (if the reading was closer to -45.0 pascal, then having it become more outside would be effective) or sealing off the foundation of the tested area (if the reading was closer to -5.0 pascal, then making the area more inside).
- If the reading is between -5.0 pascal and 0.0 pascal, then the area being tested is closer to being inside the home and should be considered as within the pressure boundary.
  Note: Caution, auditor should be aware of the "Add-A-Hole" theory as it should be understood to determine the true meaning of zonal testing.

k. T4 Pressure Pans

- Pressure Pan testing is applicable to ductwork that is located within unconditioned areas, such as crawlspaces or attics. Pressure pan tests should always be conducted on mobile home ducts.
- There must be a pressure differential between the unconditioned area and the living area. A 5.0 pascal pressure differential should be the minimum level. If this cannot be achieved, then a window or vent should be opened to achieve a larger pressure differential.
  - To use an example to explain this, if the ductwork is located in a basement and the pressure differential between the basement and the living area was 1.0 pascal, the highest pressure pan reading that can be achieved (even with a completely disconnected duct) would be 1.0 pascal.
- For a site-built home with the Blower Door operating at -50.0 pascal, disconnect the hoses being used for the Blower Door Test (or use a separate gauge) and test the ductwork. Using the Input tap on the A side, record the location and the pressure reading on all ducts in the distribution system that are located within an unconditioned area. Include all return ducts, even if some of the registers may need to be partially taped closed or covered so the entire grille/register is covered when the Pressure Pan is put onto it.
- Any Pressure Pan readings greater than 1.5 pascal should be investigated for leakage. Always begin investigating for leakage in the ductwork where the Pressure Pan reading is the highest.
- Following weatherization work, no more than three registers shall have pressure pan readings greater than 2.0 Pa. No readings shall be greater than 4.0 Pa. If all readings are under 1.5 Pa, no duct sealing is needed. Pressure pan readings in

excess of 4.0 Pa indicate a serious breach in the duct system. Locate and seal holes in duct. Best practice has well- sealed ducts testing at or below 1.0 pascal.

- Inspect the boot connections behind registers measuring more than 4 Pa. Reattach or seal boots if necessary.
- For Manufactured Homes, the Pressure Pan test is performed on all supply registers. Return registers are not evaluated in MHEA software. With the Blower Door operating at -50.0 pascal, disconnect the hoses being used for the Blower Door Test (or use a separate gauge) and test the ductwork. Using the Input tap on the A side, record the location and the pressure reading on all supply ducts in the distribution system.

Not only is the Energy Auditor discovering the possible location of any leakage (based upon the leakage site being close to the register with the highest Pressure Pan reading), but the cumulative pressure pan readings must be added together. The goal for the Contractor/ Crew Leader is to have all pressure pan readings adding up to be less than or equal to the number of supply registers in the unit, since the Quality Control Inspector will be looking for the cumulative of less than the number of registers. In addition, the static pressure must be tested after the Blower Door testing has been completed and the furnace distribution fan can be operated. A Static Pressure Probe is to be inserted down into the supply trunk line as close as possible to the furnace. The initial reading will be recorded and entered in to the MHEA audit tool, Duct / Infiltration tab. Best practice is to add 5 pascals to the original tested pressure.

l. T5 Duct Diagnostics

- Record existing Insulation R-values of duct insulation. When installing Duct insulation, the newly installed insulation should be R8.
- Record the Supply and Return Air Temperature. The Heating Unit will need to be operated to achieve these values.
- Record the Static Operating Pressure for the Return and the Supply.
- Record the Total Leakage from duct pressurization testing.
- Record the Total Leakage to the Outside from duct pressurization testing.

m. Lighting

- Use this section to indicate the number of light bulbs to be replaced in each room.

n. FOOTPRINT SKETCH

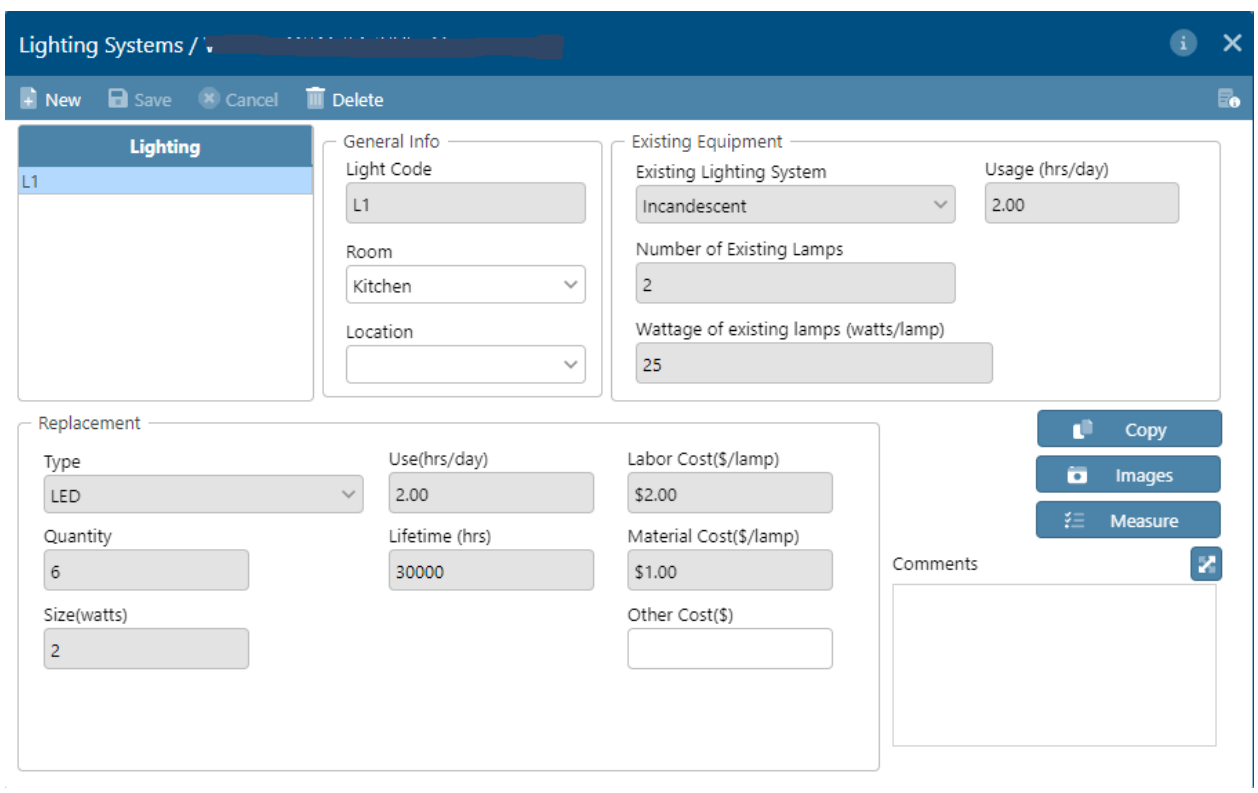
- Using the page provided, draw the foundation footprint of the home, to include basements, crawlspaces, or slab foundations. Accurately record the dimensions of these areas. It is highly recommended to notate the thermal and pressure boundaries of the home.
- Include window and door locations, however, it may be advantageous to mark the windows with a number and the doors with a letter. Then on the section for windows and doors, the dimensions, type of window, glazing, and framing can be correlated with the appropriate window. This will also allow an accurate input of the individual window /door to be assigned to a wall code when entering data into the NEAT / MHEA.
- The height of each story and the highest point within the home to the ground can be recorded.
- Record the Orientation of the home with the compass in the bottom corner.
- Ensure the footprint sketch has any side porch/carport/or awnings included, along with

their measurements.

- For a manufactured home, indicate the floor joist orientation. Determine if they are running perpendicular or parallel to the length of the unit.
  - An easy way to determine the direction of the floor joists in a manufactured home is by accessing the heating system distribution registers in the living area floor. If the heating system trunkline is located close to the sub-floor and flooring, then the trunkline is running between the floor joists and therefore, the floor joists are running parallel with the unit.
- Indicate the roof type and roof color.
- Determine the Net Free Vent Area (nfva) of attic and foundation ventilation.
  If the net free ventilation area of existing vents is not known, assume that it is half the area of the vent opening.
- List the number of light bulbs to be replaced in each room listed. Kitchen Bathroom

Family Room	Utility Rooms
Living Room	Hallway
Recreation Room	Exterior Locations
Dining Room	Bedrooms

- Modelling bulb replacement:
  - To model missing or broken bulbs, in the Existing Equipment section, enter the number of ***working*** bulbs in the fixture and their wattage. In the Replacement section, enter the quantity of sockets in the fixture and the wattage of the replacement bulbs. In the example below, the fixture has six sockets, but only two currently have working incandescent bulbs in them. Those two bulbs and four empty sockets are being replaced by six LED bulbs).



o. SHELL DATA

The Shell Data is necessary to determine what weatherization retrofits (specifically insulation) can and should be performed on the home. The Walls, Floors / Belly, and Attics compose the largest square footage of the components of the home and if not adequately insulated, will be the largest source of heat loss.

The listing of each shell component (Walls, Foundation, Floors, Attics, Doors, and Windows) should follow the Footprint Drawing of the home. Wall Codes should correspond with the respective code associated with the drawing and be entered in the Weatherization Assistant (NEAT/MHEA) software.

The three columns at the end of the shell data for Walls, Foundation, Floors, and Attic are for documenting the Insulation R-Value by the initial Energy Auditor (EA); the QCI and, if needed the follow-up QCI.

p. T6 Walls

- Use the appropriate code for the wall component that will also be used in the NEAT /MHEA software.
- Determine the Exterior Type Wall Type Siding on each wall component. Select either Balloon, Platform, Masonry/Stone, Adobe, Other, MH – Vented, or MH – Not Vented.
- Determine the Wall Stud Size
- Record the Size of each wall (Length times Height) to determine the Total Gross square footage dimensions (L x H)
- Determine if the wall has existing insulation using an infrared camera and/or a probe. Record the type of insulation present using a probe. Document the wall insulation by taking a picture.
- Determine the compass orientation for the wall.
- Determine if the wall component is exposed to Outside (Ambient), exposed to a Buffered (fully enclosed), or is exposed to the Attic Space.
- Determine the R-value for site-built and Inches for manufactured home for any existing insulation in the wall n and enter the data into the NEAT / MHEA audit tools as required.
- Enter the data into the NEAT / MHEA audit tools as required.

q. T7 Foundation (Walls)

- Use the appropriate code for the foundation component that will also be used in the NEAT
  /MHEA software.
- Determine the Foundation Type. Enter Conditioned, Non-Conditioned, Vented Non-Conditioned, Uninsulated Slab, Insulated Slab, Exposed Floor Sheathed, or Exposed Floor Unsheathed. Do not use the Unintentionally Conditioned option. While the space may be unintentionally conditioned at the time of the energy audit, it should be intentionally conditioned or unconditioned after weatherization work has been completed.
- Record the Size of each foundation (Length times Height) to determine the square footage dimensions (L x H)
- Determine the Gross Area of each Foundation, based upon the Length x Height dimensions.
- Determine the Depth of the foundation component.
- Determine the %AG (percent Above Grade) of each foundation component.
-

- Enter the Perimeter of the dwelling. This is the length (feet) of the floor perimeter bordering the outdoors.
- Determine the R-value for any existing insulation along the foundation component.
- Enter the data into the NEAT / MHEA audit tools as required.

