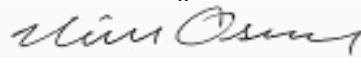


ASSISTANCE AGREEMENT

1. Award No. DE-EE0009932		2. Modification No. 0001	3. Effective Date 07/01/2022	4. CFDA No. 81.042	
5. Awarded To Tennessee Housing Development Agency Attn: DON WATT Andrew Jackson Building 502 Deaderick Street Third Floor NASHVILLE TN 37243		6. Sponsoring Office Energy Efficcy & Renewable Energy EE-1 U.S. Department of Energy 1000 Independence Avenue, S.W. Washington DC 20585		7. Period of Performance 07/01/2022 through 06/30/2024	
8. Type of Agreement <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Other	9. Authority Public Law 109-58, Energy Policy Act (2005)		10. Purchase Request or Funding Document No. 23EE002303		
11. Remittance Address Tennessee Housing Development Agency Attn: Don Watt ANDREW JACKSON BUILDING 502 DEADERICK ST THIRD FLOOR NASHVILLE TN 37243		12. Total Amount Govt. Share: \$12,146,479.00 Cost Share : \$0.00 Total : \$12,146,479.00		13. Funds Obligated This action: \$6,387,066.00 Total : \$12,146,479.00	
14. Principal Investigator	15. Program Manager Floris C. Weston Phone: 202-586-8296		16. Administrator Golden Field Office U.S. Department of Energy Golden Field Office 15013 Denver West Parkway Golden CO 80401		
17. Submit Payment Requests To Payment - Direct Payment from U.S. Dept of Treasury		18. Paying Office Payment - Direct Payment from U.S. Dept of Treasury		19. Submit Reports To See Reporting Checklist	
20. Accounting and Appropriation Data See Schedule					
21. Research Title and/or Description of Project WEATHERIZATION ASSISTANCE PROGRAM - Tennessee					
For the Recipient			For the United States of America		
22. Signature of Person Authorized to Sign			25. Signature of Grants/Agreements Officer 		
23. Name and Title		24. Date Signed	26. Name of Officer Nicholas C. Oscarsson		27. Date Signed 08/23/2023

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	DE-EE0009932/0001	2	3

NAME OF OFFEROR OR CONTRACTOR

Tennessee Housing Development Agency

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>DUNS Number: Not Available UEI: PE5YAVXSBZL7 -</p> <p>In addition to this Assistance Agreement, this award consists of the items listed on the Cover Page of the Special Terms and Conditions.</p> <p>Current Budget Period: 07/01/2023 to 06/30/2024</p> <p>Project Period: 07/01/2022 to 06/30/2025</p> <p>In Block 7 of the Assistance Agreement, the Period of Performance reflects the beginning of the Project Period through the end of the current Budget Period.</p> <p>The purpose of this action is to:</p> <p>a) Obligate Program Year 2023 funds and to authorize performance of Program Year 2023 activities;</p> <p>b) Update the DOE Award administrator and the DOE Project Officer, as shown below.</p> <p>Funding for all awards and future budget periods is contingent upon the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority.</p> <p>DOE Award Administrator: Denise McCracken Email: Denise.Mccracken@ee.doe.gov Phone: 240-562-1485</p> <p>DOE Project Officer: Floris Weston E-mail: floris.weston@ee.doe.gov Phone: 202-586-8296</p> <p>Recipient Business Officer: Ralph M. Perrey E-mail: RPerrey@thda.org Phone: 615-815-2200</p> <p>Recipient Principal Investigator: Cynthia Peraza E-mail: CPeraza@thda.org Phone: 615-815-20112</p> <p>Electronic signature or signatures as used in this document means a method of signing an electronic message that-</p> <p>Continued ...</p>				

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	DE-EE0009932/0001	3	3

NAME OF OFFEROR OR CONTRACTOR
 Tennessee Housing Development Agency

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	(A) Identifies and authenticates a particular person as the source of the electronic message; (B) Indicates such person's approval of the information contained in the electronic message; and, (C) Submission via FedConnect constitutes electronically signed documents. ASAP: YES Extent Competed: NOT AVAIL FOR COMP Davis-Bacon Act: NO PI: Peraza, Cynthia				

BUDGET INFORMATION - Non-Construction Programs

1. Program/Project Identification No. EE0009932		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address State of Tennessee Andrew Jackson Building Nashville, TN 372430900		4. Program/Project Start Date 07/01/2023	5. Completion Date 06/30/2024

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. PY2022-2023 WAP Allocation & Carryover	81.042	\$ 3,981,325.00		\$ 6,387,066.00		\$ 10,368,391.00
2.						
3.						
4.						
5. TOTAL		\$ 3,981,325.00	\$ 0.00	\$ 6,387,066.00	\$ 0.00	\$ 10,368,391.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) GRANTEE ADMINISTRATI ON	(2) SUBGRANTEE ADMINISTRATI ON	(3) GRANTEE T&TA	(4) SUBGRANTEE T&TA	
a. Personnel	\$ 203,750.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 203,750.00
b. Fringe Benefits	\$ 50,937.50	\$ 0.00	\$ 0.00	\$ 0.00	\$ 50,937.50
c. Travel	\$ 618.50	\$ 0.00	\$ 23,044.00	\$ 0.00	\$ 23,662.50
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
e. Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
f. Contract	\$ 0.00	\$ 716,949.00	\$ 975,458.00	\$ 812,810.00	\$ 10,056,296.00
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other Direct Costs	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
i. Total Direct Charges	\$ 255,306.00	\$ 716,949.00	\$ 998,502.00	\$ 812,810.00	\$ 10,334,646.00
j. Indirect Costs	\$ 33,745.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 33,745.00
k. Totals	\$ 289,051.00	\$ 716,949.00	\$ 998,502.00	\$ 812,810.00	\$ 10,368,391.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

BUDGET INFORMATION - Non-Construction Programs

1. Program/Project Identification No. EE0009932		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address State of Tennessee Andrew Jackson Building Nashville, TN 372430900		4. Program/Project Start Date 07/01/2023	5. Completion Date 06/30/2024

SECTION A - BUDGET SUMMARY						
Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						
2.						
3.						
4.						
5. TOTAL		\$ 3,981,325.00	\$ 0.00	\$ 6,387,066.00	\$ 0.00	\$ 10,368,391.00

SECTION B - BUDGET CATEGORIES						
6. Object Class Categories	Grant Program, Function or Activity					Total (5)
	(1) PROGRAM OPERATIONS	(2) HEALTH AND SAFETY	(3) Weatherization Readiness	(4) FINANCIAL AUDITS		
a. Personnel	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 203,750.00	
b. Fringe Benefits	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 50,937.50	
c. Travel	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 23,662.50	
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
e. Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
f. Contract	\$ 5,659,892.00	\$ 1,006,175.00	\$ 865,012.00	\$ 10,000.00	\$ 10,056,296.00	
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
h. Other Direct Costs	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
i. Total Direct Charges	\$ 5,659,892.00	\$ 1,006,175.00	\$ 865,012.00	\$ 10,000.00	\$ 10,334,646.00	
j. Indirect Costs	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 33,745.00	
k. Totals	\$ 5,659,892.00	\$ 1,006,175.00	\$ 865,012.00	\$ 10,000.00	\$ 10,368,391.00	
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	

BUDGET INFORMATION - Non-Construction Programs

1. Program/Project Identification No. EE0009932		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address State of Tennessee Andrew Jackson Building Nashville, TN 372430900		4. Program/Project Start Date 07/01/2023	5. Completion Date 06/30/2024

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						
2.						
3.						
4.						
5. TOTAL		\$ 3,981,325.00	\$ 0.00	\$ 6,387,066.00	\$ 0.00	\$ 10,368,391.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) LIABILITY INSURANCE	(2)	(3)	(4)	
a. Personnel	\$ 0.00				\$ 203,750.00
b. Fringe Benefits	\$ 0.00				\$ 50,937.50
c. Travel	\$ 0.00				\$ 23,662.50
d. Equipment	\$ 0.00				\$ 0.00
e. Supplies	\$ 0.00				\$ 0.00
f. Contract	\$ 10,000.00				\$ 10,056,296.00
g. Construction	\$ 0.00				\$ 0.00
h. Other Direct Costs	\$ 0.00				\$ 0.00
i. Total Direct Charges	\$ 10,000.00				\$ 10,334,646.00
j. Indirect Costs	\$ 0.00				\$ 33,745.00
k. Totals	\$ 10,000.00				\$ 10,368,391.00
7. Program Income	\$ 0.00				\$ 0.00

**U.S. Department of Energy
WEATHERIZATION ASSISTANCE PROGRAM (WAP)
WEATHERIZATION ANNUAL FILE WORKSHEET**

(Grant Number: EE0009932, State: TN, Program Year: 2023)

IV.1 Subgrantees

Subgrantee (City)	Planned Funds/Units
City of Memphis (Memphis)	\$1,579,246.00 123
Clarksville/Montgomery County Community Action Agency (Clarksville)	\$227,067.00 18
Delta Human Resource Agency (Covington)	\$158,685.00 12
East Tennessee Human Resource Agency (Knoxville)	\$812,555.00 63
Highland Rim Economic Corporation (Erin)	\$109,491.00 10
International Center for Appropriate and Sustainable Technology (Denver)	\$250,000.00 1
Knoxville-Knox County Community Action Committee (Knoxville)	\$784,598.00 61
Metropolitan Development & Housing Agency (Nashville)	\$865,285.00 67
Mid-Cumberland Community Action Agency (Lebanon)	\$780,249.00 61
South Central Human Resource Agency (Fayetteville)	\$565,023.00 44
Southeast Tennessee Human Resource Agency (Dunlap)	\$856,915.00 67
Southwest Human Resource Agency (Henderson)	\$780,552.00 61
Upper Cumberland Human Resource Agency (Cookeville)	\$531,153.00 41
Upper East Tennessee Human Development Agency (Kingsport)	\$760,019.00 59
Total:	\$9,060,838.00 688

IV.2 WAP Production Schedule

		Units
Weatherization Plans		
Total Units (excluding reweatherized)		688
Reweatherized Units		0
Planned SERC Units *		0
Average Unit Costs, Units subject to DOE Project Rules		
VEHICLE & EQUIPMENT AVERAGE COST PER DWELLING UNIT (DOE RULES)		
A	Total Vehicles & Equipment (\$5,000 or more) Budget	\$0.00
B	Total Units Weatherized	688
C	Total Units Reweatherized	0
D	Total Dwelling Units to be Weatherized and Reweatherized (B + C)	688
E	Average Vehicles & Equipment Acquisition Cost per Unit (A divided by D)	\$0.00

**U.S. Department of Energy
WEATHERIZATION ASSISTANCE PROGRAM (WAP)
WEATHERIZATION ANNUAL FILE WORKSHEET**

(Grant Number: EE0009932, State: TN, Program Year: 2023)

AVERAGE COST PER DWELLING UNIT (DOE RULES)		
F	Total Funds for Program Operations	\$5,659,892.00
G	Total Dwelling Units to be Weatherized and Reweatherized (from line D)	688
H	Average Program Operations Costs per Unit (F divided by G)	\$8,226.59
I	Average Vehicles & Equipment Acquisition Cost per Unit (from line E)	\$0.00
J	Total Average Cost per Dwelling (H plus I)	\$8,226.59

IV.3 Energy Savings

Method used to calculate savings: <input checked="" type="checkbox"/> WAP algorithm <input type="checkbox"/> Other (describe below)				
		Units	Savings Calculator (MBtus)	Energy Savings
	This Year Estimate	688	29.3	20158
	Prior Year Estimate	472	29.3	13830
	Prior Year Actual	153	29.3	4483
Method used to calculate savings description:				

IV.4 DOE-Funded Leveraging Activities

Conversations are in progress regarding leveraging utility funds in PY2023.