r. T8 Floors/Belly/Sills

- Use the appropriate code for the floor component that will also be used in the NEAT /MHEA software.
- Determine Existing Insulation Type. Enter Floor-Fiberglass Batts, Floor-Foam Board, Floor-None, Sill-Fiberglass Batts, Sill-None, Belly-Fiberglass Batts, Belly-Fiberglass Loose, or Belly-None.
- For Manufactured Homes, determine the Belly Condition. Enter Good, Average, or Poor into the MHEA audit software.
- Measure and record the Length and Width of the Floor Area. This perimeter information will be entered in the NEAT software.
- Calculate the Gross Area of the Floor based upon the Length and Width measurements. This Gross Area information will be entered in the NEAT software.
- Determine the OC" (On Center) dimension of the floor cavities. These dimensions are usually 16", 24", or Random.
- Determine the Framing size of each Floor component.
- For Manufactured Homes, the Energy Auditor will need to determine the framing size of the wings (outside of the I-beams) and the framing size of the center section.
- Determine the R-value for any existing insulation in the floor component.
- Enter the data into the NEAT / MHEA audit tools as required.

s. T9 Attics

- Use the appropriate code for the attic component that will also be used in the NEAT /MHEA software.
- For Site Built Homes when completing NEAT, record the following data.
  - Is the Attic considered Unfinished or Finished?
    - ✓ If Unfinished, is it Unfloored, Floored, or Cathedral/Flat?
    - ✓ If Finished, are there Outer Ceiling Joists, Collar Beam, Kneewall, or Roof Rafters?
  - Are these components unfloored or floored?
  - What is the Roof Color?
    - ✓ Is it White, Reflective, or Shaded?
    - ✓ Is it Normal or Weathered?
  - What is the Type of Existing Insulation?
  - What is the Depth of the Existing Insulation? NOTE: The NEAT audit does not ask for R- value, but the depth of the existing insulation.
- For Manufactured Homes when completing MHEA, record the following data.
  - Is the Ceiling considered Flat, Bowstring, or Pitched?
  - What is the Roof Color?
    - ✓ Is it White, Reflective, or Shaded?
    - ✓ Is it Normal or Weathered?
  - What is the Height of the Roof at Center (inches)? This is for both Bowstring roofs in MHEA and is the measurement at the center of the roof from the ceiling to the roof.

For Pitched roofs, this input is asking how much insulation depth to add above the existing insulation.

- What is the Type and Depth of Existing Insulation?
  - ✓ Batts/Blanket (inches)
  - ✓ Loose fill (inches)
  - ✓ Foam Core (inches)
- What is the percentage of Cathedral Ceiling?
- If there is a Cathedral Ceiling and the unit is either a Flat or Pitched Roof, what is the Step Wall Direction?

- Record the Size of each attic (Length times Width) to determine the square footage dimensions (L x W)
- Determine the Gross Area of each Attic, based upon the Length x Width dimensions.
- Determine the Depth of the cavities of each attic. This would be the framing size of the attic joists.
- Determine the OC" (On Center) dimension of the attic cavities. These dimensions are usually16", 24", or Random.
- Determine the R-value for any existing insulation in the attic component.
- Determine the venting requirements (1 ft^2 per 150 ft^2 of attic floor area; 1 ft^2 per 300 ft^2 when high-low ventilation is achievable). Proper and adequate ventilation must be included to ensure effectiveness of the insulation and guard against deterioration caused by moisture.
- Attic Ventilation is not an Energy Conservation Measure (ECM) and should be entered into the NEAT audit in the Itemized Cost tab as an Incidental Repair Measure (IRM); related to attic insulation.
-
- If insulation in the attic exists and the NEAT/MHEA audit does not call for additional insulation to be installed, attic baffles are allowable as a Health and Safety measure to improve ventilation using non-DOE funds.

t. T10 Doors

Replacement door must first be modeled as an ECM. If a replacement door is not recommended at the 0.5 or 1.0 SIR, the Energy Auditor may recommend replacement as a Health and Safety measure using LWAP funds. The replaced door shall be modeled in the Shell tab. If the doors are replaced as a Health and Safety measure, the initial Recommended Measure Report from NEAT/MHEA must be included in the client file indicating the replacement doors were modeled as an ECM but were not cost effective.

- Use the appropriate code for the Door component that will also be used in the NEAT / MHEA software.
- Determine the compass orientation for the wall.
- Record the size of the door (Width x Height).
- List the type of door.
  - For Site Built the following types are listed in NEAT.
    - ✓ Hollow Core Wood
    - ✓ Solid Core Wood
    - ✓ Insulated Steel
    - ✓ Single Pane Sliding Glass
    - ✓ Double Pane Sliding Glass
  - For Manufactured Homes the following types are listed in MHEA.
    - ✓ Hollow Core Wood

- ✓ Solid Core Wood
- ✓ Standard Manufactured Home Door
- ✓ Insulated Steel

- Record if there is a storm door
  - For Site Built the following types are listed in NEAT.
    - ✓ Adequate
    - ✓ Deteriorated
    - ✓ None
  - For Manufactured Homes the following is listed in MHEA
    - ✓ A check box if one is present.
- Record the overall leakage of the door
  - For Manufactured Homes this is not part of the MHEA.
  - For Site Built the following types are listed in NEAT:
    - ✓ Tight
    - ✓ Medium
    - ✓ Loose
  - If the box is checked for REPLACEMENT DOOR REQUIRED, another box and question will be shown that asks INCLUDE IN SIR.
  - If the box is clicked to INCLUDE IN SIR, then the replacement door measure will be listed in the Energy Conservation Measures section of the Recommended Measures list, even though it may not be cost effective (SIR below 0.5). If the replacement door is not cost effective, this Recommended Measures Report should be included in the client file to indicate it was modeled as an ECM. However, if it is not cost effective, it should not be included in the SIR and should be installed as a Health and Safety measure.
  - If the box is not clicked to INCLUDE IN SIR, then the replacement door measure will be listed in the Health & Safety section of the Recommended Measures list with an SIR of 0.0. **Requirement:** Document existing door condition with photographs and ensure if replacement door is installed as a Health and Safety measure that it is paid with LWAP funds.
  - The measure cost for the Replacement Door will be pulled from the Setup Library/Library Measures that has been previously completed. Any Additional Cost per Door that is specific to this project will be added onto the Library Measure cost.
- Enter the data into the NEAT / MHEA audit tools as required.

u. T11 Windows

- Use the appropriate code for the Window component that will also be used in the NEAT / MHEA software.
- Record the interior shading of the window. Record Drapes, Blinds or Shades, Drapes with Blinds or Shades, or None.
- Record the size of the window (Width x Height).
- List the Glass Type of the Window component.
  - For Site Built the following types are listed in NEAT:
    - ✓ Single Pane
    - ✓ Double Pane
    - ✓ Double Pane with Low E
  - For Manufactured Homes the following types are listed in MHEA:
    - ✓ Single Pane

- ✓ Double Pane
- Record if there is a storm window
  - For Site Built the following types are listed in NEAT:
    - ✓ Wood Storm
    - ✓ Metal Storm
    - ✓ Bad Storm
  - For Manufactured Homes the following is listed in MHEA:
    - ✓ Glass Storm
    - ✓ Plastic Storm
- For NEAT or MHEA, select "Evaluate All". If the Audit does not give the replacement window, Energy Auditor should replace as an itemized H&S cost using LWAP funds. **Requirement:** Document existing window condition with photographs.
- Record the Exterior Shading.
  - For Site Built, the percentage of shading is to be entered into NEAT.
  - For Manufactured Homes, the following is listed in MHEA.
    - ✓ Awning
    - ✓ Carport or Porch
    - ✓ Low E Film
    - ✓ Sunscreen
    - ✓ None
- Record the Frame Type of the Window - Metal, Vinyl, Wood
- Record the number of windows per wall
- Record the overall leakage of the window
  - For Site Built (NEAT) and Manufactured (MHEA) the following types are listed.
    - ✓ Very Tight
    - ✓ Tight
    - ✓ Medium
    - ✓ Loose
    - ✓ Very Loose
- From the drop-down box in NEAT, choose an option for the retrofitting of the window.
  - The Retrofit Options are:
    - ✓ Evaluate All
    - ✓ Weatherize
    - ✓ Replace
    - ✓ Replace with LowE
    - ✓ Add Storm
    - ✓ All applicable measures should be evaluated for cost-effectiveness.
  - If Replace is chosen, another box and question will be shown that asks INCLUDE IN SIR. Run an audit with the replacement window included in the SIR. If the SIR of the replacement window is less than 0.5, it must be installed as a Health and Safety measure (paid with LWAP funds). This Recommended Measures Report should be included in the client file to indicate it was modeled as an ECM. If the replacement window is not cost effective, a second audit must be run with the replacement window listed as an itemized Health and Safety measure.
  - If Evaluate All is chosen, the NEAT will evaluate all four measures and based upon the cost effectiveness will determine the best measure (if any). The measure cost for the four

measures will be pulled from the Setup Library/Library Measures that has been previously completed. Any Additional Cost per window for the measures that is specific to this project will be added onto the Library Measure cost.

- If Evaluate None is chosen, the NEAT will not evaluate any of the measures.

- From the drop-down box in MHEA, choose an option for the retrofitting of the window.
  - The Retrofit Options are:
    - ✓ Evaluate All
    - ✓ Weatherize
    - ✓ Replace
    - ✓ Add Glass Storm
    - ✓ Add Plastic Storm
    - ✓ Evaluate None
  - If Replace is chosen, another box and question will be shown that asks INCLUDE IN SIR. Run an audit with the replacement window included in the SIR. If the SIR of the replacement window is less than 0.5, it must be installed as a Health and Safety measure (paid with LWAP funds). This Recommended Measures Report should be included in the client file to indicate it was modeled as an ECM. If the replacement window is not cost effective, a second audit must be run with the replacement window listed as an itemized Health and Safety measure.
  - If Evaluate All is chosen, the NEAT will evaluate all four measures and based upon the cost effectiveness will determine the best measure (if any). The measure cost for the four measures will be pulled from the Setup Library/Library Measures that has been previously completed. Any Additional Cost per window for the measures that is specific to this project will be added onto the Library Measure cost.
  - If Evaluate None is chosen, the NEAT will not evaluate any of the measures.

When attempting to replace windows in LITT, the system requires the U-Value and SHGC of the window to be entered. Use the chart below to enter the estimated U-Value and SHGC based on the window type.

Estimating U-Value and SHGC for Windows

From BPI Building Analyst Standards
For Estimation Purposes Only

Default Window Values

Frame Type	Glazing Type	U-Value	SHGC	U-Value with low e	SHGC with low e
Wood	Single	.90	.65	NA	NA
	Single w/ Storm	.49	.71	NA	NA
	Double	.49	.58	.39	.45
	Triple	.39	.53	.30	.45
Vinyl	Double	.46	.57	.36	.45
	Triple	.36	.52	.36	.45
Metal	Single	1.31	.80	NA	NA
	Double	.87	.73	NA	NA
Metal w/ Thermal Break	Double	.65	.66	.53	.52
	Triple	.53	.60	.43	.52

Window Sealing

- Air Sealing and Duct sealing gains can easily be lost to leaky windows. Windows need to be inspected as they can be major sources of uncontrolled air infiltration, moisture, or bulk water intrusion. All windows rated as "Medium," "Loose," or "Very Loose," all Jalousie windows that impact the thermal boundary; as well as any window determined to have damage that creates an infiltration problem, are to be modeled for replacement in LITT.

- Checking the "Evaluate All" button in LITT for each window that is determined to fit the above description is required. Valid information is to be entered into the "Weatherize Window" "Replace Window" and "Add Storm Window" sections. The U-value and SHGC value chart is in section 7, sub-section v (T-11 Windows) of the South Carolina Policy and Procedures Manual.

- As a reminder: window sealing is like air sealing in that it can be paid for with DOE funds with an SIR below 1.0, but 'Weatherizing' a window is different and is subject to the 1.0 requirement. DOE funds can be used to pay for general air sealing or window sealing with an SIR of less than 1.0 provided the collective SIR of all the ECMs is 1.0 or greater. LWAP funds also meet this exception and can be used for blower door guided air sealing or window sealing measures that are below 0.5 SIR provided the cumulative SIR is 1.0 or greater. This exception is outlined in WPN 23-6.

- Examples of window sealing would be repairs made to a window with: caulk/putty, foam, or weather stripping. Examples of Window Weatherization would be repairs such as: replacing glass, replacing wood or structural repairs, storm windows, Window film, sash repair, or window replacement.

v. T12 Comments Doors & Windows

- Enter any comments about the doors and windows of the home in this location.
- Use the appropriate code for the component.

w. T13 Refrigerator / Freezer Data

To meter the Refrigerator, the meter must be on the unit for at least 2 hours. It is recommended that the meter be installed after the Client Engagement and before any other testing or inspections begin.

Department of Energy funding does not allow the replacement of Freezers in the WAP program.

- Measure the Height, Width, and Depth of the existing unit.
- Record the Manufacturer and the Model number of the refrigerator.
- Record the Location of the existing unit.
- Record the amount of time that the meter has been on the appliance and the Kilowatts used during that time.
  - Using the *WattsUp* meter for example, the reading may be 2:09 for time and 207 for watthours. The time should be 129 minutes The watthours usage needs to be converted to Kilowatt hours, therefore, the 207-watt hours / 1,000 equals 0.207 KWh.
  - Using the formula [KWh/(Min/60)] x 8760 = [0.207/2.15] x 8760 = 843 KWh per year
- If you are not able to meter the Refrigerator, you may use a database to look-up the usage information for an appliance. The *Weatherization Assistant* software has a limited database of appliances that can be access in NEAT / MHEA. Newer models may not be listed. Note that if the model number cannot be determined, the refrigerator must be metered.
- The Department of Energy also has a refrigerator and freezer energy rating database search tool. The tool can be downloaded from: https://www.energy.gov/scep/wap/articles/refrigerator-and-freezer-energy-rating-online-search-tool
- OEO recommends that refrigerators 8 years old or older should be modeled and evaluated in LITT. If an auditor believes a newer model is in poor enough shape to be replaced, the auditor may still model for replacement if the auditor's reasoning is documented in the client file. In addition, if an auditor believes the unit is very well maintained and does not need to be modeled, that is also acceptable if the auditor's reasoning is documented in the client file.
- At minimum, the refrigerator model number (if available) and year manufactured must be documented on the 501 Form and a picture of the refrigerator must be included in the client file. This information must be captured even if the refrigerator is not modeled for replacement.
- For non-functioning refrigerators, if the model number can be determined, use the refrigerator databased referenced earlier in this section and model the refrigerator as if it were working. If the model number cannot be determined, the refrigerator cannot be modeled for replacement.
- Follow instructions in WPN 22-7, SWS 7.0101.1e, and the 2026 South Carolina Field Guide 10.1.1 for proper refrigerator disposal.

x. T14 Cooling Systems

- Record the number of cooling systems in the home. If more than two exist, complete the data collection of the additional units on another page.
- Measure and record the area of the home being cooled by the Window A/C unit. The area will be needed when completing the NEAT, but the percentage of the total floor will be needed when completing the MHEA.
- Record the type of unit, either Window or Central. Record if the unit is strictly Air

Conditioning (A/C) or if it is a Heat Pump (HP).
  - If the unit is a Mini-Split that cools the entire home, consider it as Central.
  - If the Mini-Split cools a portion of the home, consider it as Window.
- Record the Manufacturer, the Model Number, and the Serial Number.
- Record the Seasonal Energy Efficiency Rating (SEER) of the Central A/C unit.
- Record the Energy Efficiency Rating (EER) of the Window A/C unit.
- Record the Heating Seasonal Performance Factor (HSPF) of the Heat Pump unit.
- Record the BTUs of the existing unit.
- Enter information about a new system, if applicable.
  - Manufacturer
  - Model Number
  - Fuel Type
  - HSPF / AFUE or SEER
  - KBTU
  - Comments
- Enter the data into the NEAT / MHEA audit tools as required.
- OEO recommends that HVAC systems 5 years old or older should be modeled and evaluated in LITT. If an auditor believes a newer model is in poor enough shape to be replaced, the auditor may still model for replacement if the auditor's reasoning is documented in the client file. As well, if an auditor believes the unit is very well maintained and does not need to be evaluated, that is also acceptable if the auditor's reasoning is documented in the client file.
- When an HVAC replacement is needed but is not cost effective as an Energy Conservation Measure, it must be replaced as an itemized Health and Safety measure. The Recommended Measures Report must clearly list it as a Health and Safety measure (identified with H&S and have no SIR). When it is determined that the HVAC unit will be replaced as a H&S measure (using LWAP or DES funds). the new/replacement unit is required to be modeled as the "existing" unit in LITT.
- Note that all HVAC replacements regardless of whether they are installed as an ECM or Health and Safety Measure must have a Manual J calculation run by a licensed HVAC contractor to ensure the replacement unit is sized properly. The Manual J should be run using post-Wx dwelling characteristics. The HVAC contractor must provide the make and model number of the unit so this can be verified at the final Quality Control Inspection.
- Agencies must receive OEO approval for the installation of any HVAC window unit, PTAC, or window unit heat pump. OEO will consider these installations on a case-by-case basis

y. COMBUSTION APPLIANCE DATA

Collecting the Combustion Appliance Data provides important information to heating contractors and technicians. Heating Type, Fuel Type, Make, Model number, and BTU Input can provide information about the unit. If necessary, the owner's manual, installation instructions or technical data can be located either on-line or in written format for the individual unit.

Unless a combustion appliance is being decommissioned, it must be properly vented regardless of the attestations of the client concerning its use.

Prior to testing any of the appliances, the Energy Auditor, the Crew or Contractor, and the Quality Control Inspector must ensure safety for the customer, but also, safety for themselves.

1) A Personal Gas Detector (for at least Carbon Monoxide) shall be carried to test the Ambient Air and is necessary when entering all Confined Spaces (OSHA – Confined Space in Construction regulation). A Personal Gas Detector shall always be worn when testing combustion

appliances and it is a good habit to keep it on throughout the Energy Audit.

2) A Gas Leak Detector (either a Bacharach, Sensit, Testo, or other commercially manufactured devices) and commercially available liquid leak detector is necessary to locate and verify natural and propane gas leaks. The Energy Auditor, the Quality Control Inspector, and the Crew or Contractor (after performing any work on the combustion appliances) must test all accessible fuel lines and combustion appliances for fuel leakage (Natural Gas, Propane Gas or Fuel Oil) from the appliance back to the meter or tank.
3) A Non-contact Electric Circuit tester to verify for "live" wiring in electrical circuits that may be hanging loose, within a heating unit cabinet, or laying in a crawlspace or attic.

z. T15 Heating Systems

Combustion Testing is to be performed at three (3) critical points to ensure the safety of the customer and to determine if the appliance(s) are operating as efficiently as possible. The first test is during the initial Energy Audit (EA); the second test is by the QCI after work is completed, the third test is done by the QCI if follow-up is necessary.

During all three of the critical points, EA, QCI (1), and QCI (2), if applicable, the following information or diagnostic tests are to be performed and the results recorded for the

Primary Heating Appliance and the Secondary Heating Appliance (if applicable). If additional heating appliances are within the home, use additional pages of the Combustion Appliance and Heating System Data form.

All testing (Carbon Monoxide testing and Spillage testing) of Category I Appliances is to be performed while the Combustion Appliance Zone (CAZ) is in the Worst-Case scenario. See instructions for T16- CAZ Worst Case Test. All testing must begin with the appliance with the smallest BTUh Input, and progressively moving to the largest BTUh Input appliance. Re-testing of the smaller BTUh appliances is necessary when the larger BTUh appliances are firing.

- Record the following items to input into the Heating tabs of the NEAT / MHEA software:
  - Equipment Type
  - Fuel
  - Location (Heated, Unconditioned, Unintentionally Heated)
  - Heat Supplied (%) – This is the percentage of the floor area that each appliance (Primary and Secondary) is heating based upon the total floor area of the home.
  - Manufacturer of the Appliance
  - Model Number #
  - Input (KBTU)
  - Output Capacity. This is sometimes listed on the data plate as the Output Capacity or the Bonnet Capacity
  - Steady State Efficiency (SSE) rating as determined from the combustion analysis of the unit. This is needed for vented Space Heaters, Forced Air Furnaces, and Boilers (Hot Water and Steam) that are fueled by Natural Gas, Propane, or Fuel Oil. This question is not necessary for Electric units.
  - Condition of the unit.
  - There is also a check box in NEAT to mark if there is a programmable thermostat.
- Determine if the Vent Condition is considered Warm or Cold. Based upon the description in

BPI 1200, a Cold vent pertains to an appliance for which the heat setting is turned OFF. A Warm vent pertains to an appliance for which the heat setting is turned ON and includes domestic Water Heaters. This information will assist the Energy Auditor when testing for Carbon Monoxide (CO) and spillage in Category I appliances.

- These are the categories for the different types of heating appliances being produced. (per NFPA 54)
  - Category I = An appliance that operates with a non-positive vent static pressure and with a vent gas temperature that avoids excessive condensate production in the vent. **The Unit will have a Negative or natural draft & High Vent Temperature**
  - Category II = An appliance that operates with a non-positive vent static pressure and with a vent gas temperature that can cause excessive condensate production in the vent.

The Unit will have a Negative or natural draft & Low Vent Temperature

  - Category III = An appliance that operates with a positive vent static pressure and with a vent gas temperature that avoids excessive condensate production in the vent. **The Unit will have a Positive draft & High Vent Temperature**
  - Category IV = An appliance that operates with a positive vent static pressure and with a vent gas temperature that can cause excessive condensate production in the vent.

The Unit will have a Positive draft & Low Vent Temperature

- Record the Smoke number (if testing a Fuel Oil fired appliance). Insert the Smoke tester and determine the amount of smoke PRIOR to inserting the probe for the combustion analyzer. A large amount of smoke pulled into the combustion analyzer can damage the equipment.
- Record the Oxygen (O^2) and the Carbon Dioxide (CO^2) percentages in the flue gases.
- There are two methods of recording the level of Carbon Monoxide in the flue gases, "Air Free" and "As Measured". The Carbon Monoxide is to be measured at 5 minutes after main burner operation in the undiluted flue gases of the appliance. In atmospheric appliances, the undiluted sample would be before the diverter. For fan induced appliances, the undiluted sample would be after the induction fan. For Category IV appliances (90%+ units), the undiluted flue gases should be taken at the end of the venting on the outside, except when the venting runs up through the home and terminates along the roof.
  - Unacceptable CO Level == If the Carbon Monoxide is above the threshold level for the combustion appliance when measured at 5 minutes, the Energy Auditor is to advise the homeowner/occupant that the appliance should be serviced immediately by a qualified professional.
  - Acceptable CO Level == If the Carbon Monoxide is below the threshold level for the combustion appliance when measured at 5 minutes, no action is required.

The Carbon Monoxide Threshold for Combustion Heating Appliances (from BPI- 1200)

Appliance	Threshold Limit
Central Furnaces (all categories)	400 ppm air free
Boiler	400 ppm air free
Floor Furnace	400 ppm air free
Gravity Furnace	400 ppm air free
Wall Furnace (BIV)	200 ppm air free
Wall Furnace (Direct Vent)	400 ppm air free
Vented Room Heater	200 ppm air free
Unvented Room Heater	200 ppm air free

- If the analyzer being used does not provide the "Air Free" measurement, the following equations can be used to calculate the "Air Free" reading.