IV.5 Policy Advisory Council Members

Check if an existing state council or commission serves in this category and add name below

e3 Innovate	Type of organization: For-profit or Corporate (not a financial institution or utility) Contact Name: Erik Daugherty Phone: 6158765479 Email: erik@E3Innovate.com
Habitat for Humanity	Type of organization: Non-profit (not a financial institution) Contact Name: Lucile Houseworth Phone: 6159421250 Email: lhouseworth@habitatnashville.org
Jackson Energy Authority	Type of organization: Utility Contact Name: Bruce Dorris Phone: 7314227294 Email: bdorris@jaxenergy.com
Knoxville-Knox Community Action Committee	Type of organization: Non-profit (not a financial institution) Contact Name: Jeffrey Vincent Phone: 8652443080 Email: jeffrey.vincent@cachousing.org
Nashville Electric Service	Type of organization: Utility Contact Name: Phone: 6122266893 Email: tvigliett@comcast.net
Penn Rose	Type of organization: Other Contact Name: Mark Straub Phone: 4236348955 Email: mstraub@penrose.com
Tennessee Department of Environment and Conservation	Type of organization: Unit of State Government Contact Name: Molly Cripps Phone: 8888918332 Email: molly.cripps@tn.gov
	Type of organization: Non-profit (not a financial institution)

**U.S. Department of Energy
WEATHERIZATION ASSISTANCE PROGRAM (WAP)
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(Grant Number: EE0009932, State: TN, Program Year: 2023)

Tennessee Manufactured Housing Association	Contact Name: Marla Jackson Phone: 6152564733 Email: marla@tmha.org
Tennessee Valley Authority	Type of organization: Unit of Federal Government Contact Name: Frank Rapley Phone: 6152326673 Email: fmrapley@tva.org
Three Cubed	Type of organization: Non-profit (not a financial institution) Contact Name: Erin Rose Phone: 8659633256 Email: erose@threecubed.org
Upper Cumberland Human Resource Agency	Type of organization: Non-profit (not a financial institution) Contact Name: Tommy Simcox Phone: 9318237323 Email: tsimcox@uchra.com

IV.6 State Plan Hearings (Note: attach notes and transcripts to the SF-424)

Date Held	Newspapers that publicized the hearings and the dates the notice ran
05/03/2022	Public notice of the PY2023 WAP Application was provided by posting the draft application on the THDA website, sent an email to the PAC and the WAP agencies with the draft application attached.

IV.7 Miscellaneous

<p>Recipient Business Officer: Ralph M. Perrey, RPerrey@thda.org, 615-815-2200 Recipient Principal Investigator: Cynthia Peraza CPeraza@thda.org, 615-815-2112</p> <p>Address for both: Tennessee Housing Development Agency 502 Deaderick Street, Third Floor Nashville, TN 37243</p>
<p>Policy Advisory Council (PAC):</p> <p>To the extent possible, THDA's PAC advocates for and provides a broad representation of 'At-Risk' and 'Low-income' populations such as but not limited to: children, elderly, Persons with Disabilities, and Native Americans.</p>
<p>MAXIMUM AVERAGE COST PER UNIT:</p> <p>THDA estimated the average cost per unit at the maximum allowed to ensure all the needed ECMs could be installed in each home and to ensure we set an attainable unit goal.</p> <p>In accordance with 2 CFR 200.425(a)(2), Only those Subgrantees expending \$750,000 or more in Total Federal Funding (Federal Awards) will receive FINANCIAL AUDITS funds identified in THDA's SF-424 Budget.</p>
<p>THE STATE OF TENNESSEE WEATHERIZATION READINESS PLAN:</p> <p>Weatherization Readiness Funds (WRF) are designated for use by Subgrantees in addressing structural and health and safety issues. Wx Readiness Funds are specifically targeted to reduce the frequency of deferred homes that require other services, outside the scope of weatherization, before the weatherization services can commence.</p> <p>THDA and Subgrantees will comply with the requirements of WPN 23-4 including but not limited to:</p> <ul style="list-style-type: none"> • DISTRIBUTION OF FUNDS: Tennessee was allocated \$578,913 dollars and it will be divided between the subgrantee agencies receiving 2023 Weatherization Program awards to use across the State of Tennessee, aligned with the other DOE funding.

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WEATHERIZATION ASSISTANCE PROGRAM (WAP)
WEATHERIZATION ANNUAL FILE WORKSHEET**

(Grant Number: EE0009932, State: TN, Program Year: 2023)

TENNESSEE WRF Allocation \$578,913

City of Memphis Division of Housing	10 UNITS
Clarksville-Montgomery County CAA	1 UNITS
Delta HRA	2 UNITS
East Tennessee HRA	5 UNITS
Highland Rim EC	1 UNITS
Knoxville-Knox County CAC	5 UNITS
MDHA	6 UNITS
Mid-Cumberland CAA	5 UNITS
South Central HRA	4 UNITS
Southeast Tennessee HRA	6 UNITS
Southwest HRA	4 UNITS
Upper Cumberland HRA	3 UNITS
Upper East Tennessee HDA	5 UNITS

WRF AVERAGE COST PER UNIT: The average cost per unit for Readiness will be \$10,000.

MONITORING OF UNITS: Agencies will conduct 100% inspections on Readiness units and the state will conduct 5% minimum but will try to inspect more units. We will monitor these units as we do the regular weatherization units at 5 percent minimum field monitoring. We will add a section to the QCI checklist regarding whether readiness funds were used on this home or not.

REPORTING: Currently the subgrantees keep a list of deferred clients on spreadsheets that we view at the time of Program Monitoring. Those spread sheets can be expanded to include tracking the work performed under Readiness and the overall costs and submitted quarterly to our office. THDA could compile a list of all the units completed under Readiness and the total materials and labor costs for measures. Conversations are ongoing regarding adding a WRF tracker to our online system WAPez.

REPORTING CATEGORIES:

These clients will be qualified through the regular system so any separate reporting of readiness funds will include Readiness specific data only until it can be incorporated into our regular tracking:

- Client/Job # as if relates to the deferral and subsequent full weatherization
- Date of Application
- Dwelling type and year built
- Documented cause for deferral
- Cost of Remediation
- Date of Remediation
- Other funds utilized

ELIGIBLE MEASURES: NATURE OF REPAIRS NEEDED WHICH PROHIBIT WEATHERIZATION. Where applicable, identify multiple repairs or remediation reasons for a single building. These are some of the eligible categories include, but are not limit to:

- MAJOR ROOF REPAIR
- WALL REPAIR
- CEILING REPAIR
- FLOOR REPAIR
- FOUNDATION OR SUBSPACE REPAIR
- EXTERIOR DRAINAGE REPAIRS (GUTTER/LANDSCAPING)
- PLUMBING REPAIRS
- ELECTRICAL REPAIRS
- CLEANUP AND OR REMEDIATION BEYOND WAP
- LEAD PAINT/ASBESTOS/MOLD AND MOISTURE/BIOLOGICA/PESTS/ETC.
- FUEL TANK REMOVAL, REPAIR, OR INSTALLATION
- MAJOR REPAIR TO UNSAFE CHIMNEY AND STACKS
- WATER SOURCE REPAIR (WELLS/FILTRATION SYSTEM, ETC.)
- WINDOWS AND DOORS BEYOND SCOPE OF WX. H&S

PROCESS: Weatherization Readiness Funds can only be used on homes that will receive weatherization services following the deficit correction:

1. If the subgrantee has a wait list of deferred homes in a service area, these homes should be considered immediately for Weatherization Readiness funds to get

U.S. Department of Energy
WEATHERIZATION ASSISTANCE PROGRAM (WAP)
WEATHERIZATION ANNUAL FILE WORKSHEET

(Grant Number: EE0009932, State: TN, Program Year: 2023)

them in the queue for weatherization services. Client should be contacted and scheduled for assessment.

2. Normally, deferrals are identified at the time of the assessment when an energy auditor goes to the home. For a new client that is being assessed for weatherization services, if there are serious issues identified that are beyond the scope of eligible conservation and H&S recommendations utilizing the funds available, this home would be categorized as Deferred until the deficiency is corrected. These clients have been identified following the normal prioritization and wait list process so this should continue to be followed.
 3. In either case the subgrantee would create a scope, contract for services or engage with a crew to do the work so that the building would then be eligible for weatherization work. Readiness work needs to be identified by measure in the client file.
 4. Once the Readiness work is complete, the client needs to sign off on a detailed list of the measures installed and then should be scheduled as soon as possible for weatherization services. (If this occurs during a transition between program years, that is fine just keep the information from the Readiness work in the client file moving forward.
 5. The subgrantee agency will then report to THDA on a spreadsheet quarterly until we can create a category in our on line data base systems. Client files for each job are expected to contain the intake, measure, cost, and inspection information for Readiness.
- **BRAIDING FUNDS:** Tennessee will try to utilize funds from other sources to augment these funds.

Build America. Buy America Act Compliance

THDA is prepared to purchase domestically manufactured iron, steel, manufactured goods, or construction materials when Department of Energy guidelines become available.

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WEATHERIZATION ASSISTANCE PROGRAM (WAP)
STATE PLAN/MASTER FILE WORKSHEET

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This worksheet should be completed as specified in Section III of the Weatherization Assistance Program Application Package.

V.1 Eligibility

V.1.1 Approach to Determining Client Eligibility

Provide a description of the definition of income used to determine eligibility

Countable income and income exclusions will follow WPN 23-3, or the most current version.

For a dwelling to be eligible for weatherization services, it must be occupied by a household who meets one of the following criteria:

1. Income Eligible – Total annualized income of the household residing in the dwelling to be weatherized is at or below 200 percent of the poverty level determined by the U.S. Department of Commerce.
2. Categorically Eligible – The household has a member who has received cash assistance payments under one of the following state or federally funded programs:
 - Supplemental Nutrition Assistance Program (“SNAP”)
 - Low Income Home Energy Assistance Program (“LIHEAP”)
 - Tennessee Head Start
 - Social Security Disability Income (“SSDI”) – for head of household or single parent
 - Supplemental Social Income (“SSI”) – issued through the Title XVI of the Social Security Act
 - Families First/Temporary Assistance for Needy Families (“TANF”) – for head of household
 - Woman, Infants, and Children benefits (“WIC”) – for households with 3 or fewer members
 - Housing Choice Voucher/Section 8 Rental Assistance

An applicant will remain eligible for weatherization services for 12 months from the date of verified eligibility. If 12 months have passed from the date of verified eligibility, a re-audit is required.

The application and supporting documentation will be reviewed and verified by the program administrator.

Describe what household eligibility basis will be used in the Program

Any household meeting either income or categorical eligibility would be eligible to receive weatherization benefits by the Weatherization Assistance Program (WAP).

Describe the process for ensuring qualified aliens are eligible for weatherization benefits

The applicant must be a U.S. citizen, or legal alien. Documentation of citizenship is required for every applicant, without regard to race, religion, gender, ethnicity, or marital status. When an applicant declares themselves an alien, agencies will utilize the Systemic Alien Verification for Entitlements (“SAVE”) database for verification and maintenance.

V.1.2 Approach to Determining Building Eligibility

Procedures to determine that units weatherized have eligibility documentation

The applicant must provide income documentation satisfactory to the Subgrantee outreach worker that demonstrates the household meets the eligibility requirements. Documentation must be verified for the one-year period prior to the certification month.

Describe Reweathering compliance

Weatherization services for a dwelling unit previously weatherized using DOE funds are not allowable except if:

- A dwelling unit is located in an area that has been declared a federal or state natural disaster area
- The dwelling unit has been damaged by fire, flood, or act of God and repair of the damage done to the weatherization materials is not paid for by insurance or other source

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STATE PLAN/MASTER FILE WORKSHEET

(Grant Number: EE0009932, State: TN, Program Year: 2023)

- A dwelling unit has not been weatherized using Federal funds within fifteen years of the date such previous weatherization was completed.

Any applicants being considered for reweatherization are required to meet the income eligibility standards.

Describe what structures are eligible for weatherization

Structures eligible for weatherization include single family, mobile homes, manufactured housing, and with approval, small (1-4 unit) multifamily buildings. All structures

Describe how Rental Units/Multifamily Buildings will be addressed

Rental Units

If the applicant rents the home to be weatherized, the building owner or his agency must provide written permission before weatherization services can be provided. agent, and a copy maintained for documentation purposes. Separate permission from the renter is also required.

Multifamily Buildings

A building that has multiple (two or more) living units under a single roof is considered a multifamily building regardless if renter or owner occupied. A single unit with services.

Before services can be provided, the multifamily building must be determined to meet minimum eligibility standards regarding the number of unit with eligible applicant

Multifamily units with four or less units must have a minimum of 50 percent of all units occupied by an eligible household; multifamily units with five or more units must

Describe the deferral Process

THDA Subgrantees may elect to defer a home from receiving weatherization services where health and safety hazards exist for Subgrantee staff, contractors, clients or

It is the responsibility of the tenant and/or property owner to correct deferral condition(s) in order for weatherization services to proceed.

Subgrantees are encouraged to access Weatherization Readiness Funds (WRF) to address reasonable deferrals. Guidance on WRF processes, maximum expenditure Program Manual. If WRF funds are fully expended or otherwise not available, Subgrantees are encouraged to make referrals or collaborate with programs including

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WEATHERIZATION ASSISTANCE PROGRAM (WAP)
STATE PLAN/MASTER FILE WORKSHEET**

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Existing conditions under which a dwelling unit should be determined as Deferred include, but may not be limited to, the following:

- Elevated carbon monoxide levels where abatement is not possible using WAP funds;
- Existing moisture problems that cannot be resolved within program guidelines;
- House with sewage or other sanitary problems that not only endanger the customers but the workers who will perform the weatherization work;
- Occupant’s health condition;
- Building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and these conditions cannot be resolved within the scope and funding restrictions of WAP;
- Mechanical systems that have been “red-tagged” and cannot be resolved within the scope and funding restrictions of WAP;
- Any existing condition that could endanger the health and/or safety of the work crew or subcontractor and cannot be safely abated;
- When toxic substances are discovered which cannot be addressed by the WAP, the coordinator should report the problems to the client and indicate that activities that would have to be disturbed during the installation process.
- Unlawful activities are occurring in the dwelling that could endanger the customers or the crews. Example: A home may have housed a methamphetamine lab. <http://www.justice.gov/dea/seizures/index.html>
- When structural, wiring or plumbing problems exist which make the project unfeasible, the client should be notified of the problem(s) and no further WAP activities should be performed until the condition has been remedied.
- When a dwelling is infested with insects, rodents, etc., activities should cease until the condition has been remedied.
- Condition of the home, and the contents within, prohibit the ability to weatherize the home.
- Homes using un-vented gas heaters as a primary heating source are not eligible for services until suitable measures have been accomplished to minimize the health and safety issues associated with the heaters.
- Health and Safety funding has been temporarily exhausted, and weatherization work cannot proceed without addressing the associated health and safety issue.
- Initiation of eviction or foreclosure proceedings for the property will require deferral of weatherization services. In the event the household is evicted, or foreclosure proceedings are initiated, weatherization services will be deferred until the property is no longer in foreclosure proceedings.

The following is a list of potential funding sources to help remedy situations in the home:

- LIHEAP Wx
- U.S. Department of Housing and Urban Development (HUD) - HOME Program
- HUD – Community Development Block Grant
- U.S. Department of Health and Human Services – Community Services Block Grant
- U.S. Department of Agriculture - Rural Economic Community Development
- State-funded housing and rehabilitation programs
- Low-income program funds provided by local utilities
- City-funded housing and rehabilitation programs
- Donations or financial participation from landlords
- Donations from local churches or community groups
- Donations from local businesses, non-profit organizations, or local associations

Deferrals are tracked in WAPez, and any referrals are maintained in the client file. Listing the referral agency will be an add-on to WAPez in PY2023.

V.1.3 Definition of Children

Definition of children (below age): **18**

V.1.4 Approach to Tribal Organizations

Recommend tribal organization(s) be treated as local applicant?

If YES, Recommendation. If NO, Statement that assistance to low-income tribe members and other low-income persons is equal.

Tennessee does not have any federally or state recognized tribes. Any client that is a member of a tribal organization will be treated the same as any other eligible applicant.

V.2 Selection of Areas to Be Served

All 95 counties in Tennessee will be served. Funding allocations will be provided based on the percentage of the State’s low income population that resides within a service area that will consist of one or more counties; and Subgrantee funding will be based on the county allocation(s) for their service area.

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THDA reserves the right to reallocate funding amongst Subgrantees based on performance and need throughout the year.

In the event that an entity fails to enter into an agreement to service a Subgrantee, THDA will work to identify another organization to serve in this Subgrantee role. In covering the remaining counties in Tennessee.

V.3 Priorities

Priority will be given to households with one or more vulnerable household members, and/or with a high energy burden.

A vulnerable household member is defined as elderly, disabled, or with a child under the age of six (6).

A household with a high energy burden, based on the percentage of total household countable income and their energy costs, will be given priority in receiving weatherization assistance in the South Central Region according to the Residential Energy Consumption Survey conducted by the Energy Information Administration.

Priority wait lists will be maintained on a county level.

An approved client may have a maximum of 100 points, exception to the maximum may occur after additional points are assigned due to disaster related damage.

Priority points will be assigned as follows:

Vulnerable Household Members (50 Points Maximum)

Includes a household member with following characteristic(s):

- Late Elderly (age 75+) 20
- Elderly (age 60-74) 15
- Disabled 15
- Child under age 6 years of age 15

If multiple elderly members reside in the unit, use the age of the oldest members to determine countable points. A client may be awarded points once per category based on the number of members.

Energy Burden (15 Points Maximum)

Percentage of income used for home energy costs, calculated by the total countable annualized income for dwelling:

- 19.01% or higher 15
- 15.01% - 19% 10
- 8.01% - 15% 5
- 8% or less 0

High Residential Energy User (10 Points Maximum)

Annual Energy Costs Points, per the Residential Energy Consumption Survey:

- \$3,000 or more 10
- \$1,900 or more 5
- \$1,899 or more 0

Average annual energy costs for a low-income household in the East South Central Region is \$1,907.00 (2015 Residential Energy Consumption Survey conducted by the Energy Information Administration)

V.4 Climatic Conditions

Tennessee has a generally temperate climate, with warm summers and mild winters. However, the state's varied topography leads to a wide range of climatic conditions.

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up middle Tennessee, and lies between the Tennessee River to the west, the hilly Highland Rim to the north and the Cumberland Plateau to the east. The Cumberland Great Valley of East Tennessee. The Great Valley, which runs parallel to the Cumberland Plateau on the west and the Great Smokey Mountains on the east, is a fun ranging from 4,000 to 6,000 feet. Tennessee's topography contributes to the variance of temperature, with an average of three degrees Fahrenheit decrease per 1,000 feet. Tennessee state, have lower average temperatures than those found in other parts of the state. Across the state the average annual temperature ranges from 62 degrees in extra winter average of 39 degrees and a summer average of 76 degrees. Average annual precipitation in Tennessee is 53 inches, with the greatest rainfall occurring in the

The data is pasted below:

Heating Degree Days

Month starting	HDD
1/1/2021	859
2/1/2021	664
3/1/2021	462
4/1/2021	217
5/1/2021	56
6/1/2021	2
7/1/2021	0
8/1/2021	0
9/1/2021	24
10/1/2021	189
11/1/2021	460
12/1/2021	744
Total	3677

Cooling Degree Days

Month starting	CDD
1/1/2021	0
2/1/2021	4
3/1/2021	4
4/1/2021	19
5/1/2021	186
6/1/2021	255
7/1/2021	393
8/1/2021	370
9/1/2021	345
10/1/2021	52
11/1/2021	0
12/1/2021	0
Total	1,628

V.5 Type of Weatherization Work to Be Done

V.5.1 Technical Guides and Materials

All work done is consistent with its DOE approved energy audit and Appendix A; Tennessee is approved to use LED's, replace Refrigerators, Lifetime changes and use of the Weatherization Assistance Program Audit tool ("NEAT, MHEA") with the exception of the measures that have been identified as low cost or no cost. He

All measures and incidental repairs performed on projects must meet the specifications, objectives and desired outcomes outlined in the Standard Work Technical C the form of technical assistance memorandums, technical assistance contractors, or through reference to DOE established guidance. The measures identified are the n current Tennessee Specific Standard Work Specifications will be available online and in digital form via the WAPez platform and linked here [Tennessee Housing De Guide](#) to the current version, the approved SWS has been uploaded as an attachment to the SF-424.

THDA contracted with Saturn Resource Management in PY18 to create a Tennessee specific field guide, this was updated in 2021. Tennessee's current SWS Field

Ensuring Quality Work from Quality Control Inspectors, Energy Auditors and Contractors

All units must receive a final inspection by a THDA approved Quality Control Inspector ("QCI"). A THDA approved QCI must have a current QCI certification from

QCIs are required to ensure weatherization work has been completed and meets the current technical guidance and SWS. QCIs must attend all mandatory weatheri

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the course within six (6) months they are no longer eligible to conduct QCI visits until they take the course. A QCI's performance is monitored by THDA or THDA'

If there are repeat findings from a QCI, additional training will be required. If after successfully passing additional training the QCI continues to have repeat findings,

Step 1: Technical Assistance THDA will set up technical assistance and training sessions with the QCI, THDA staff, and our T&TA provider.

Step 2: Additional training If the QCI continues to have findings after the technical assistance and training sessions, the QCI may be required to attend and

Step 3: Removal from the program If the QCI is unable or unwilling to perform to the standard set by THDA and DOE, they will be removed from WAP. An inspector may request to be reinstated into the program. The request to be reinstated must include the corrective action steps that were taken and justification

THDA reserves the right to reject work from a poor performing QCI, Energy Auditor or contractor.

The Subgrantee, contractors, and auditors are able to view and download the TN WAP Technical SWS within WAPez via their login credentials.

By signing the WAP Contract and the Weatherization Services Contract the agency and

contractor verifies that all weatherization work including audits/testing, installation of energy conservation measures, health and safety measures, incidental repair measures, Work Specifications, and State and Federal requirements.

All work must comply State and Federal WAP requirements and the THDA Standard Work Specifications.

If a contractor repeatedly fails to meet program expectations, they will be subject to the following corrective action:

Step 1: Counseling The Subgrantee will set up a counseling session with the contractor, local agency staff and THDA T&TA provider.

Step 2: Additional training as a result of counseling, the contractor must attend and pass mandatory additional training.

Step 3: Removal from the program If the contractor is unable or unwilling to perform to the standard set by THDA and DOE they will be removed from WAP.

After the completion of the two-year period a contractor may request to be reinstated into the program. The request to be reinstated must include the corrective action

Air Sealing

Air sealing work will be guided by the use of a blower door and digital manometer. The most effective infiltration reduction efforts typically involve sealing leaks between units. The energy auditor may be required to perform necessary air infiltration measures until the unit is properly air sealed established using a CFM50 target based approach. The energy auditor may utilize blower door readings to identify air sealing opportunities, the Subgrantee has the flexibility to determine how they will specify it on the work order. The work order should include increased training for auditors and crews on air sealing techniques and CFM reduction, auditors and crews are better prepared to recognize areas to reduce air infiltration. A weatherization conservation measure that is not required to show a post weatherization individual SIR of 1.0 or greater. The package of weatherization measures, including costs are required to meet an individual 1.0 SIR as long as the cumulative SIR is 1.0 or higher for the entire project. All other Energy Conservation Measures must provide an individual cumulative SIR fall below 1.0 SIR, then the cost for the measure must be negotiated until the cumulative SIR is 1.0 or higher. American Society of Heating, Refrigeration and Air Conditioning (ASHRAE) Ventilation standards are included in auditor training, the Tennessee Weatherization Field Guide and National Standard Work Specifications. As a result of a blower door test, if a door, it may be that the unit is deferred. Living conditions that prohibit the use of the blower door may require deferral until such conditions can be remedied.