✓ CO_{AF}= (20.9 / 20.9 – O_2) x CO_{ppm}

- Where CO_{AF} = Carbon Monoxide, air free ppm
- CO_{ppm} = As measured combustion gas carbon monoxide
- O_2 = Percentage of oxygen in combustion gas, as a percentage OR

✓ CO_{AF}= (UCO_2 / CO_2) x CO_{ppm}

- Where CO_{AF} = Carbon Monoxide, air free ppm
- UCO_2 = Ultimate concentration of carbon dioxide for the fuel being burnedin percent = natural gas (12.2 percent) and propane (14.0 percent)
- CO_2 = As measured carbon dioxide in combustion gas, as a percentage
- CO_{ppm} = As measured combustion gas carbon monoxide

o Spillage Time – This is the length of time that the appliance may "backdraft" prior to when the natural draft starts up. This test is performed in the CAZ Worst Case scenario (Test T16). The allowable maximum amount of time for spillage of combustion gases into the home or into the combustion appliance zone (CAZ) is:

- 2 minutes for spillage in a warm vent
- 5 minutes for spillage in a cold vent

o Record the Stack Temperature of the flue gases. After the unit has been in operation and stabilized (oxygen % and stack temperature have stabilized), record the Steady State Efficiency (SSE).

o Include a printout of your combustion test readings during the Energy Audit and the Quality Control Inspection in the client file.

o During the Energy Audit of a Manufactured Home, it is important to check the type of thermostat that is used to control the heating unit. Due to the possibility of high winds blowing on the manufactured home (even if it causes a rocking motion), a mercury bulb thermostat could be jostled to turn on or turn off the heating appliance. A mercury bulb thermostat should not be used or left in operation in a manufactured home.

o Record the number and location of all existing operational smoke alarms and carbon monoxide detecrors. Next, include the number of Smoke Alarms and Carbon Monoxide Detectors to be installed in the home.

aa. T16 CAZ Worst Case Test

This is a Depressurization Test of the Combustion Appliance Zone (CAZ), and it is designed to put the CAZ into the worst-case scenario regarding depressurization by other appliances in the home. Once it has been determined that the worst-case configuration has been achieved, the configuration shall remain for all spillage and Carbon Monoxide tests being performed within the CAZ.

As work on the home progresses from the initial Energy Audit, through the installation of materials, to the final Quality Control Inspection, the configuration for the Worst-Case scenario will change. Therefore, it is important to understand the test and be able to reconfigure the Worst Case when required.

o Baseline –

- All combustion appliances should be turned to PILOT or turned OFF.

- All exterior doors and windows in the home are to be closed.
- Close all the Combustion Appliance Zone (CAZ) doors.
- Close all interior room doors, except those rooms with an exhaust fan and rooms with a forced air system return.
- All exhausting appliances are to be turned OFF.
- Record the Baseline pressure for the Combustion Appliance Zone (CAZ) With Reference To (WRT) the Outside of the home.

- Exhaust Fans On –
  - Turn on the Clothes Dryer, Range Hoods, and other Exhaust Fans
    - ✓ If there are speed controls on these exhaust appliances, operate on highest speed.
  - Record the pressure for the Combustion Appliance Zone (CAZ) With Reference To (WRT) the Outside of the home.
- Forced Air Fan ON -
  - Turn on the Forced Air System Blower (Distribution Fan)
    - ✓ If the thermostat has a FAN ON / AUTO switch, turn to ON.
    - ✓ If the thermostat does not have a FAN ON /AUTO switch, the Heating System will need to be activated to have the Forced Air System Blower (Distribution Fan) come on.
  - Record the pressure for the Combustion Appliance Zone (CAZ) With Reference To (WRT) the Outside of the home.
    - ✓ If the CAZ becomes more negative with the Distribution Fan ON, the Distribution Fan shall remain on during all combustion appliance safety testing.
    - ✓ If the CAZ becomes more positive with the Distribution Fan ON, the Distribution Fan shall be turned OFF during all combustion appliance safety testing.
- Doors Open/Closed –
  - Open and Close all interior door(s), including those with fans behind them, that directly enter the Combustion Appliance Zone (CAZ).
  - Record the pressure for the Combustion Appliance Zone (CAZ) With Reference To (WRT) the Outside of the home.
  - If the CAZ becomes more negative after the interior door(s) are opened, the door(s) shall remain open during all combustion appliance safety testing.
- CAZ Worst Case –
  - Review the CAZ WRT Outside pressure readings from all previously recorded configurations. The Worst-Case scenario is the configuration with the most negative pressure.
  - Record the most negative pressure and reconfigure the home to the setup with the most negative pressure. All Combustion Safety Testing is to be performed in this configuration.

bb. T17 Gas Range / Oven Test

Gas ovens shall be tested for Carbon Monoxide by inserting the combustion analyzer probe into the appliance vent. Range top burners shall be visually inspected.

- Record any problems with auto-lighting
- Pull out the bottom drawer to sniff gas lines.
- Do NOT pull stove from wall!
- Do not turn stove on if gas leaks are present.
- Continue monitoring ambient Carbon Monoxide with your personal gas detector.
- Keep kitchen exhaust running – if recirculating – keep running and window open.

- Remove all items (debris) from oven and stove top.
- Turn on oven to hottest setting (500°F) – do not turn on self-clean feature.

Oven Testing

With appliance off, complete the following visual inspection:

- Check the oven cavity for any stored materials and remove before testing.
- Inspect the oven cavity for cleanliness. If the oven area is dirty enough to adversely impact the combustion process, recommend that the oven be cleaned to reduce the possibility of unacceptable emissions.
- Check the bottom surface inside of the oven cabinet for air venting that may be present. Any air vent obstruction, such as aluminum foil or silicone liners, must be removed before oven CO testing.
- Check for air blockage at the bottom of the range and drawer and/or broiler compartment under the oven and remove any obstructions before testing.
- Turn the oven on to a bake temperature of 500°F. Do not turn the oven all the way up to the broil setting or self-cleaning setting.
- After 5 minutes of the oven's main burner operation the auditor shall place the test probe of a CO analyzing tool into the throat of the oven exhaust vent and measure Carbon Monoxide.
- Record the CO measurement once the CO level has become a stable reading.
- The CO measurement shall be compared with the appropriate CO threshold (see below).
- If CO exceeds the threshold limit of 225 ppm, the appliance shall be cleaned. If the CO still exceeds the threshold limit of 225 ppm after cleaning, the unit will be serviced.

The Carbon Monoxide Threshold for Oven / Broiler Appliances (from BPI- 1200)

Appliance	Threshold Limit
Oven/Broiler	225ppm as measured

Range Top Testing

Light burners in sequence.

- Inspect range top burners for cleanliness.
- If the burners are excessively dirty, recommend that they be cleaned to reduce the possibility of unacceptable emissions.
- Visually inspect flame for; – Blue color – Non-pulsing (consistent). Enter "P" – Passes. Yellow flame indicates flame impingement or bad fuel mixture. Enter "F" – Fails.
- If top burner(s) fail, recommend service.

cc. T18 Dryer Venting

- Record (Y) Yes or (N) No if there is a Dryer present.
- Note if the Dryer is vented to the outside properly.
- Record (Y) Yes or (N) No if the Duct Run is smooth pipe.
- Record (Y) Yes or (N) No if the Dryer is SWS Compliant.

Dryer Vent Treatment Clarification with No Dryer Present

An issue has arisen concerning the policy for addressing the clothes dryer venting in a dwelling with no dryer present. DOE has weighed in on this with the following to make clear what is permitted.:

1. The vent termination may be replaced in order to provide for the continuous pressure boundary that would otherwise be breached if left as found.
2. Removing the vent termination and sealing the hole is also an option. If the dryer termination is to be removed and the opening sealed, communication with the client is needed to not make more difficult any anticipated installment of a dryer.
3. Installing dryer vent ducting to a nonexistent appliance is not an allowable measure.

dd. T19 Domestic Water Heater

- Record the following items to input into the Water Heater screen of LITT:
  - Manufacturer
  - Model
  - Fuel type
  - Location (Heated, Unconditioned, Unintentionally Heated)
  - Size (gal)
  - Water Heater Wrap Present – Y, N
  - Water Heater Pipe Insulation – Y, N
  - PRV Compliant? Y, N
  - Input Units – Enter KBTU or kW
  - R-value of Insulation
  - Insulation Thickness (inches)
  - Insulation Type – Fiberglass, Polyurethane
  - Record the number of Showerheads
  - Enter total number of minutes of shower use – see chart for calculating shower use

Occupants

Showerheads (do not include low flow showerheads that already exist in the home)	1	2	3	4	5
1	15 min.	30 min.	45 min.	60 min.	75 min.
2	30 min.	30 min.	45 min.	60 min.	75 min.
3	45 min.	45 min.	45 min.	60 min.	75 min.
4	60 min.	60 min.	60 min.	60 min.	75 min.

  - Enter the average flow rate (in gallons per minute, gpm) for the showerheads.
  - If the flow rate is indicated on the showerhead, you can use this value (document with pictures). Otherwise, measure the water flow.
- Water Temperature – Record the temperature and indicate the location of the test (kitchen, hall bathroom, master bathroom, etc.)
- Vent Condition – Warm or Cold
  Based upon the description in BPI 1200, a Cold vent pertains to an appliance for which the heat

setting is turned OFF. A Warm vent pertains to an appliance for which the heat setting is turned ON and includes domestic Water Heaters.

- Record the Stack Temperature of the flue gases.
- After the unit has been in operation and stabilized (oxygen % and stack temperature have stabilized), record the Steady State Efficiency (SSE).
- Record the Oxygen (O^2) and the Carbon Dioxide (CO^2) percentages in the flue gases.
- CO AF/AM - There are two methods of recording the level of Carbon Monoxide in the flue gases, "Air Free" and "As Measured". The Carbon Monoxide is to be measured at 5 minutes after main burner operation in the undiluted flue gases of the appliance.
  - Unacceptable CO Level == If the Carbon Monoxide is above the threshold level for the combustion appliance when measured at 5 minutes, the Energy Auditor is to advise the homeowner/occupant that the appliance should be serviced immediately by a qualified professional.
  - Acceptable CO Level == If the Carbon Monoxide is below the threshold level for the combustion appliance when measured at 5 minutes, no action is required.

The Carbon Monoxide Threshold for Combustion Water Heaters (from BPI- 1200)

Appliance	Threshold Limit
Water Heater	200 ppm air free

- Spillage Time – This is the length of time that the appliance may "backdraft" prior to when the natural draft starts up. This test is performed in the CAZ Worst Case scenario (test T16). The allowable maximum amount of time for spillage of combustion gases into the home or combustion appliance zone is two minutes.
- Water heaters cannot be modeled for replacement. They can only be replaced as Health and Safety measures using LWAP or DES funds.

ee. T20 Health & Safety

- Note (Y) Yes, (N) No, or (N/A) Not Applicable for any signs of flame rollout. If yes, identify the issue on page 3, Table D.
- Note (Y) Yes, (N) No, or (N/A) Not Applicable for any signs of spillage. If yes, identify the issue on page 3, Table D.
- Note (Y) Yes, (N) No, or (N/A) Not Applicable for any safety/fire hazards. If yes, identify the issue on page 3, Table D.
- Note (Y) Yes, (N) No, or (N/A) Not Applicable if masonry chimney is lined. If no, identify the issue on page 3, Table D.
- Note (Y) Yes, (N) No, or (N/A) Not Applicable for any gas/fuel leaks. If yes, identify the issue on page 3, Table D.
- Note (Y) Yes, (N) No, or (N/A) Not Applicable for any combustion appliance vent(s) that have ¼" per foot rise or better. If no, identify the issue on page 3, Table D.
- Note (Y) Yes, (N) No, or (N/A) Not Applicable if combustion appliance venting is the correct material. If no, identify the issue on page 3, Table D.
- Note (Y) Yes, (N) No, or (N/A) Not Applicable if combustion appliance vent(s) have proper clearances to combustibles. If no, identify the issue on page 3, Table D.