Attic Insulation

Attic bypasses shall be sealed prior to the installation of attic insulation. The amount of attic insulation that can be cost effectively added depends on the level of existing insulation. Attics must comply with Tennessee state standards and codes. Attics with structural issues that are beyond the scope of the WAP may not be able to be insulated in full or at all. For more information regarding the proper procedures to follow for attic preparation and installation standards.

Floor Insulation

The Weatherization Assistant Audit Tool determines the appropriate R value and need for insulation for a specific unit. The Tennessee Weatherization Field Guide determines the amount of insulation that can be cost effectively added varies with existing levels of insulation, space heating fuel, and foundation type. Plastic sheeting may be installed as ground vapor barrier, following the barrier will preserve the integrity of the floor insulation by reducing the amount of moisture evaporating from the ground.

Wall Insulation

Walls shall be insulated if the cost to insulate is justified. Walls that are already fully insulated or solid masonry, concrete, concrete block or wood will not be insulated.

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- Active knob and tube wiring is present in the wall cavity
- Wall cavity contains HVAC duct, wall furnace or heater
- Wall cavity is next to a fireplace or chimney without sufficient clearance
- Wall cavity space is connected to an unprotected pocket door cavity
- Wall repairs are needed and not able to be performed as part of the weatherization package

Other situations that may result in a hazardous situation or where the wall cannot be properly prepared due to unique structure of the home.

Other Insulation

Insulation of water heaters, water pipes, and HVAC ductwork are allowable weatherization measures.

Domestic Hot Water (DHW)

Replacement of the water heater is permitted, provided the replacement of the existing unit meets minimum SIR value of 1.0 or meet the definition for health and safety

- Either a standard tank or tankless (on demand) water heater.
- All replacement units must be similarly sized as the original unit that is being replaced. Justification must be submitted to THDA if the size varies significantly
- All gas and electric DHW replacements shall be Energy Star rated. However certain instances may occur where Energy Star water heaters cannot be installed

Solar water heaters are not approved as replacement units in Tennessee at this time.

Heating System Maintenance, Repair and Replacement

As part of the energy audit, all heating systems will be evaluated, including any ductwork present. A heating system may be solid fuel (wood or pellet stove heaters), gas, or electric. Heating system maintenance, limited repairs or replacement is allowed, provided the SIR value is equal to or greater than 1.0.

Replacement or repair may occur outside the SIR requirements provided the necessary replacement meets the definition of a health and safety measure as detailed in the weatherization manual.

Maintenance and repair will always be preferable to replacement of an existing unit, whenever possible.

All heating system replacements shall meet the current Energy Star specifications or equivalent. If the heating system is replaced, the original unit must be removed from the home.

Cooling System Maintenance, Repair and Replacement

Tennessee's hot, humid climate makes the use of air conditioning vital for many of our clients. All cooling systems will be evaluated, including any ductwork present.

Cooling system maintenance, limited repairs or replacement is allowed, provided the SIR value is equal to or greater than 1.0. Replacement or repair may occur outside the SIR requirements provided the necessary replacement meets the definition of a health and safety measure as detailed in the weatherization manual and safety plan and DOE's WPN 22-7. If the cooling system is replaced, the original unit must be removed from the home, and refrigerants disposed in accordance with applicable regulations.

Unvented Space Heaters

If the unit targeted for weatherization services has an unvented gas or liquid fuel space heater that serves as the primary heat source for the home, this unit must be removed. If the homeowner refuses the removal of the primary unvented space heating source or if funding is not available to remove and replace the unit. The unit is to be replaced with a vented space heater. If a vented space heater is not installed, it may remain in the home provided it complies with the International Residential Code (IRC) and the International Fuel Gas Code (IFGC). Removal is required for weatherization, but may remain until a replacement heating system is in place. DOE funds may not be used to replace any unvented space heater that serve as a secondary heat source.

Electric Baseload/Lighting

Refrigerator replacements are allowable as an ECM with a SIR of 1.0 or greater. Replacement refrigerators must be Energy Star Rated or equivalent. The existing refrigerator may be replaced with a TVA Energy Saver Kits which are not funded by DOE, but are provided to all WAP Clients.

Door and Window

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All doors and windows will be evaluated as part of the energy audit. Only those doors and windows that are part of the building envelope can be repaired or replaced justified through the energy audit tool. In rare instances, doors and windows may be replaced as incidental repairs if associated with an energy conservation measure explanation.

General Heat Waste Measures

The Tennessee Weatherization Assistance Program will allow the installation of the following measures that are typically acknowledged to be cost effective.

- Water Flow Controllers, including low flow shower heads
- Furnace or Cooling Filters, up to a one year supply
- Weather stripping, caulking, plugging, glass patching and other similar measures primarily used to address air infiltration.

General Heat Waste measures are limited to \$50 of material cost per unit. Such measures may be installed by the energy auditor or the contractor. It is not necessary

Solar

THDA is requesting approval to include solar PV in the list of measures for qualifying households and properties.

THDA understands the solar PV projects might require a NEPA review, especially if they are ground mounted and disturb the ground.

The energy audit report will include solar as a measure and will demonstrate the SIR for the solar PV install, for it to be integrated into the approved package of measures families reduce their energy burden through WAP.

Incidental Repairs

The Weatherization Assistance Program is not a home rehabilitation program. Only limited incidental repairs will be permitted. An incidental repair is a repair that is roof membranes, minimal floor and wall repair, attic access and stairs, limited electrical repair, leaking pipes, etc. These repairs must be necessary to preserve the initial final cumulative SIR value of 1.0 or greater for the unit. Certain measures may meet the definition of an incidental repair OR the DOE WAP health and safety definition repair /health and safety measure flow chart is also a valuable tool. The chart can be found THDA's Health and Safety Plan. Items such as porch steps, landings, decks are not allowable costs under the Weatherization Assistance Program.

Permits and Code Compliance

It is the responsibility of the Subgrantee to ensure the contractor obtains all necessary permits and is in compliance with code for the area in which the work is being performed.

Bulk Purchases

THDA will consider Subgrantee request for the bulk purchase of WAP related materials and equipment. This consideration will serve in part to expedite completion to help control rising costs due to the state of the building industry in Tennessee. Purchasing in bulk should reduce per unit pricing. Subgrantees are required to follow Subgrantee/State average cost per unit, past and current Subgrantee performance, and local supply chain issues will be taken to ultimately approve or deny the purchase.

Field guide types approval dates

Single-Family: 11/9/2021
Manufactured Housing: 11/9/2021
Multi-Family:

V.5.2 Energy Audit Procedures

Audit Procedures and Dates Most Recently Approved by DOE

Audit Procedure: Single-Family
Audit Name: Other (specify)
Tennessee is approved to use the Weatherization Assistant (NEAT/MHEA) audit tool by DOE. Approval dates are July 5, 2021 through July 5, 2021
Approval Date: 7/5/2021

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Audit Procedure: Manufactured Housing
Audit Name: Other (specify)
Tennessee is approved to use the Weatherization Assistant (NEAT/MHEA) audit tool by DOE on mobile homes. Approval dates are July 5, 2021
Approval Date: 7/5/2021

Audit Procedure: Multi-Family
Audit Name:
Approval Date:

Comments

Audit Tool Approval

THDA received audit tool approval on April 28, 2021. THDA received verification from DOE on 3/20/2018 to use WAPez developed by TVA which is integrated

The following is the contract clause to ensure the Tennessee Weatherization Field Guide is used:

The Grantee shall perform all WAP activities and carry out all fiscal responsibilities in accordance with THDA WAP policies and procedures; the Standard Work Spec applicable Office of Management and Budget (OMB) circulars (collectively, the "Program Requirements").

Energy Auditors

Energy audits will only be conducted by energy auditors that meet minimum qualification standards as defined by THDA. An energy auditor may be a Subgrantee empl provided in order to determine the appropriate measures for that specific unit. Subgrantees are encouraged to hire Energy Auditors that already have completed BPI Cer BPI Energy Auditor Certification and meet the other requirements of DOE and THDA WAP. All Quality Control Inspectors must have a BPI QCI Certification. Any in by a QCI certified auditor that meets all other DOE and THDA WAP requirements.

Single Family

The audit tool approved by DOE for use on single family units in Tennessee is the Weatherization Assistant (NEAT/MHEA). DOE approval of the tool was obtained Ju greater in order to be cost justified. Additional diagnostic tests will be conducted as necessary for the specific unit.

The energy audit recommended measures are used to build the work order for the unit. Based on DOE WPN 194, if *minor* measures must be removed from the work c reduction measures), along with any incidental repair that is tied to the deleted ECM from the work order. It is to be known, DOE WPN 194 defines *major* measures as they are determined costeffective as defined by the audit tool. Whenever measures are added or removed, the SIR value must be recalculated to ensure both individual l requirements continue to be met.

Manufactured Homes

The audit tool approved by DOE for use on mobile home units in Tennessee is the Weatherization Assistant (NEAT/MHEA). The audit tool approved by DOE for use o

Multifamily Buildings

Any multifamily building containing 5 or more units will be sent to the DOE PO before the work order is sent for bid. The Weatherization Assistant audit tool will be use the energy audit, and recommended cost effective measures for the entire building will be identified.

All multifamily units that do not meet the approved criteria must be submitted separately for approval prior to commencing work. If the multifamily building contains units for review and approval prior to commencement of weatherization work.

The multifamily building (to include all living units and common spaces) will have the weatherization work awarded following the single bid process, with the job to be aw

Weatherization Contractors

Weatherization work will be performed through a combination of contract or crew based workers. Most Tennessee Subgrantees contract weatherization work on a per j

All contractors and Subgrantee crews must meet the training and certification requirements listed in the THDA WAP Manual. All contractors and crews must be appro requirements listed in the WAP Manual may be allowed to bid. Licensed contractors who have three or more years of experience in weatherization work may be exemp employees are also in compliance with federal and state requirements, as applicable. All contractors must carry an active liability policy in an amount as approved by th

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Subgrantees have the option to impose additional contractor qualifications.

If the building to be weatherized includes five or more family units, or if the building exceeds three stories, only those contractors with an active Tennessee Commercial

Provided the contractor meets the above qualification, the Subgrantee has the authority to determine those contractors they wish to approve to bid on the weatherization

Contractors must sign the "Contract to Provide Services Under the Weatherization Assistance Program." This agreement is provided by the grantee to the Subgrantee a contractor performing the work is ensuring quality work and that all terms of the contract will be followed.

Weatherization Work Job Awards

Subgrantees using weatherization contractors will follow a THDA approved bid process, with the job being awarded to an agency approved contractor. All awards must exceeds the maximum amount permitted under the program, following the priority list (Recommended Measures Report) and procedures for removal of measures. The j unit.

In the event the qualified contractor withdraws their bid, the Subgrantee may award the contract to the next contractor, with the same policies and procedures to be appl reevaluate the work that remains to be performed and rebid the job.

Contractors who make an error in the submission of their bid have the option to honor the price as quoted, or to withdraw their bid. Under no circumstances will the bid (

Change Orders

Occasionally, there may be additional weatherization work identified as needed after the initial audit or after the work has been awarded to a contractor. Change orders prior to the additional work being performed by the contractor.

V.5.3 Final Inspection

Tennessee currently has 9 certified Quality Control Inspectors. There is a mix of staff and contracted QCIs in Tennessee. Some agencies do not have the capability to l least 10% of units. Tennessee allows Subgrantees to use QCI certified inspectors on a contract basis.