8. FINAL INSPECTION DATA COLLECTION – QCI (ONLY)

This section serves to provide more information on the data collection process for the final

field energy audit. The above tables should be completed as well as the tables T21-T26 as listed below.

a. T21 Insert Audit Recommended Measures Report

- Electronically insert or handwrite the Recommended Measures Report that were installed in this section of Form 501:
  - Items in the top third of the Recommended Measures List with an individual Saving to Investment Ratio (SIR) of 0.0 are items entered as Incidental Repair Measures (IRM). These items were included in the audit by manually entering them in the Itemized Cost tab.
  - Items in the middle third of the Recommended Measures List with an individual Saving to Investment Ratio (SIR) of greater than 1.0 are Energy Conservation Measures (ECM) and were determined by the audit to be cost-effective to perform.
  - Items in the lower third of the Recommended Measures List with an individual Saving to Investment Ratio (SIR) of 0.0 are items entered as Health and Safety Measures (H&S). These items were included in the audit by manually entering them in the Itemized Cost tab.
- Any targeted values (Post blower door target), bag counts, square footage, R-values should be included for comparisons.
- Please note Pass/Fail (P/F) for each measure. All failed measures should be marked in T23 for Rework.

b. T22 Installation Standard Checklist

- This is a listing of commonly installed measures and the Standard Work Specifications (SWS) reference number that are to be verified.
- The list is not inclusive of all measures and reference numbers, but space is limited to add additional measures as may be found.

c. T23 Rework / Callback / Repair / Missed Opportunities

- Include the items / measures that need to be re-worked, repaired, or are requiring a callback.
- Include the date of the notification for the measure / item to be re-worked, repaired and the SWS reference number / citation number.
- Check "Done" for Reworks, Callbacks, and/or Repairs
- Information about any additional work items, due to missed opportunities, any additional H&S items not included on the initial Work Order, or items identified during the final QC diagnostic testing should be included within this section.
- Include any error or omissions in the energy audit inputs.
- Insert Comments regarding the Rework / Callback / Repair / Missed Opportunities that were identified.

d. T24 Audit Checklist

- Enter (Y) Yes, (N) No, or (N/A) Not Applicable for Customer File / Audit items. These include:
  - Audit Software Entries Correct
  - Audit Data Collection Complete
  - All Expenditures Justified by Audit
  - Client File Complete
  - Lead / Asbestos Documentation Complete
  - Missed Opportunities
  - ALL Combustion Systems Safe

- Final ASHRAE Settings Correct
- Picture of All Installed Measures
- All Required Signatures Complete
- Client Education (Identify)

e. T25 Energy Auditor Certification – Work Order

- Enter the name of the Energy Auditor and BPI Certification number.
- The Energy Auditor shall sign and date the form to verify that the Audit is a correct representation of the dwelling and that the Work Order/Recommended Measures Report is an accurate list of the needed weatherization measures.
- The Energy Auditor will also include the expiration date of their BPI certification.

f. T26 QCI Final Inspection

- Enter the name of the Quality Control Inspector and BPI Certification number.
- The Quality Control Inspector shall sign and date the form to verify that the unit passed the final quality inspection.
- The date entered in this section must be on or after the date of the final Quality Control Inspection (if there are multiple).
- The Quality Control Inspector will also include the expiration date of their BPI certifications.

g. Comments

Enter comments about the job, the audit, the workmanship, condition of the unit, that may be valuable information for a future visit. If anything has changed with the home since the initial audit (new or previously unidentified plumbing leak, unsafe electrical outlets, etc.), note it here. If there are new issues that can be addressed with Health and Safety funds, Weatherization Readiness Funds, or Dominion Energy Settlement funds, the Work Order can be updated, and these measures can be completed. The most important job of the Quality Control Inspector is to ensure the safety of the dwelling and the client.

9. Work Order and Recommended Measures Report

Each job in LITT must end with an engine run status of "Finished." The final WA 10 Engine run is the basis for the rest of the file. The corresponding Recommended Measures Report will be saved in LITT and the Work Order must be built from the same final engine run.

10. Recommended Measures Report

The Recommended Measures Report (RMR) details the weatherization measures that are to be installed in a client's home and must be included in the client file. In most circumstances, the final RMR and corresponding Work Order are sufficient to document the measures that were installed. However, there are some instances where multiple RMRs are required. This section details when to include multiple RMRs in the client file.

1) When replacement doors or windows are installed as Health and Safety measures, it is necessary to document the measures were first modeled as Energy Conservation Measures (ECM). If the energy auditor determines replacement doors or windows may be necessary, take the steps outlined in Sections T10 Doors and T11 Windows to model the replacements as ECMs. If the windows or doors are cost effective (SIR is above the LWAP threshold of 0.5), install them as ECMs. A second audit would not be necessary in this case. If the windows or doors are not cost

effective, run a second audit, and install them as Health and Safety measures (paid with LWAP funds). Include both RMRs in the client file and clearly label them.

2) Once weatherization work begins, additional information regarding the state of the dwelling may be discovered or certain factors in the dwelling could change. For example:

- A bathroom window was missed during the initial energy audit.
- A heat pump becomes non-operational.
- Belly insulation is damaged after a heavy rain.

In these instances (note the list is not intended to be exhaustive) a second audit would be required. To help OEO and DOE understand the measures that were installed and the timeline of the case, it is necessary to include multiple audits in the file. The RMRs should be clearly labeled.

It is also important the RMRs reflect the date the audit occurred. The Energy Audit comes before the Work Order, which comes before the work being done, which comes before the Quality Control Inspection. When viewing or saving an RMR, click '**Preview**'. This ensures the original audit date does not change. If 'Run Audit' is selected, the original audit date is overwritten by the new date. This can cause confusion, especially if the RMR date is now after the date the QCI was completed.

11. Change Order

During the course of weatherization, it may be necessary to add additional measures, remove certain measures, or provide clarification to changes to measures. Use the Change Order section in DBA to document these changes.

a. Change order Details Screen (DBA FACSPro)

Subgrantee is responsible for entering pertinent information into the Change Order Details screen to document cost differences or changes. First enter the date and initials as requested by the DBA screen. Subgrantee shall separate information into 3 distinct categories: Cost increases, cost decreases, and Information.

- The Cost increase section should be first and include: the date, information identifying the specific measure, information as to why the change occurred, and end with the dollar difference denoted with a (+) and ($). i.e. 1-1-2023, HVAC replacement recommended after service and diagnostic check. (+$6,000.00)
- The cost decrease section should be second and include: Date, information identifying the specific measure, information as to why the change occurred, and end with the dollar difference denoted with a (-) and ($). i.e, 1-1-2023, Only three smoke alarms needed instead of four. (-$40.00)
- The information section should be last and include: the date, information identifying the specific measure, and any information that the CAA deems necessary to add to the screen for explanatory purposes. This section should not include any cost change information that is already accounted for in the Itemized or non-itemized screens. It is exclusively for documenting information that helps understand why changes occurred. i.e. 1-1/2023, final blower door 2800 CFMs instead of targeted 2600, air sealing reduced from initial estimated cost.

12. Measure Skipping

It is important to identify the major measures listed on the Work Order. Major measures include air sealing, duct sealing outside the thermal boundary, and thermal boundary insulation (attic, wall, floor, belly, foundation, sill, etc.). If the audit returns these measures with a cost-effective SIR (1.0 or higher for DOE funds or 0.5 or higher for LWAP funds), they must be installed.

There are situations where other non-major measures can be skipped, but these situations should be rare and require significant documentation as well as prior approval from OEO. Measures can be skipped in the following instances:

1. There is a funding issue or limitation. If DOE, LWAP, or other funds will not cover all the listed measures, non-major energy conservation measures can be removed starting with the lowest SIR measure and working up the list. As measures are removed, the overall SIR of the dwelling must remain at 1.0 or higher to spend DOE funds. Note that necessary Health and Safety Measures cannot be removed, only non-major energy conservation measures.
2. Client refusal prior to work beginning. As with funding issues, major measures cannot be skipped regardless of client preference. If the client refuses a major measure, the job must be deferred. If the client refuses a non-major ECM, an effort should be made to educate the client on the importance of the measure and/or find an alternative material to complete the installation. If the client is still resistant to the install, non-major ECMs can be skipped, provided the SIR of the dwelling remains at 1.0 or higher once the measure is removed from the audit. The client file must include the documentation and justification for skipping the measure.
3. Client refusal after a job has begun. Due to scheduling and logistics, lower priority measures are sometimes installed before measures with a higher SIR. If the client declines a higher priority measure after one with a lower SIR has already been installed, work on the dwelling must cease. The measures that were installed must be inspected by a QCI and the dwelling closed out. Documentation of this action must be included in the client file.
4. Inadequate training of contractors, crew, or other subgrantee staff is not a valid reason to skip a measure. Work on the dwelling must be postponed until adequate training is acquired.
5. General Heat Waste Measures. These measures (water heater tank and pipe wrap, low flow showerheads, and faucet aerators) can be skipped. The reason for the skip must be documented in the client file.

13. Weatherization Measures Priority List Policy

With the release of WPN 22-8 (effective July 1, 2022), the Department of Energy (DOE) has given grantees permission to use preapproved Priority Lists for dwellings that meet certain criteria. For dwellings that meet the criteria outlined below, an Energy Audit using the NEAT/MHEA Weatherization Assistant software is not required. While sub-grantees are not required to use the NEAT/MHEA tool for these dwellings, they must conduct an Energy Audit and obtain enough information to complete Form 501 and the appropriate Regional Priority List Checklist (Form 130 for Site Built or Form 140 for Manufactured). The information captured here is necessary so a Quality Control Inspection (QCI) can be completed once the measures are installed. In this document the term 'DOE WAP' covers both the annual DOE WAP grant and the DOE Infrastructure Investment and Jobs Act (IIJA) WAP grant (Formerly the Bi-Partisan Infrastructure Law or BIL grant). Subgrantees should

consult the IIJA (BIL) State Plan for additional restrictions on WAP IIJA (BIL) funds.

a. Mandatory and Optional Measures

DOE has designated certain measures in the Priority Lists as 'Mandatory' and 'Optional'. A mandatory measure must be installed unless it is physically impossible for it to be installed, or it already exists (ex. attic already has specified R-value of insulation). These specific instances must be clearly documented with photos and a narrative and included with the client file. An optional measure can only be installed if ***all*** mandatory measures have already been installed (excluding those that are impossible to install or already exist).

b. Priority List for Single Family Site-Built Homes

To qualify for preapproved Priority Lists, single family site-built homes must meet the following criteria:

1. Be no more than 3 stories in height above grade.
2. Have a primary heating system that is NOT:
   a. A sealed-combustion natural gas furnace originally rated for ≥ 90% AFUE.
   b. A heat pump manufactured after 2006.
3. Require no more than $500 in DOE WAP money on incidental repairs as outlined in WPN 19-5 (LWAP money can be used for additional incidental repairs).

If the single-family site-built home is eligible for the preapproved Priority List, install measures as indicated below.

1. Mandatory: All applicable Health and Safety (H&S) measures as outlined in the approved H&S Plan. Note the DOE WAP H&S maximum of $1,050 applies. H&S measures in excess of $1,050 must be paid for with LWAP H&S money.
2. Mandatory: Light Emitting Diode (LED) lighting replacement of all existing screw-based incandescent, halogen, or compact fluorescent lighting used for a minimum of one hour per day.
3. Mandatory: Air Sealing – seal the exterior pressure boundary surfaces at all the following locations: attic top-plates; ceiling, wall, and floor bypasses, penetrations, and holes; sill box to floor intersection if on unconditioned crawlspace or basement, or entire sill box area if conditioned foundation.
   - Target value is 1 cfm/ft2 of conditioned floor area.
4. Mandatory: Duct Sealing – seal all accessible ducts located outside the thermal boundary.
   - Target value is 1 Pascal per register as measured with a Pressure Pan.
5. Mandatory: Duct Insulation – insulate all accessible uninsulated ducts located outside the thermal boundary to R-8 or R12 if exposed to the exterior.
6. Mandatory: Ceiling Insulation
   - Unconditioned Attic
     i. Mandatory: Insulate all accessible attics to R-38 or to capacity if less.
     ii. Mandatory: Insulate all uninsulated enclosed attics to capacity (e.g., floored or cathedral).
   - Finished Attic /Kneewall Attic /Bonus Room
     i. Mandatory: Insulate all attic flats (collar beam & outer ceiling joists) to R-38 or to capacity if less.

ii. Mandatory: Insulate all uninsulated attic enclosed roof rafter slopes to maximum capacity possible.
iii. Mandatory: Insulate all uninsulated knee walls to R-15 or to capacity, whichever is greater.

7. Mandatory: Wall Insulation
   - Mandatory: Insulate any uninsulated exterior wall cavities to capacity with dense pack insulation.
   - Optional: – Insulate any partially insulated exterior wall cavities (e.g., 3.5" cavity with 2" of existing batt) using dense-pack insulation.
8. Mandatory (only for homes with propane or oil-fired primary heat): Floor insulation – insulate all uninsulated floors over unconditioned foundations to R-30 or to full joist capacity, if less. Must include complete ground moisture barrier over any exposed dirt floor.
9. Optional: ($250 per dwelling DOE WAP maximum)
   - Showerhead (≤ 2.5 Gallons per Minute)
   - Domestic Water Heater (DWH) tank insulation (R-10 minimum)
   - DWH Pipe Insulation (6' of both hot and cold-water lines nearest the DWH, and any accessible hot water lines beyond that to R-3)
10. Optional: Replace up to (1) refrigerator per home, with a label rating of less than 400kWh/yr and maximum installed cost of $850 per unit when the existing refrigerator:
    - Was manufactured before 2001, OR
    - Uses >1000 kWh/yr based upon energy use metering or industry accepted resource.
11. Optional: Primary Heating and Air-Conditioning System Replacements
    - Replace existing ducted electric resistance forced-air furnace and air conditioning combination with a heat pump of minimum 15.2/SEER2 & 7.8/HSPF2 which must include an EC air handler motor and programmable thermostat.
    - Replace existing combination of non-ducted fixed electric resistance heat (e.g., electric baseboard, and PTAC units), and non-ducted air conditioning (i.e., window or room A/C, including PTAC) with a minimum 19/SEER2 & 10/HSPF2 mini-split heat pump system which must include a programmable thermostat.
    - Replace existing window A/C manufactured before 2014 with a minimum 12 CEER or higher unit of the same or lesser BTU capacity.
    - If the home has any other existing combination of heating/cooling systems other than as described above, it is not eligible for a replacement via the priority list.
    - If a home is not eligible to have its heating or air-conditioning replacement be performed as an Optional Measure, the unit can still be replaced as a Health and Safety Measure using LWAP funds. This mirrors the existing practice where an HVAC can still be replaced even if it the replacement is not energy efficient after a NEAT/MHEA audit.
    - HVAC repairs or clean and tunes are not part of the priority list. These must be completed as Health and Safety measures.

c. Priority List for Single-Family Manufactured Homes

To qualify for preapproved Priority Lists, single-family manufactured homes must meet the following criteria:

1. Be manufactured before 2010.
2. Have an accessible unconditioned subspace.
3. NOT have an attached conditioned addition.
4. Have a primary heating system that is NOT a natural gas furnace originally rated ≥ 80% AFUE.
5. Require no more than $500 in DOE WAP money on incidental repairs as outlined in WPN 19-5 (LWAP money can be used for additional incidental repairs).

If the single-family manufactured home is eligible for the preapproved Priority List, install measures as indicated below.

1. Mandatory: All applicable Health and Safety (H&S) measures as outlined in the approved H&S Plan. Note the DOE WAP H&S maximum of $1,050 applies. H&S measures in excess of $1,050 must be paid for with LWAP H&S money.
2. Mandatory: Light Emitting Diode (LED) lighting replacement of all existing screw-based incandescent, halogen, or compact fluorescent lighting used for a minimum of one hour per day.
3. Mandatory: Air Sealing – seal the primary pressure boundary surfaces at the following locations: attic top-plates (if accessible); all penetrations and holes through the ceiling, exterior walls, and floor.
    - Target value is 1 cfm/ft2 of conditioned floor area.
4. Mandatory: Duct Sealing – seal all accessible ducts. At a minimum, seal all end caps, crossovers, duct boot connections, holes or penetrations, and furnace connections.
    - Target value is 1 Pascal per register.
5. Mandatory: Ceiling Insulation (both flat and vaulted ceilings) – fill ceiling to capacity with blown insulation.
6. Optional (only for homes with propane or oil-fired primary heat): Replace all single-paned metal-framed windows with Low-E double-paned windows having a U-value of 0.33 or less. Single pane windows with storm windows are not eligible for replacement using DOE funds.
7. Optional: ($250 per dwelling DOE WAP maximum)
    - Showerhead (≤ 2.5 Gallons per Minute)
    - Domestic Water Heater (DWH) tank insulation (R-10 minimum)
    - DWH Pipe Insulation (6’ of both hot and cold-water lines nearest the DWH, and any accessible hot water lines beyond that to R-3)
8. Optional: Replace up to (1) refrigerator per home, with a label rating of less than 400kWh/yr and maximum installed cost of $850 per unit when the existing refrigerator:
    - Was manufactured before 2001, OR
    - Uses >1000 kWh/yr based upon energy use metering or industry accepted resource.
9. Optional: Primary Heating and Air-Conditioning System Replacements

- Replace existing window A/C manufactured before 2014 with a 12 CEER or higher unit of the same or lesser BTU capacity.
- If the home has any other existing combination of heating/cooling systems other than as described above, it is not eligible for a replacement via the priority list.
- If a home is not eligible to have its heating or air-conditioning replacement be performed as an Optional Measure, the unit can still be replaced as a Health and Safety Measure using LWAP funds. This mirrors the existing practice where an HVAC can still be replaced even if it the replacement is not energy efficient after a NEAT/MHEA audit.
- HVAC repairs or clean and tunes are not part of the priority list. These must be completed as Health and Safety measures.

d. Dwellings Not Eligible for Priority Lists

If a single-family site-built or manufactured home does meet the criteria to be eligible for the Preapproved Priority Lists or if it is determined additional measures are required which are not included on the Preapproved Priority Lists, a site-specific Energy Audit using the NEAT/MHEA software as approved by DOE is required.

e. Additional Considerations

This section contains further instruction and guidance for using Priority Lists. If you have specific questions not addressed in this document, please contact OEO's senior manager for weatherization.

- In order to use these Priority Lists, DOE WAP money must be spent on at least one mandatory measure other than Health and Safety.
- The maximum amount of DOE WAP money that can be expended on Health and Safety measures remains $1,050.
- LWAP money can be used to install Health and Safety measures regardless of whether DOE WAP money is spent on Health and Safety measures.
- DOE WAP funds used for Energy Conservation Measures will be included in the calculation of the Average Cost Per Unit (ACPU) for the fund in question. The ACPU for DOE WAP IIJA (BIL) funds is $8,009. The ACPU for DOE WAP funds is $8,250 for Program Year 2023, but subject to change in subsequent program years.
- LWAP funds used for Energy Conservation Measure will be included in the calculation of the ACPU. The ACPU for LWAP funds is $12,000.
- For optional measures with a hard cap of DOE WAP funds, LWAP funds can be used as needed so long as the ACPU of $12,000 is not exceeded.
- Mandatory and Optional measures may be co-funded (individual measures may be split between DOE and LWAP funding). However, the cost center must clearly indicate which measures were paid by which funding source.
- The Quality Control Inspection for single-family site-built and single-family manufactured homes is identical to the one outlined in the Weatherization Policies and Procedures Manual.
- Dwellings weatherized with the Priority List must include a weatherization application, relevant weatherization forms, and documentation of the client's situation (proof of income, energy bill, etc.) as outlined in the Weatherization Policies and Procedures Manual.

- The client file must include a completed Form 130 or 140 depending on the type of dwelling that was weatherized.
- The client file must include a Work Order printed from LITT and signed by the contractor performing the weatherization work.

f. Priority List Forms

a. Form 501

- Form 501 has an additional cover sheet. Go over the requirements for site built and manufactured homes to use the Priority List.
- Note on the Cover Sheet if an audit will be run on the home or if the Regional Priority List will be used.
- Complete all sections of Form 501 regardless of the section of audit or Regional Priority List.

b. Form 130 Single-Family Site Built Priority List Checklist

Page 1: The first section lists the requirements to use the Regional Priority List. Make sure the home is eligible before proceeding. The second section lists the photo requirements for using the Regional Priority List. Note the requirements are not changing. Photos should be clear and labeled in client file.

1. Mandatory Health and Safety Measures: The Energy Auditor may list the Health and Safety measures in this section, but in the interest of not duplicating work may write 'See Form 501'. Make sure all measures are consistent with the most recent Health and Safety Plan.
2. Mandatory LED Lighting: Check 'Yes' or 'No' for the question regarding lighting and enter additional comments if necessary.
3. Mandatory Air Sealing: Enter areas to be air sealed in the additional comments section.
4. Mandatory Duct Sealing: Check 'Yes' or 'No' for the question regarding duct locations and continue to the subsequent sections.
   Check 'Yes' or 'No' for Duct Repairs and list any repairs in the additional comments section.
   Check 'Yes' or 'No' regarding accessible ducts, indicate where the ductwork is located and enter any additional comments.
5. Mandatory Duct Insulation: Check 'Yes' or 'No' for insulation question, enter any additional comments, and continue to subsequent section.
6. Mandatory Ceiling Insulation: Check the types of attic insulation that exist in the home.
   Check 'Yes' or 'No' regarding the R38 question.
   Check 'Yes' or 'No' on the existence of a finished attic. If 'Yes' is checked, check the box beside each applicable item. For items that were not checked, enter insulation requirements in the additional comments section.
   Check the boxes for any attic prep required before insulation and enter any additional comments.
7. Mandatory Exterior Wall Insulation: Check 'Yes' or 'No' and continue to the subsequent sections.
   For the optional question, check 'Yes' or 'No' and continue to the subsequent sections. Answer the wall prep question and enter any additional comments.