Once the contractor has notified the Subgrantee that all work on a unit has been completed, the Subgrantee will assign a qualified Quality Control Inspector to perform a state and national standard work specifications and in accordance with 10 CFR 440. The purpose of the inspection is to ensure that all required measures (ECMs, incider initial energy audit, work order, the awarded contract that specifies the work to be performed, and any change orders that have been approved for the job.

If the QCI determines that all required work has not been installed, or has not been installed in accordance with program standards, the contractor will be notified of the standards. Once corrected, another inspection will be conducted. All completed work must be inspected by a BPI certified, and agency approved, QCI and passed before

Contractors will not be paid until work has passed inspection.

Every client file must have a final QCI inspection form that certifies that the unit had a final inspection and that all work met the required standards. The form must be s will be available in the client file one for each inspection.

Subgrantees have the option to incorporate contractor penalties related to failed inspections or a contractor's failure to complete the work by the timeframe outlined in tl will be invoiced to THDA, with the amount of the applied penalty defined.

If the final inspection cannot be performed due to the client's unwillingness to allow the auditor access to the home, or other circumstances beyond the agency's control, be counted as a completed unit for purposes of meeting production goals.

If there are repeat findings from the same QCI the Subgrantee will be notified and the QCI will be placed on a corrective action plan including increased training. Discip termination, and are strongly encouraged to do so. The provided Energy Auditor Contract Template in Chapter 19 can be modified to include any sub-grantee specific pe abuse will be reported to State Office.

V.6 Weatherization Analysis of Effectiveness

Every unit will have an energy audit performed utilizing the WAPez software which runs the Weatherization Assistant (NEAT/MHEA) tool to identify the most effectiv

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the impact the weatherization work had on the energy costs for the home. This partnership will require THDA to provide TVA with pre and post weatherization data for and the post weatherization energy costs. There will be no cost to the program for this evaluation.

THDA will also conduct a cost analysis across the state in order to provide updates to our measure cost library. The analysis will include obtaining contractors actual co

The results of the Quality Assurance Reviews are incorporated into training plans that are to be provided both statewide and on an agency basis. Continued monitoring c

V.7 Health and Safety

Tennessee will track and report health and safety expenditures separately, and these funds will not be considered in the average cost of the unit. Subgrantees will be permitted in Tennessee's health and safety plan. Funds may only be spent in homes where weatherization work is being performed, although there is not a limit per h
The Health and Safety Plan template is attached to SF-424. Subgrantees are also instructed to review policy in the WAP Manual and DOE WPN 22-5 which incl

Additionally, the Subgrantee must incorporate the Radon Requirements listed within WPN 22-7 and adhere to the Buildings Assessment of Radon Reduction Interv

The Subgrantees must also update their email notifications to use the Radon Informed Consent Form which provides documentation that the occupant(s) (and landlo

The form must minimally contain the following:

- #1 An explanation on the potential small risk of increasing radon levels when building tightness is improved.
- #2 A list of precautionary measures WAP will install based on EPA Healthy Indoor Environment Protocols.
- #3 Some of the benefits of Weatherization including energy savings, energy cost savings, improved home comfort, and increased safety; and
- #4 Confirmation that EPA's A Citizen's Guide to Radon was received and radon related risks were discussed with the client.

TN is defining the FY22 ACPU as \$8,250.

V.8 Program Management

V.8.1 Overview and Organization

The Tennessee Housing Development Agency (THDA) has been designated by the Governor as the State's administering agency for the Weatherization Assistance Pr
entities, will contract with THDA to provide weatherization assistance in each of Tennessee's ninety-five counties. THDA's intent is to provide weatherization services s

The Weatherization Assistance Program (WAP) was established under Title IV of the Energy Conservation and Production Act and amended by the National Energy C
Improvement Act of 1990. The program is administered and funded at the federal level by the U.S. Department of Energy (DOE). This program is designed to assist low
education. Weatherization measures provided by this program will reduce heat loss and energy costs by improving the thermal efficiency of dwelling units occupied by lc

All allocations to local agencies are subject to Congressional appropriation (and/or Federal Court orders) and subsequent allocations to the State by the DOE. In the ever
allocations accordingly. In no event shall funds be provided for reimbursement of WAP agencies where federal funds are not available for such purposes. Tennessee h
DOE rules.

Funding allocations to Subgrantees will be provided based on the percentage of low-income population within a county. This percentage will be determined using a three
recent three years' worth of data available at the time. THDA will monitor expenditures during the fiscal year. Subgrantees who are not on track to fully expend their a
year will be recaptured by the State, and reallocated at the THDA's discretion.

Subgrantees are expected to meet performance and quality standards, as defined by the State. Failure to meet these standards can result in termination of the Subgrante

Subgrantees may request advance payment to THDA in writing to meet the immediate cash needs of the program and requirements of 2 CFR 200.305. Subgrantee risk
needed and partly based on historical payments from previous program years.

All funds available to Tennessee's WAP will be administered in accordance with DOE rules and regulations and State policies and procedures. Local agencies will be re
published by the State of Tennessee's Comptroller of the Treasury; and the Tennessee Weatherization Assistance Program policies and procedures.

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Pollution Occurrence Insurance (POI)

Tennessee does not require Subgrantees to purchase Pollution Occurrence Insurance (POI). However, it is an allowable expense if a Subgrantee opts to purchase this insurance.

Caps on Expenditures

Each single family home will be limited to \$8,250.00 in DOE funding to perform weatherization services (ECMs, Incidental Repairs, Health & Safety) on a single family home. THDA reserves the right to provide approval to exceed these caps on a case by case basis. The State average per unit will not exceed the maximum permitted by DOE.

Client Education

Client education will be provided to clients by the Subgrantees, auditors and contractors. The state will provide a basic client education review sheet that is to be covered during inspection. As standard health and safety issues are covered during the initial inspection by the Subgrantee, information will be provided on the measures that are scheduled on the Tennessee WAP Client Education Checklist. The Tennessee WAP Client Education Checklist must be retained by the Subgrantee in the client's file. If there are health and safety concerns, the Subgrantee's program manager. The Subgrantee will notify THDA if the client's concerns cannot be answered. THDA will seek guidance from the DOE Project Office.

The Tennessee Housing Development Agency partners with the TVA (Tennessee Valley Authority) to obtain client education kits that support energy conservation practices for clients of basic energy conservation practices to help them further reduce their energy costs. All Subgrantees will participate in client education activities.

THDA will also continue to explore best practices throughout the state, and nationally, on effective ways to deliver client education related to the WAP. There is growing interest in "client training" on the responsible use of energy and healthy home habits would be an allowable use of state T&TA Funds.

As stated in the previous deferral section, THDA is working towards implementing a more comprehensive prescreening process that will lend towards "house as a system" approach.

Policy Advisory Committee

The Policy Advisory Committee (PAC) serves to advise THDA not only on issues specifically related to the Weatherization Assistance Program but will also provide guidance on other energy efficiency issues. The PAC consists of members named by THDA, each of whom will serve time in limited terms. The Policy Advisory Committee (known as The Energy Efficiency and Weatherization Program Advisory Committee) includes representatives from utility providers, individuals involved in property development, and individuals who represent the low-income and elderly population served. A representative from the DOE Project Office will also be included.

V.8.2 Administrative Expenditure Limits

THDA will follow the rules for administrative expenditure limits outlined in 10 CFR 440.18 (e), which states that not more than 15 percent of any grant made to a state may be used by the state for such purposes, and not less than 7.5 percent must be made available to subgrantees by states. DOE includes the provision where a Grantee may request for such recipient requires the additional amount to implement effectively DOE's administrative requirements.

Subgrantees are authorized to budget up to 11% of their total fiscal year allocation for administrative costs subject to approval by THDA. The Tennessee Housing Development Agency may be permitted to allocate an additional 5% of their funds for administrative costs, subject to approval by THDA.

V.8.3 Monitoring Activities

The Community Programs Division of THDA is responsible for the administration of the WAP in Tennessee. Currently, the Community Programs Division has a Program Coordinator. THDA's Internal Audit Division will conduct the Fiscal Monitoring of the WAP. Housing Program Coordinators will monitor WAP invoices.

An estimated amount of 5% of the grantee admin funds are used for program monitoring, and about 40% of the T&TA funds are used for technical monitoring. THDA will continue to monitor and improve the monitoring process.

Monitoring is conducted through a combination of desk and onsite monitoring. Client cases selected for quality assurance inspections and file review may be selected by the inspection selection process and the method will be applied uniformly across the state. The same clients selected for QA will also include file review of eligibility, procurement, and other programmatic areas.

Programmatic and Management Monitoring

Each Subgrantee weatherization program will be monitored annually and in accordance with 10 CFR 440.23 and DOE WPN 20-4. Subgrantees will be monitored for compliance with program requirements and a selected sample of closed case files will be reviewed. Through the use of THDA's WAP reporting platform, WAPez, Subgrantees upload required case documentation and inspection related documents such as QCI forms, photos, and ASHRAE 62.2 calculations. Any questions related to the review or documents missing from the file should be directed to the DOE Project Office.

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necessary. Areas of monitoring include, but not limited to:

- Correct determination of eligibility and notification provided, including the annual recertification where applicable
- Case documentation
- Identification of reweatherized units, and agency method for tracking homes that have been weatherized
- Compliance with rental property requirements and eligibility
- Compliance with multifamily building policies
- Correct determination of eligibility and notification provided, including the annual recertification where applicable
- Case documentation
- Identification of reweatherized units, and agency method for tracking homes that have been weatherized
- Compliance with rental property requirements and eligibility
- Compliance with multifamily building policies

In addition to the review of case files, the following information will also be reviewed:

- Conduct inventory of any equipment (original purchase price of \$5000 or more) purchased with DOE funds.
- Review staff and contractor qualifications and contracts, if applicable, to determine compliance with program requirements and Subgrantee's operational plan
- Review Subgrantee's process of tracking and addressing quality and workmanship concerns and findings for staff, auditors and contractors.
- Review process for contract payment
- Review the agency procedures for identification of staff performance and subsequent corrective action to address any deficiencies
- Using the Weatherization Manual / Operational Plan that each Subgrantee must sign and submit to the Grantee on an annual basis for review and approval, mc
- The Subgrantee's most recent annual audit
- Review findings from Grantee's technical inspections and corrective action plans that have been implemented to address any concerns
- Procurement process complies with federal and state requirements, and follows procedures outlined in the Subgrantee's operational plan
- Budget management of funds
- Compliance with production goals
- Contract compliance
- Timely and accurate submission of reports and invoices
- Identification of Training and Technical Assistance needs.

This list is not meant to be all inclusive and may be expanded as necessary to ensure compliance with both federal and state program guidelines.

Financial Monitoring

THDA will comply with the requirements of 2 CFR 200 Subpart F - Audit Requirements.

In addition to an annual financial monitoring visit to each Subgrantee, all invoices submitted for payment will undergo a fiscal desk review prior to any payment being authorized. Documentation will be reviewed and approved by multiple staff persons prior to submission to THDA's fiscal department for payment.

Invoices reviewed that lack sufficient backup documentation will not be paid until documentation is provided that justifies the amount invoiced. Additionally, any invoice

Every Subgrantee will have an annual onsite financial compliance review conducted by THDA Internal Audit staff. At minimum, this monitoring visit will review the following:

- Financial Management and Accounting Systems and Operations
- A review of the most recent annual audit conducted for the Subgrantee. Any additional audits related to WAP that have been conducted within the last twelve
- Payroll and personnel
- Equipment and/or vehicles defined as any item with an initial cost of \$5000 or more that were purchased with at least a percentage of DOE WAP funds.
- Procurement
- Invoicing (supported by fiscal desk reviews mentioned earlier)
- Record Retention
- Contract compliance
- Follow-up on issues from prior monitoring visits, reports, desk reviews and other sources

Subgrantees are required to submit their Annual Single Audit for THDA to review.

Technical Monitoring

THDA will conduct quality assurance inspections of at least five percent (5%) or more of all completed units per Subgrantee during the fiscal year. Subgrantees that do not meet the percentage of units being monitored for Subgrantees with significant deficiencies based on previous monitoring, in progress monitoring, desk reviews, multiple dwelling units will be performed by a THDA employee or a contractor acting on behalf of the Grantee. Weatherization activities will be monitored to ensure compliance with the guidelines per

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memorandums and the WAP Policies and Procedures Manual.

Technical monitoring consists of desk review using WAPez as well as site visits to verify quality work practices and validity of the energy audit and inspection.

Quality assurance inspections will also serve as an opportunity to provide technical assistance as appropriate. THDA compensates contract workers who attend at a flat paid work for the day. Additional description to this is found in the T&TA section of the plan.

Subgrantees whose completed units require reworks or other corrective action cannot use DOE funds for the correction process. Findings related to technical assistance. These results will be used to identify training and technical assistance needs for our continuous quality improvement process.

Technical monitoring will review the work of the auditor, contractors, and the QCI. If there are repeat findings from the same QCI the local agency will be notified and

THDA will monitor for the training and certifications requirements of WAP contractors and auditors during the technical monitoring visit. This is a shared responsibility.

Monitoring Reports and Corrective Action Plans

Within thirty (30) days following every onsite program or financial monitoring visit, a report that details the findings of the visit, including any identified best practices will be delivered. The Subgrantee will be required to provide a written Corrective Action Plan (CAP) that addresses all identified concerns. If the Subgrantee disagrees with any findings in the monitoring report, they may provide rebuttal as part of their CAP. The CAP is not part of the monitoring visit, and these costs are not successfully resolved during the CAP process, these costs will be recovered from the next invoice. If they cannot be

Compliance with Corrective Action Plans will be monitored through desk reviews, communication with the Subgrantee, and subsequent monitoring visits. Subgrantees who do not successfully address by corrective action may have funding reduced, be placed on probation or face termination and no longer be allowed to participate in the program.

Reporting

Within thirty (30) days from the end of the program year, THDA will create a report that provides a summary of each Subgrantee's financial reviews, program monitoring, and will be made available to DOE upon request.

As mandated by federal guidance, THDA will also provide to DOE a report that includes successes and significant problems identified through monitoring. This narrative report will be provided within 30 days from the end of the reporting period.

In addition to DOE reporting requirements related to monitoring, State Policy 22 requires an annual report of Subrecipient Monitoring. THDA will provide a summary of the monitoring results.

Technical and Programmatic Monitoring Schedule

Once production is underway, we plan on visiting 2 Subgrantees per month for programmatic and technical monitoring. Throughout the year we will monitor each Subgrantee through annual fiscal monitoring visits for Subgrantees. Fiscal Monitoring is conducted by the THDA Internal Audit division and averages 12 Subgrantee visits per month. The T&TA is attached to the SF424.

First Quarter

None

Second Quarter

MCCAA, CMCCAA, DHRA,
UETHDA

Third Quarter

UCHRA, ETHRA, MHCD,
SWHRA, MDHA

Fourth Quarter

SETHRA, KKCCAC, SCHRA

V.8.4 Training and Technical Assistance Approach and Activities

Tennessee Housing Development Agency will ensure that all training paid for with WAP T&TA funds meet the requirements of WPN 22-4, Section 3: Workforce Training.

The major objective of Training and Technical Assistance is to provide Subgrantees with the information and training required to administer and operate in compliance with the program requirements.

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THDA will utilize the following to identify training opportunities: DOE monitoring, internal state audits, Grantee monitoring of the Subgrantees, Inspector General (IG) requirements. THDA will review all Subgrantee monitoring reports with our T&TA provider and trainings will be developed based on the needs of the Subgrantee and/or

THDA is currently seeking a new training provider via RFP process to obtain an IREC-accredited Comprehensive (Tier 1) and Specific (Tier 2) training provider.

Programmatic/Administration Training

Programmatic trainings are conducted by THDA staff during monitoring visits as issues are identified and as requested by the Subgrantees. The trainings will focus on:

- Production goals and ACPU
- Client eligibility and application process
- Budgets and invoices
- WAPez data entry
- Review of 2 CFR 200

Additionally, THDA is partnering with Clearesult to offer WAPez training for new state and agency staff. Refresher courses are available upon request, and can be done

Fiscal Training

Fiscal trainings are conducted by THDA staff during monitoring visits as issues are identified and as requested by the Subgrantees. These trainings will address issues as expenditures are reviewed during monthly/bi-monthly meetings with Subgrantee staff and THDA coordinators to identify any possible concerns in advance of the monitoring

Technical Training

THDA's training plan will follow the Comprehensive (Tier 1) and Specific (Tier 2) training categories as outlined in the WPN 22-4 "Quality Work Plan", and will meet the

Subgrantees are encouraged to recertify their weatherization workers in accordance with this training plan, as needed, and at least 6 months prior to the expiration of the

Subgrantees are strongly encouraged to have at least one QCI person on staff but some may contract with an independent QCI contractor and still others may use shared technical positions.

THDA and the training partner will review the Subgrantee's energy audits to check for consistency across Subgrantees. If an agency's average recommended mean training on the audit tool. THDA will discuss the importance of consistent and accurate energy audits.

Comprehensive Training must be completed at least every 2 years.

Quality Control Inspector

Training for the Quality Control Inspector Job Task will take place Fall 2023 Spring 2024.

Continual QCI training will be conducted annually or, as needed, for new QCIs and for continuing education credits. QCI training is currently formatted as field mentoring

Energy Auditor

Training for the Energy Auditor Job Task will take place Fall 2023 Spring 2024. Energy Auditor training may be conducted in a classroom, as part of field mentoring, or Energy Auditor certification is similar to QCI field mentoring as outlined in the previous section.

Mandatory Training for all WAP Energy Auditors and Quality Control Inspectors:

- BPI EA and QCI certifications
- EPA Renovate, Repair, Painting – Certified Renovator
- OSHA 10
- Comprehensive Weatherization Assistant training

Workforce Credentials

All credentials and certifications obtained by Energy Auditors and QCIs are documented within WAPez and required to be maintained in good standing to be allowed to

THDA WAP staff approves all new users and recertification requests and monitors the statuses of credentials including Federal, State and local requirements such as, but not limited to, (certification) and Contractor licensing.

EA / QCI Training & Testing

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Certification training typically consists of weeklong review consisting of a combination classroom and field exercises to include all associated travel costs, regular staff seeking certification. If Subgrantee staff is unable to pass the exam on the first attempt, the Subgrantee can request that the grantee pay for the second attempt. Permits additional training. If the auditor is unable to pass the exam after the additional training, the individual will be responsible to pay for the exam using other funding sources

Retrofit Installer Technician Field Mentoring

Comprehensive RIT Training will continue to canvass across the state for all WAP approved contractors. THDA currently offers a modified version of Retrofit Installer interpretation and prep, material lists, etc. The remaining days are spent in the field at two actual client houses, preferably a site built and manufactured home. The train house will be an actual weatherization client and the job will be awarded to a single contractor, as normal. THDA and the Subgrantee will receive a list of those contrac

The RIT statewide training will be planned this upcoming program year for those contractors not receiving field mentoring in the past two program years. Subgrantees, c

As stated in the previous Technical Monitoring section, THDA compensates contract workers who attend at a flat rate of \$100/inspection using T&TA funds. The comp used to address specific needs in certain and included as part of a contractor's comprehensive training requirement.

THDA is also experimenting on the use of the DOE adapted RIT Badges Passport system. We currently have asked one crew based Subgrantee to experiment with the Weatherization Field Guide or as a component within the RIT comprehensive training curriculum.

Diagnostic training for contractors is also being developed in partnership with Tennessee Subgrantees and our T&TA provider, Community Housing Partners. The need is indispensable piece of the weatherization program. Diagnostic training may consist of onsite, classroom (training house), or webinar training through our T&TA provider.

Specific diagnostic trainings to be planned for the upcoming program year include blower door diagnostic setup and results analysis, duct leakage analysis, tool calibration

T&TA funds can be used to compensate contractors during WAP training activities in the form of a stipend established in cooperation with the state and Subgrantee an compensation being made.

Specific Training

Single-issue, short-term, training to address acute deficiencies in the field such as dense packing, crawlspace, ASHRAE 62.22016, etc. Conference trainings are included are multiple repeat findings due to lack of experience or training.

In addition to IREC accredited training providers, several non-IREC accredited training providers are located throughout the state/country (i.e. State, regional and/or national) dependent upon the individual Training Providers' schedule. Subgrantees are reminded that any out of state training activities must be approved in advance by Tennessee

The following organizations, agencies, and companies offer Specific training:

- Statewide WAP Meetings/Conferences
- Home Performance Conference
- Energy OutWest Conference
- CHP Energy Solutions Research and Training Center
- Southface Energy Institute
- Everblue Energy Inc.
- Other for-profit and nonprofit Organizations Specific Training Courses including but not limited to:
 - ASHRAE 62.2 (2016) Residential Ventilation
 - Audit Assessment
 - Blower Door & Duct Testing
 - Building Science
 - CAZ Zone Pressure Diagnostics
 - Client Education
 - CPR & Standard First Aid
 - Crew Leader
 - Dense Pack Walls
 - Diagnostics Energy Auditor Testing Equipment
 - HVAC Fundamentals
 - Infrared Thermography
 - LeadSafe Weatherization
 - Manufactured Housing Fundamentals
 - NEAT/MHEA
 - OSHA 10 Construction
 - EPA Certified Renovator Initial Course

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- Retrofit Installer Technician Online
- Weatherization Management

Specific Training that may be incorporated as part of a larger comprehensive training plan includes technical assistance provided to EAs, QCIs, and contractors while on comprehensive WAP related trainings.

The contracted T & TA provider will assist in the following: Implementation of a Quality Work Plan, assessment of readiness for QCI examination, and the development

Marketing and Training of New Technical Workers

Tennessee's weatherization program has experienced challenges of replenishing its technical worker base over the past three program years. Recognizing this challenge planning and program solutions towards the issue of technical staff capacity.

Based on these quarterly group discussions, THDA has outlined a skeleton draft of steps for new auditors, inspectors, and weatherization workers to begin working in the field to build worker confidence and technical knowledge. The drafted outline consists of a balanced approach of check and balances. First being, the new technical worker needs to be where they can become familiar with the system and how NEAT/MHEA inputs interact with one another. Assessments will be conducted along the way to determine program effectiveness.

Marketing to weatherization contractors, or those interested in weatherization work, is another challenge. This is an issue raised within the advisory group, as well as at the state level. Such as branding, one sheets, program statistics, to garner local industry interest to potentially bring on as approved weatherization contractors, crews, energy auditors, and inspectors.

Client Education

Energy efficiency education occurs throughout weatherization services as described in previous sections. Energy auditors distribute Tennessee Valley Authority funded materials including EPA's Mold & Moisture in Your Home, Renovate Right: Lead Based Paint Activities, and the Citizen's Guide to Radon.

THDA also created a Client Education Checklist for the auditor and client to work through step by step prior to the audit as well as during the quality control inspection.

Energy Savings Comparison Analysis of Subgrantees

Analysis of energy savings is currently conducted by THDA on multiple levels. Through THDA's partnership with the Tennessee Valley Authority, an estimation of energy savings from installed weatherization measures such as attic insulation and air sealing, as well as equipment such as HVAC systems and water heaters. THDA can use this information to compare energy savings across the network.

The program's reporting platform, WAPez, has also added greater accessibility to estimated energy savings pulled from the Recommended Measures report within the WAP Subgrantees and to national averages.

A number of variables influence energy savings from unit to unit, agency to agency. Considering size and dwelling type, auditor experience and accuracy, effectiveness of weatherization measures, energy savings will help highlight training needs across the network.