8. Mandatory Floor Insulation: Check 'Yes' or 'No' for the primary heating fuel question and continue to the subsequent section.
   Check 'Yes' or 'No' for the floor question and continue to the subsequent section.
   Check 'Yes' or 'No' for the dirt floor question and enter any additional comments before continuing to the subsequent section.
9. Optional General Heat Waste Reduction: Place a check beside the optional repairs that will be completed and enter any additional comments.
10. Optional Refrigerator: Check 'Yes' or 'No' for the refrigerator question and enter any additional comments.
11. Optional Primary Heating and Air-Conditioning System Replacements: Check the box beside the option that describes the primary heating or air-conditioning system. If home is not eligible for a replacement heating or air-conditioning system via the priority list, HVAC units can also be replaced with LWAP Health and Safety funds.

Page 6: The auditor should print and sign their name and enter the current date.

c. **Form 140 Manufactured Home Priority List Checklist**

Page 1: The first section lists the requirements to use the Regional Priority List. Make sure the home is eligible before proceeding. The second section lists the photo requirements for using the Regional Priority List. Note the requirements are not changing. Photos should be clear and labeled in client file.

1. Mandatory Health and Safety Measures: The Energy Auditor may list the Health and Safety measures in this section, but in the interest of not duplicating work may write 'See Form 501'. Make sure all measures are consistent with the most recent Health and Safety Plan.
2. Mandatory LED Lighting: Check 'Yes' or 'No' for the question regarding lighting and enter additional comments if necessary.
3. Mandatory Air Sealing: Enter areas to be air sealed in the additional comments section.
4. Mandatory Duct Sealing: Check 'Yes' or 'No' for the question regarding duct failures and list necessary repairs in the additional comments section.
   Check 'Yes' or 'No' regarding areas that are already sealed and enter any additional comments.
5. Mandatory Ceiling Insulation: Check 'Yes' or 'No' for the question regarding ceiling space and continue to the subsequent section.
   Check the boxes for any attic prep required before insulation and enter any additional comments.
6. Optional Window Replacement: Check 'Yes' or 'No' for question on the primary heating fuel and continue to the subsequent section.
   Check 'Yes' or 'No' for the window question, enter any additional comments, and continue to the subsequent section.
7. Optional General Heat Waste Reduction: Place a check beside the optional repairs that will be completed and enter any additional comments.
8. Optional Refrigerator: Check 'Yes' or 'No' for the refrigerator question and enter any additional comments.

9. Optional Primary Heating and Air-Conditioning System Replacements: Check the box beside the option that describes the primary heating or air-conditioning system. If home is not eligible for a replacement heating or air-conditioning system via the priority list, HVAC units can also be replaced with LWAP Health and Safety funds.

Page 6: The auditor should print and sign their name and enter the current date.

14. Heating System/Air Conditioning Reworks

During weatherization, an agency may perform work on a heating or cooling system without replacing the unit (clean and tune or diagnostic check). If the system is working properly during the QCI, the subgrantee is not responsible for any repairs that may be necessary later. However, if the client calls within one calendar year post-QCI and indicates the system is not working properly, the subgrantee may, at their discretion, but under no obligation, take the following steps to access and correct the problem:

1. Have a licensed HVAC technician perform a diagnostic check on the system to determine the problem.
2. Have the licensed HVAC technician correct the problem if possible. Since a replacement system was not recommended during the Energy Audit or included in the Health and Safety measures, the system cannot be replaced once weatherization work is completed.
3. Pay the HVAC technician with non-DOE and non-LWAP funds. If the subgrantee does not have non-DOE or non-LWAP funds, they may use money from the tool/supplies line item if available to complete the repair (must be less than $500).
4. Update the notes screen in LITT documenting the reason for the rework.
5. Upload relevant paperwork (invoices, HVAC diagnostics, etc.) to the client file in LITT.

If the HVAC system cannot be repaired, notify the client in writing, and refer to other services to assist with HVAC repair or replacement (if available). Update the notes screen in LITT detailing the situation and upload relevant paperwork to the client file in LITT.

15. Vapor Barrier

The vapor barrier (used interchangeably with vapor retarder) is an important part of weatherization as it preserves other measures by preventing or reducing moisture. When a vapor barrier is being selected, it must meet International Residential Code (IRC) requirements. This means it must be a Class I vapor retarder rated at 0.1 perm or less. It must also be dark in color and puncture resistant with a thickness of at least 6 mil.

a. Installation of Vapor Barrier

Vapor barriers must be installed in the crawlspace of all site-built homes. The vapor barrier must be secured with stakes and cover all exposed soil. The vapor barrier must extend a minimum of six inches up all foundation walls and piers but should not come in contact with non-treated structural wood. If a wall vapor barrier is used to meet the six-inch requirement, the wall vapor barrier should be installed under the ground vapor barrier at the wall to floor connection. Fasten the barrier with wood strips, masonry fasteners, and sealant., such as polyurethane adhesive or acoustical sealant to a clean and flat masonry surface. Seams must overlap at least 12 inches. Seal the edges and seams with acoustical sealant, butyl caulking, or construction tape to create an airtight seal between the crawl space and the ground underneath. If the crawlspace does not provide adequate clearance (less than 24 inches in height) or there is a danger to the contractor or crew

conducting the installation, the vapor barrier can be skipped after discussion with OEO. This includes clearances from ductwork, plumbing and other penetrations restricting movement in the crawlspace. If the Energy Auditor can't fit under the house, chances are the contractor and the QCI will not fit also. OEO may determine deferral is a better option rather than weatherizing a home without installing a vapor barrier. If the vapor barrier is not installed, pictures documenting the clearance restriction or other safety risk must be included in the client file along with a narrative explaining the choice.

b. Vapor Barrier and Skirting

Vapor barriers are not required for manufactured housing if the belly is intact. If one is deemed necessary, you should follow the same procedures as above, except for running it up the sides of the skirting, unless the skirting is brick.

c. Ground Cover

To save time and money on clean up, and for the comfort of the contractor/crew, sub-grantees are allowed to install a ground cover under a manufactured dwelling. The plastic used must be at least 6-mil polyethylene with less than .1 perm. The ground cover needs to extend to the skirting and to any support structures to effectively capture all construction waste. The ground cover is not required to go up any internal support structures or have any seams sealed. When skirting is present there are no requirements to fasten the ground cover to the ground, but if there is no skirting present the ground cover must be fastened to the ground in a fashion that will secure it from wind and other forces that might dislodge it. The Ground Cover must remain in place under the dwelling. The maximum allowable cost for the installation of a ground cover is $400.00 for a single-wide mobile home and $500.00 for a double-wide mobile home. Ground covers should be installed as a Health and Safety measure and paid for with alternative funds (LWAP or DES).

d. Special Situations

If a manufactured home has an addition with a site built foundation and crawl space, the addition should have a vapor barrier installed provided there is adequate clearance and no danger to the contractor. Please contact OEO if you have questions regarding the installation of vapor barriers.

e. References

See the South Carolina Weatherization Field Guide (section1.6.7) for details on ground vapor barriers. If you have specific questions, please contact OEO.

16. WEATHERIZATION ASSISTANCE PROGRAM DUCT BLOWER PERFORMANCE STANDARDS

a. Duct Blower Reading

As of 1 January 2011, Duct Testing is now required via a duct-blower system. The IRC 2009 states in section N1103 of the Energy Efficiency Chapter 11:

"*Duct Tightness shall be verified by either of the following: 1. Post-construction test: leakage to the outdoors shall be less than or equal to 8 CFMs per 100 sq.ft. of conditioned floor area or a total leakage less than or equal to 12 CFMs per 100 sq.ft. of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25Pa) across the entire system, including the manufacturer's air handler end closure. All register boots shall be taped or otherwise sealed during the test.*"

This required test can only be accomplished with a duct- blower.

A. The energy auditor is required to test the unit during the initial assessment.
B. The energy auditor or the contractor may test the unit while the WAP work is in progress.
C. The quality control inspector or the contractor is required to test the unit at the time of the final inspection.

*If the CONTRACTOR performs the final test, the quality control inspector is responsible for the accuracy of the final test.

b. Duct Leakage Limits

Weatherization work must reach the target duct leakage limits.

A. The Total Duct Leakage Limit is defined as the minimum amount of air infiltration (calculated @ 25Pa duct system pressure) necessary to maintain a healthy air quality for the unit.
B. The Duct Leakage to Outside Limit is defined as the minimum amount of air infiltration (calculated @ 25Pa to the outside of house with reference to the duct system pressure) necessary to maintain a healthy air quality for the unit.
C. The Total Duct Leakage is calculated by 12 CFM/100 square feet of conditioned floor area. Duct Leakage to the Outside is calculated by 8 CFM/100 square feet of conditioned floor area. These can be easily calculated by multiplying the conditioned square footage of the house by .12 for total duct leakage and .08 for duct leakage to the outside.
D. The final CFM readings should fall at or below these calculations. If they do not, then more duct sealing should be performed. If unable to achieve these targets, then documentation of why targets were unattainable must be made and placed in file.
E. The final duct blower readings must be recorded on the 501 Form.

c. Prescribed procedure for Duct Blower

Use either Minneapolis or Retrotec Duct Blower setup guides for step-by-step instructions for both Total Duct Leakage and Duct Leakage to Outside testing. Readings must be documented on the 501 Form.

d. Prescribed procedure for Duct Operating Pressures

Duct operating pressures must be taken in the supply and return. NOTE: The air handler should be turned on AND any cooling or heating functions should be turned off, as these measurements are taken.

A. Obtaining the operating pressure for supply pressure (in Pa): Drill a small hole in the supply plenum. Care should be taken not to drill into the "A"coil—you may cause a (coolant / Freon) leak. You should use a drill stop to ensure the drill bit only penetrates 1/8 of an inch into the plenum (a ring of plastic PVC piping measured to your drill tip and bit is an excellent drill stop, especially when drilling through metal sheeting). Use a static pressure probe w/ a metal magnetic tip that is "hooked" or curved. Insert the tip into the plenum to get a

pressure reading with your manometer. Make sure the hole of the probe is facing the flow of the air when you get the reading.

B. Obtaining the operating pressure for the return pressure (in Pa). Follow the same instructions above. Drill and measure the pressure in the return duct.
C. After duct sealing these numbers should increase.

e. Duct Sealing Requirements

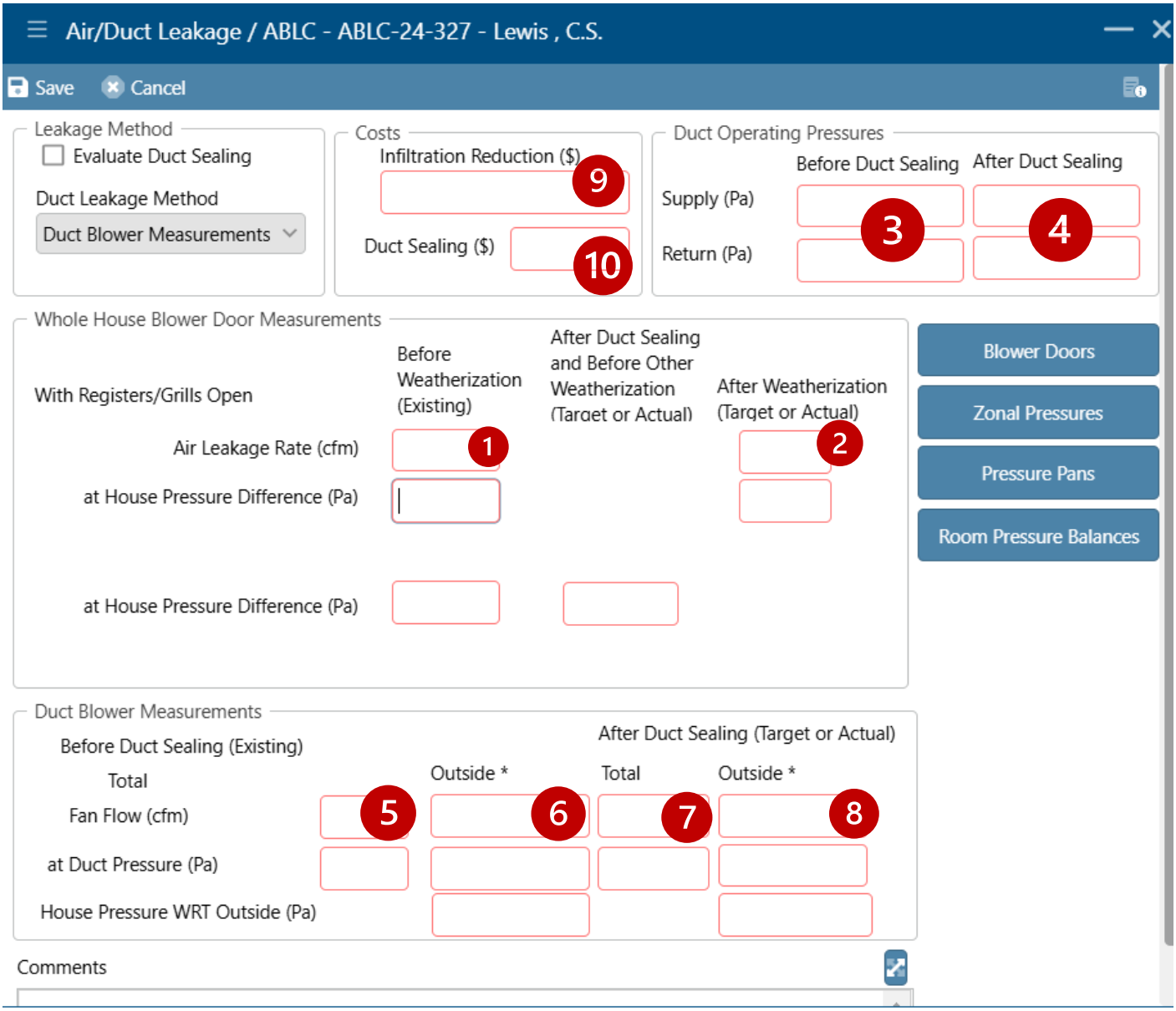
Duct mastic is the preferred duct-sealing material because of its superior durability and adhesion. Apply at least 1/16-inch thick and use reinforcing mesh for all joints wider than 1/8 inch or joints that may experience some movement.

Codes call for UL-181 A or B mastic. The A listed product is for use on foil or metal duct materials. The B listed product is for use on flex duct. There are chemicals in the A product that can rot flexduct so be sure to get the right one. Also, for health and safety reason, only use **water-based** mastics! Mastics with petroleum-based solvents can pose severe health risks including hospitalization of the crew or client.

Siliconized acrylic-latex caulk is acceptable for sealing joints in panned joist spaces, used for return ducts. Joints should rely on mechanical fasteners to prevent joint movement or separation. Tape should never be expected to hold a joint together nor expected to resist the force of compacted insulation or joint movement. Aluminum foil or cloth duct tape are not good materials for duct sealing because their adhesive often fails after a short time.

Ducts located outside the thermal boundary or in an intermediate zone like a ventilated attic or crawl space should be sealed. Leaks nearer to the air handler are more important than leaks further away.

The following is a screenshot of the LITT data entry screen:



1. This is where your Blower Door CFM50 number goes.

2. This is where your Blower Door Target CFM50 number goes.

3. Duct operating pressures must be taken in the supply and return. NOTE: The air handler should be turned on AND any cooling or heating functions should be turned off, as these measurements are taken.
   a. Obtaining the operating pressure for supply pressure (in Pa): Drill a small hole in the supply plenum. Care should be taken not to drill into the "A"coil—you may cause a (coolant / Freon) leak. You should use a drill stop to ensure the drill bit only penetrates 1/8 of an inch into the plenum (a ring of plastic PVC piping measured to your drill tip and bit is an excellent drill stop, especially when drilling through metal sheeting). Use a static pressure probe w/ a metal magnetic tip that is "hooked" or curved. Insert the tip into the plenum to get a pressure reading with your manometer.

Make sure the hole of the probe is facing the flow of the air when you get the reading.

b. Obtaining the operating pressure for the return pressure (in Pa). Follow the same instructions above. Drill and measure the pressure in the return duct.

4. After duct sealing these numbers should increase.

5. This is the reading on the duct blower as you run total duct leakage.

6. This is the number on the duct blower manometer as you run duct leakage to outside.

7. This is where you will put the target 12 CFM/100 SF of home.

8. This is where you will put the target 8 CFM/100 SF of Home

9. This is where the dollars that you want to spend on air sealing goes (based on the whole-house assessment, prices of materials & labor, and funds justification [based on the audit and agency policies]).

10. This is where the dollars that you want to spend on duct sealing goes (based on the whole-house assessment, prices of materials & labor, and funds justification [based on the audit and agency policies]).

f. Recommendation Summary:

Studies by U.S. utilities, cities and universities found that 25% - 30% of rated airflow is lost due to duct leakage. Duct leakage slashes equipment efficiency and increases peak demand for electricity. Worse is that supply duck leaks depressurize the house, trading conditioned air for unwanted hot humid outside air, and can cause back- drafting of appliances. While return duck leaks pressurize the house, bringing in dirty hot humid air from attics or crawlspaces, and can back-draft appliances that are near the return leak.

Be in compliance with IRC 2009 standards. Use a duct-blower to evaluate duct leakage. Proper data-entry into NEAT will nearly always result in adequate and authorized funds (SIR >1) to accomplish duct sealing.

VIII. Appeals And Fair Hearings Procedures

Complaint and Appeals Procedures

Each subgrantee must adopt the South Carolina Office of Economic Opportunity's Standardized Statewide Fair Hearing and Appeals procedures set forth by OEO. In addition, each subgrantee must educate and inform each applicant of the Fair Hearing and Appeals Procedures. A copy of these procedures must be posted in a visible place in each office and explained to all applicants.

Applicants or Clients who assert they have been unfairly treated, been denied access to program assistance services, or have complaints about the weatherization work performed are entitled to the following:

1. Denial of Services/Assistance

Applicants who assert they have been unfairly treated and/or been denied access to

program assistance services are entitled to be notified in writing explaining the reason for the denial. Subgrantees are encouraged to informally resolve issues with applicants when possible. However, if resolution cannot be reached within a reasonable time frame, the proper procedures for an applicant or client to appeal a subgrantee's decision(s) are as follows:

- Client should first file a written appeal with the Community Action Agency in which he/she applied for service(s), requesting a formal hearing, within 30 calendar days of the date of receipt of the agency's Notification of Denial of Assistance/Services.
- If the appeal is denied at the Community Action Agency level, the applicant may file a written appeal to the Office of Economic Opportunity within 20 calendar days of the applicant's receipt of the agency's written hearing decision. The applicant shall submit the written appeal to:

  Attention: Legal Counsel
  1205 Pendleton Street, Suite 366
  Columbia, SC 29201
  (803) 734-0662

- If the appeal is further denied by OEO, the applicant may file a written appeal within 20 calendar days of the applicant's receipt of OEO's written hearing decision. The Department of Administration's Chief Legal Counsel will select a Hearings Officer to conduct the hearing within 30 days of receipt of the letter of appeal, utilizing the informal disposition procedures outlined in S.C. Code §§ 1-23-310 to 1-23-400 of the State Administrative Procedures Act.

2. Workmanship Issues

Clients who have concerns about weatherization work performed should notify the Community Action Agency who provided the weatherization services. Subgrantees are encouraged to informally resolve issues with clients when possible. However, if resolution cannot be reached within a reasonable time frame, the proper procedures for an applicant or client to appeal a subgrantee's decision(s) are as follows:

- Client should first file a written complaint regarding the workmanship with the Community Action Agency in which he/she received weatherization service(s), requesting a formal hearing within 1 year of the weatherization completion date (Final Inspection date).
- If the Client is not satisfied with the Community Action Agency's response, the Client may file a written appeal to the Office of Economic Opportunity within 20 calendar days of the applicant's receipt of the agency's written hearing decision. The applicant shall submit the written appeal to:

  Attention: Legal Counsel
  1205 Pendleton Street, Suite 366
  Columbia, SC 29201
  (803) 734-0662

- If the appeal is denied by OEO, the Client may file a written appeal within 20 calendar days of the Client's receipt of OEO's written decision. The Department of Administration's

Chief Legal Counsel will select a Hearings Officer to conduct the hearing within 30 days of receipt of the letter of appeal, utilizing the informal disposition procedures outlined in S.C. Code §§ 1-23-310 to 1-23-400 of the State Administrative Procedures Act.

IX. Forms

1. Forms To Be Used During Initial Customer Engagement

Form 99	-	COVID-19 – June 2020 (Optional until further notice)
Form 100	-	Client Interview
Form 101	-	Homeowner / Fuel Release
Form 102	-	Mold and Moisture Checklist
Form 103A	-	Lead Hazard Education
Form 104A	-	Unvented Space Heater Agreement Site-Built
Form 104B	-	Unvented Space Heater Agreement Mobile Home
Form 105	-	Weatherization Service Agreement
Form 106	-	State Historic Preservation Office
Form 107	-	Deferral of Service Notification
Form 108	-	Radon Informed Consent
Form 109	-	ASHRAE 62.2 Notification
Form 120	-	Weatherization Readiness
Form 130	-	Single Family Site-built Priority List Checklist
Form 140	-	Manufactured Home Priority List Checklist
Form 501	-	Data Collection & Final Inspection Form

2. Forms To Be Used During Or At The End Of The Work Process

Form 103	-	Lead Certified Renovator (if applicable)
Form 110	-	Ventilation and Your Home
Form 111	-	Hazard Identification Form
Form 200	-	Insulation Certificate
Form 501	-	South Carolina Data Collection / Final Inspection Form

3. Forms To Be Used During Final Quality Control Inspection

Form 1	-	Client File Checklist
Form 400	-	Client Review
Form 501	-	South Carolina Data Collection / Final Inspection Form
Form 600	-	South Carolina QCI Final Inspection Certification Form

4. Warranty Information

Copies of warranty information pertaining to HVAC, Water Heaters, Refrigerators, and Stoves are recommended to be gathered and kept in the client file. This information must be given to the customer, if applicable, and as an additional safeguard or for quick reference should be retained for future use.

5. Unable To Determine Dwelling Age

In instances where the age of a dwelling cannot be determined, a letter indicating such from the governmental agency in the jurisdiction that verifies a dwellings age can be used. (ex. letter from tax accessor's office). This document should be included in the LITT upload. Since the age of the dwelling cannot be determined, Form 103 and Form 106 will also need to be included in the client file. Lead safe work practices will need to be followed, and any non-exempt work will

need to be approved by SHPO.

X. WAP CAA Directory

Community Action Agency	**Counties Served**
Aiken-Barnwell	Aiken, Allendale, Bamberg, Barnwell, Calhoun, Greenville, Lexington, Orangeburg, Richland
Carolina	Chester, Fairfield, Lancaster, Union, York
Chesterfield-Marlboro	Chesterfield, Darlington, Dillon, Marlboro
GLEAMNS	Abbeville, Anderson, Cherokee, Edgefield, Greenwood, Laurens, McCormick, Newberry, Oconee, Pickens, Saluda, Spartanburg
Lowcountry	Colleton, Hampton
Palmetto	Beaufort, Berkeley, Charleston, Dorchester, Jasper
Waccamaw	Georgetown, Horry, Williamsburg
Wateree	Clarendon, Florence, Kershaw, Lee, Marion, Sumter

04/01/2025