Percent of overall trainings

Comprehensive Trainings:	50.0
Specific Trainings:	50.0

Breakdown of T&TA training budget

Percent of budget allocated to Auditor/QCI trainings:	40.0
Percent of budget allocated to Crew/Installer trainings:	55.0
Percent of budget allocated to Management/Financial trainings:	5.0

V.9 Energy Crisis and Disaster Plan

THDA WAP is in compliance with WPN 12-07 in the event of a natural disaster that impacts the operations of the Weatherization Assistance Program, the following actions will be taken:

- Identify those current clients who reside in a disaster area. A current client is one who has applied for and been determined eligible for the Weatherization Assistance Program.
- If the client resides in a disaster area, the WAP agency must contact the client to determine if the home has sustained any damage. If the client states the home is uninhabitable, the agency must contact the client's representative who spoke to the client. No further action is required, and standard WAP procedures will be followed.
- If the client states damage occurred, document the contact in the client file, and follow the disaster plan guidance based on the current job status for the home.

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Job Not Yet Begun – Home Still on Wait List

The job is not considered to have begun if the applicant has been approved for the WAP, but is still on the wait list pending selection for service. Contact the applicant to determine if the home is destroyed or condemned, or if the applicant has moved without intending to return once repaired, terminate the WAP case.

If the home is damaged and requires repair, the home remains on the wait list. Determine if the home is eligible for extra priority points as a result of the disaster and adjust the priority points accordingly.

Jobs in Process

Identify those current clients who have a WAP job in process. A job is considered to be in process if any of the following actions have taken place:

- An energy audit has been completed;
- The job has been awarded to a contractor;
- Installation of weatherization measures has begun

However, there has not been a completed and passed QCI performed by the Subgrantee for these jobs, nor has the job been closed or marked as completed.

Home Damaged; Job Not Yet Awarded or Begun

If the home had an energy audit performed, but the job has not yet been awarded, do not award the job. If it is determined that the home was destroyed or condemned, (

If the home was not destroyed, conduct another energy audit to determine if the condition of the home permits the weatherization work to continue, and the weatherization work may be deferred pending repair. (disaster relief funds, personal funds or loans, funds from other programs, etc.) prior to the energy audit being performed.

The weatherization measures work may be deferred pending repair. Upon repair, the home may be audited, and the weatherization work may proceed based on the current condition of the home.

Home Damaged: Job Had Been Awarded, But Not Yet Completed with Final Inspection

If the installation of weatherization measures was in process (work had begun, but the quality control inspection had not been completed), and the contractor had not yet returned to the home at the time of the disaster. No post inspection is required, but the agency must confirm the home was destroyed and an audit is not possible due to damage. This home is considered a destroyed home.

If the home was not destroyed, and repairs are necessary due to damage, these repairs are to be completed utilizing other funding sources. Another energy audit will be required.

The job may need to be deferred until necessary renovations are completed prior to weatherization taking place. The contractor may be paid for all measures installed at the time of the disaster, but the job cannot be closed until all weatherization work is completed. Do not close the job until all weatherization work is completed. Dependent on the condition of the home.

Items that had been installed, but were subsequently destroyed due to the natural disaster and not covered by the homeowner's insurance or other funding sources, include the newly defined measures. Please note: Throughout this process, DOE funds may only be used for those energy related incidental repairs. WAP is not designed to be used for the replacement of destroyed items.

Home Damaged: Reweathering of Previously Completed Units

A home that has been weatherized prior to the disaster, but which was damaged by a federal or state declared disaster, may reapply for re weatherization services with DOE as a reweatherization.

Additional Priority Provided

Current clients in a disaster area may be provided priority services, with 15 additional points provided to disaster victims. These points are added to the points already provided by FEMA assigned number for that client/residence for the specific disaster.

New applications for WAP following a disaster may also receive an additional 15 priority points as a disaster victim provided:

- The existing structure was damaged (not destroyed or condemned) in the disaster, and;
- The application is received within four (4) months from the date the disaster occurred, and;
- The applicant provided verification of an assigned FEMA number for the specific disaster.

Points to Remember

- If a weatherization job that was in process or completed was damaged in the natural disaster, the Subgrantee must determine if the homeowner has insurance or other funding sources. Weatherization funds may only be used to address eligible weatherization activities, as currently allowed in Tennessee's policies and procedures.
- If possible, local agencies will coordinate the weatherization work efforts for the home to gain efficiencies. This does not negate the requirement to perform an energy audit.

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- Personnel that are paid from DOE funds are not allowed to perform disaster relief work in the community. They are permitted to perform work related to protect disaster initially occurs.
- The maximum amount of funds that may be spent per unit is capped at \$8,250.00. This includes both pre-disaster and post-disaster work with the exception of job

Tennessee Housing Development Agency Weatherization 2023 Health and Safety Plan

1.0 – GENERAL INFORMATION

Purpose of the THDA's Weatherization Program Health and Safety Plan

This document exists to provide more informed decision making for state and local weatherization agencies as well as weatherization program technical partners. The plan is designed to provide both financial, programmatic and technical instruction focused on the program's health and safety component.

Federal regulations serving as the foundation of the weatherization program allow for the improvement or elimination of occupant health and safety hazards. ***The elimination of health and safety hazards must be energy related and necessary before, or as a result of, installation of weatherization measures.***

Health and safety funding is limited and therefore, the following policies are in place to better instruct program partners how to efficiently and effectively utilize the dedicated funding.

General Information

If a subgrantee is unsure how to handle a health and safety measure, the subgrantee will contact THDA for additional guidance on a case by case basis.

- Examples of case by case guidance may include: non-visible knob and tube wiring, hazardous or non- functioning water heaters, suspected asbestos containing materials and other unique situations.
- THDA will offer additional guidance based on review of documentation or conduct a site visit if needed.
- If THDA is unable to reach a conclusion, THDA will seek additional guidance from DOE. Health and safety measures that are beyond the scope of the WAP may be addressed using LIHEAP Wx or Weatherization Readiness funds, if determined allowable by THDA.

Major Health and Safety Repair Definition: Repair costs that **meet or exceed \$1,237.50**.

- This figure is determined by 2023 Program Year DOE WAP budget cap of \$8,250 x 15%
- Examples of major health and safety repairs include, but not limited to: large areas of mold removal, structural repair, major electrical wiring replacement, extensive roof repair, pest infestation, and major moisture issues. Repairs such as these are beyond the scope of weatherization.
- Agencies are encouraged to seek alternative funding sources to conduct major repairs. Dwelling units needing repairs that are beyond the scope of weatherization ***must be deferred*** until the issues are corrected.
 - If an agency is unsure how to handle a major repair health and safety issue, THDA must be contacted for additional guidance.

Minor Health and Safety Repair Definition: Repair costs **below \$1,237.50**.

- Examples of minor health and safety repairs include, but not limited to: minor water leak repair, electrical junction box and outlet repair, and small areas of mold removal. These examples may be addressed with DOE Health and Safety funds.
 - If an agency is unsure how to handle a minor repair health and safety issue, they will contact THDA for additional guidance.

Partial Weatherization:

Partial weatherization of a unit is not allowed. Units that have health and safety issues that are beyond the scope of WAP ***must be deferred***. Units that only receive DOE funded health and safety measures may not be counted as a completed unit.

Health and Safety Measure Documentation:

Written and photo justification of health and safety measures must be included in the client file. ***This includes documentation to all Lead Safe Practices.***

2.0 – BUDGETING

Grantees are encouraged to budget H&S costs as a separate category and, thereby, exclude such costs from the Average Cost Per Unit (ACPU) cost limitation. This separate category also allows these costs to be isolated from energy efficiency costs in program evaluations. H&S costs that are budgeted and reported under the Program Operations category rather than the H&S category, the related H&S costs must be included in the calculation of the ACPU and cost-justified through the Grantee’s Department of Energy (DOE)-approved energy audit tool.

Select which option used below.

Separate H&S Budget

Contained in Program Operations

3.0 – H&S EXPENDITURE LIMITS

H&S expenditure limits and justification explaining the basis for setting the limits.

Each unit is unique and offers different challenges, there is not a specific amount per unit. The state will provide each subgrantee with the maximum amount of their funding which they can use to address eligible Health and Safety measures as defined in the Tennessee WAP Health and Safety Plan. The state will limit such expenditures to *no more than 15%* of total DOE funds allocated to program operations in the annual plan budget, although the amount used by an individual agency may be less than 15% of their funding, depending on the need of their housing stock.

The subgrantee will be allowed the flexibility to use their funds across the units they weatherize, provided they are also installing energy conservation measures. There will not be a specific cap on the amount of health and safety funding allowed per unit, but rather the subgrantee may not exceed the total health and safety funding allocation for their agency as defined by the grantee for that program year.

Tennessee housing stock includes a high incident of unvented space heaters. Per DOE policy, these unvented space heaters that serve as the primary heating source must be addressed in order for weatherization to proceed. The expense associated with replacing unvented spaced heaters, along with costs associated with complying with the requirements of this health and safety plan and the implementation of ASHRAE 62.2 - 2016 to the fullest extent possible, require Tennessee to request that a minimum of 15% of the funds available be used to address health and safety issues.

Utilizing the spreadsheet embedded below, provide a full list of H&S measures using historical data from your program, including average cost, and frequency rate. If installing more than a single instance of one measure in a unit (e.g. multiple CO alarms), Grantees may aggregate costs so that frequency does not exceed 100%, or enter a justification into the measure column, which explains why that measure has a frequency rate of over 100%. The spreadsheet will auto calculate your expected Total Average H&S Cost per Unit.

Instructions: Double-click icon directly below to open, view and edit Measure Matrix Spreadsheet. Complete the spreadsheet by entering the required information. To save, close the spreadsheet and it will save to this document.



Measure Matrix
Final.xlsx

4.0 – INCIDENTAL REPAIR MEASURES

Incidental Repairs – [\(DOE WPN 19-5\)](#)

A repair necessary for the effective performance or preservation of newly installed weatherization materials, but not part of a standard installation.

- IRM installations must be associated with a specific ECM or group of ECMs.
- IRMs must be justified by written and photo documentation in the client file.
- IRM costs must be included the SIR calculation of the total package of weatherization measures.

Certain measures included in this current health and safety plan may meet either incidental repair or health and safety measure definitions. Funding source distinction will adhere to DOE incidental repair and health & safety measure definitions and policies set forth in: [WPN 22-7](#), [WPN 19-5](#) and the [THDA Weatherization Program Manual](#).

Measure categories in this plan will identify common measures which may overlap in definitions between an incidental repair or health and safety measure.

Readers shall refer to the **WPN 19-5 Flow Chart** to aid in their decision making.

- **If a repair measure can be tied to a specific energy conservation measure**, then it may be funded as an incidental repair.
- **If the package of measures falls below 1.0 SIR after the inclusion of the repair**, the measure may potentially be funded under health and safety.
- **If the measure is not tied to a specific ECM**, the measure may potentially be funded under health and safety.

All measures must be clearly documented and meet the definition under which they are funded.

5.0 – OCCUPANT PRE-EXISTING OR POTENTIAL HEALTH CONDITIONS AND HAZARD IDENTIFICATION AND NOTIFICATION FORM(S)

Grantees must include policies/procedures for informing clients of the aspects of weatherization that may put a client with pre-existing health conditions at risk during installation of measures. This screening may occur as part of the initial application for weatherization and/or during the energy audit. Procedures must include what steps will be taken and/or available to the client to ensure that weatherization work will not aggravate pre-existing health conditions. Additionally H&S assessments are required to identify hazards in the home. For those hazards identified, appropriate testing is required when applicable. The client/landlord/property manager must be informed in writing of all testing results, including identification of a hazards revealed by the testing that will lead to deferral/referral.

Grantees are required to develop documentation forms that include at a minimum:

- *Occupant Pre-existing or Potential Health Conditions;*
 - *Screen occupant(s) to self-report known or suspected health concerns either as part of initial application for weatherization, during the energy audit, or other parts of the weatherization process as specified;*
 - *Inform client in writing of any known risks; and*
 - *Provide client with Subgrantee point of contact information in writing so client can inform of any issues.*
- *Hazard Identification Notification Form*
 - *The occupant(s) (and Landlord's, if applicable) name and address;*
 - *Date(s) of the energy audit/assessment and when the occupant(s) (and Landlord, if applicable) was informed of a potential H&S issue;*
 - *A clear description of the problem;*
 - *A statement indicating if, or when weatherization could continue; and*

- *The occupant(s) (and Landlord's, if applicable) signature(s) indicating that they understand and have been informed of their rights and options.*

Procedure for soliciting occupants' health and safety concerns related to components of their homes

Subgrantees and energy auditors allow for multiple occasions to create opportunity for the building occupant to state health and safety concerns related to components of their dwelling. Subgrantee intake staff will verbally inquire of general and common building conditions that could impact health and safety. The weatherization application allows applicants to disclose health and safety concerns related to building components. Energy auditors will conduct a health and safety evaluation during the initial energy audit. The results are communicated to the client.

List of related client health and safety documents are below:

- Weatherization Assistance Application – Single family example
- Deferral Notice – Single Family example
- Client Education Material Consent Form – Single document which verifies through client/energy auditor signature that all required client education notices and brochures were discussed and understood.
 - Mold and Moisture Inspection and Release Form
 - Client Education Checklist
 - Radon Informed Consent Form
 - Repair, Renovation, and Painting Pamphlet – Client acknowledgment

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

The weatherization assistance application includes a question that allows applicants to state health conditions that may be negatively impacted by the act of weatherizing their dwelling. Subgrantee intake staff or the energy auditor will follow up with the applicant on more specifics as necessary.

1. Do any household members have any known or suspected health concerns that would be negatively impacted by weatherization work?

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

Applicants that disclose health conditions during the application process will be addressed on a case by case basis.

- Clients who are ill from infectious disease will be deferred until the period of contagiousness and symptom(s) subside.
- Clients who suffer from allergic reactions or respiratory conditions which may be exacerbated through the installation of certain weatherization materials will be asked if certain accommodations can be made to avoid exposure. Other options may be presented such as installing alternative materials.
- Clients with physical disabilities will notify weatherization workers of concerns or restrictions that may impact typical weatherization installation.

All health conditions will be treated individually to ensure the respect and comfort of the client is maintained while maximizing weatherization efforts.

Documentation Form(s) have been included for review?Yes No **Location where forms have been uploaded/submitted**Separate attachment to SF424 Separate attachment to H&S Plan **6.0 – HEALTH AND SAFETY CATEGORIES****HEALTH AND SAFETY MEASURES MUST BE ENERGY RELATED AND NECESSARY BEFORE, OR AS A RESULT OF, INSTALLATION OF WEATHERIZATION MEASURES.***For each of the following H&S categories identified by DOE:*

- *Explain whether you concur with existing guidance from Weatherization Program Notice (WPN) 22-7 and how that guidance will be implemented in your Program, if you are proposing an alternative action/allowability, or if the identified category will not be addressed and will always result in deferral. Alternatives require comprehensive explanations as to how it meets the intent of DOE guidance.*
- *Where an action/allowability or testing is “required” or “not allowed” through WPN 22-7, Grantees must concur, or choose to defer all units where the specific category is encountered.*
- *Any activities that are marked as deferral/referrals must contain the H&S reasons specified within the Master File Section V.1.2 Box 5 Deferral/Referral.*
- *Unless an alternate funding source(s) is declared, utilize DOE funds to address the particular category.*
- *Describe the explicit methods to address the specific category.*
- *Describe in detail what testing protocols (if any) used to assess the particular category.*
- *Define and quantify minimum thresholds that determine minor, major, and limited definitions and the criteria used to make a determination on a case-by-case basis.*
- *Define “at-risk” occupant(s) and identify minimum documentation requirements for them.*
- *Client Education activities specific to H&S reasons is required within the Master File Section V.8.4 Training and Technical Assistance of the annual application.*
- *Training activities specific to H&S reasons is required within the Master File Section V.8.4 Training and Technical Assistance of the annual application.*

6.1 – Air Conditioning and Heating Systems

Concurrence, Alternative or Deferral

Concurrence with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

Air Conditioning Unallowable with DOE Funds

Heating Unallowable with DOE Funds

Other Funding Source Addresses H&S Issue LIHEAP Wx

Procedure for unsafe or non-functioning primary heating/cooling systems

SAFETY PRECAUTIONS

Unsafe primary heating and cooling systems must be: repaired, or removed and replaced, or rendered inoperable, otherwise *deferral is required*.

“Red tagged,” inoperable, or nonexistent primary heating system may be: replaced, repaired, or installed where climate conditions warrant, consistent with this guidance.

If a system has CO readings that are above acceptable levels, the subgrantee representative must advise the occupant of the dangers and the problem must be corrected prior to any weatherization work being performed, unless the excess CO will be addressed during the work scheduled to be performed under the program.

DEFERRAL

Unsafe heating and cooling systems may require a deferral if the client is unable to correct or the subgrantee is unable to address the problem within program guidelines in the [Tennessee Weatherization Field Guide](#) or through the use of outside funding sources.

ENERGY MODELING REQUIREMENT

An attempt to cost-justify the HVAC measure must be made prior to replacing/repairing with health and safety funds. The original audit will include modeling the existing system. A copied audit will be completed if the measure is not recommended as cost-effective. The replacement/repair will be modeled as an ‘Itemized Cost’ meeting the weatherization program definition of a health and safety measure.

Procedure for unsafe or non-functioning secondary heating systems, including unvented secondary space heaters

UNSAFE SECONDARY HEATING SYSTEMS

Unsafe secondary units, including space heaters, must be: repaired, removed or rendered inoperable, otherwise deferral is required.

The sub-grantee will clean, tune, or remove secondary unvented space heaters if they pose a health and safety concern.

UNVENTED HEATING SYSTEMS

No secondary unvented heating source will be replaced using DOE funds and the secondary unit must meet DOE guidance on British Thermal Units (BTU) limitations.

Unvented fossil fueled space heater limitations are defined:

- 40,000 BTUs max: Living space
- 10,000 BTUs max: Bedroom
- 6,000 BTUs max: Bathroom

Additional information is found in this plan within section: *Unvented Gas and Liquid Fueled Space Heaters Attachment A*

UNSAFE OR INOPERABLE SECONDARY HEATING SYSTEMS

Replacement or installation of secondary units is not allowed.

Definition of and documentation required for “at-risk” occupants

“AT RISK” DEFINITION

At risk clients are defined as: individuals who are under age 6, age 60 years or older, disabled, or have a specific health condition that is exacerbated by the lack of heating or cooling in the dwelling.

DOCUMENTATION

Acceptable documentation includes disability income eligibility forms and doctor's notes regarding health condition.

Testing protocols

GENERAL TESTING PROTOCOLS

Make sure primary systems are present, operable, and performing correctly and the replacement is allowable, meeting health and safety policies included in this document.

HVAC SIZING

Use proper sizing protocols (ACCA HVAC sizing calculations) based on post-weatherization housing characteristics, including installed mechanical ventilation, when installing or replacing a heating or cooling appliance.

COMBUSTION SAFETY

All combustion appliances will be tested for both efficiency and safe operation of the unit.

Tennessee currently follows [BPI's 1200 – S - 2017 Combustion Appliance and Fuel Distribution System Inspection](#) protocol. Chapter 7 of the standard practices document outlines the protocol.

Carbon monoxide action levels, worst case depressurization, chimney/flue inspection, and other combustion safety diagnostics are included in the testing protocol.

Solid fuel appliance inspection shall check for visual evidence of soot on the walls, mantel or ceiling or creosote staining near the flue pipe.

Gas appliances that exceed the acceptable levels for CO must be addressed. These levels and corrective actions are defined in the [Tennessee Weatherization Field Guide](#).

Training and Resources

- [BPI's 1200 – S - 2017 Combustion Appliance and Fuel Distribution System Inspection](#)
- [EPA's Burnwise](#) – Wood burning appliance use and maintenance
- [HVAC Fundamentals](#) – Training Course

6.2 – Asbestos (Confirmed and/or Presumed Asbestos Containing Material)

Concurrence, Alternative or Deferral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral
 Unallowable Measure with DOE Funding Other Funding Source Addresses H&S Issue LIHEAP Wx

GENERAL PRECAUTION

- **Take all reasonable and necessary precautions to prevent asbestos damage and/or contamination in the home.** When presumed friable asbestos containing materials (ACMs) are present and unless testing determines otherwise, take precautionary measures as if the material contains asbestos.
- **Major asbestos problems should be referred to the appropriate state or federal agency.**
 - [Tennessee Department of Environment and Conservation](#)
 - [US Environmental Protection Agency](#)
- **Proper respiratory and other personal protective equipment must be used.**

DEFINITIONS

- **FRIABLE** - the ACM can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand.
- **ENCAPSULATION** - the treatment of ACM (Asbestos Containing Material) with a material that **surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers**, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).

Asbestos on Heating, Ventilation and Air Conditioning (HVAC) systems, distribution, venting and other small surfaces that will be disturbed through the course of weatherization work policy

ENCAPSULATION

Weatherization workers may address ACMs such as asbestos tape on ductwork and HVAC systems as long as it is not observed to be in such a state of degradation-meeting the above definition of “friable”.

The encapsulation of this type of material can be completed by using an approved duct mastic to completely cover and seal the tape where friability is no longer a concern. Weatherization technical workers shall use expert judgement in determining the condition of ACMs and whether encapsulation is possible.

REMOVAL

Asbestos removal on HVAC, distribution, venting, and other small surfaces is allowed using DOE health and safety funds. Subgrantees must notify THDA prior to the removal of ACM as approval is on a case by case basis. It is encouraged to inform energy auditors to identify the potential need for such actions prior to bid notification.

MEASURE FUNDING

- **ACM encapsulation and removal on HVAC, distribution, venting, and other small surfaces** is allowed using health and safety funds.
- **Direct costs** associated with the testing, encapsulation, or removal of ACMs underlined above may be charged to the health and safety budget category.

Asbestos in attics, walls, floors roofs and foundations that will be disturbed through the course of weatherization work policy

GENERAL PRECAUTIONS

Never cut, drill, or bore through suspected asbestos containing materials in walls, floors, and ceiling coverings.

Contractors must take all precautions to ensure that no inhalation of dust takes place. Safety equipment must be worn at all times during the handling of asbestos materials.

EXTERIOR SIDING

The existence of asbestos siding that is in good condition does not prevent installing dense-pack insulation from the exterior.

Siding may be removed and reinstalled in order to perform the ECM, and the associated costs may be charged as part of the ECM.

General abatement of asbestos siding or replacement with new siding is not an allowable H&S cost.

Vermiculite that will be disturbed through the course of weatherization work policy

MEASURE FUNDING

Vermiculite **removal is not allowed** using health and safety funds.

Encapsulation is **allowable** using health and safety funding.

VERMICULITE GUIDANCE

When vermiculite is present, assume it contains asbestos unless testing determines otherwise.

Encapsulation is **allowed using AHERA certified professionals.**

All units where the disturbance of vermiculite is unavoidable shall be deferred. Subgrantees shall find alternative funding sources to remove vermiculite.

Blower door testing policy when asbestos/vermiculite is present

- **It is recommended to pressurize the dwelling** instead of depressurize when conducting blower door diagnostics.
- **The subgrantee or its representative shall contact THDA** if a blower door test cannot be conducted due to the potential for ACM contamination in the dwelling.
- **THDA will closely watch for results of pending DOE Vermiculite Study** that is analyzing the effects of airborne ACM particulates potentially disturbed by various methods of blower door diagnostics.

Testing protocols

- **Assess whether suspected ACMs are present** through visual inspection or testing through a certified professional.
- Asbestos Hazard Emergency Response Act of 1986 (AHERA) sample collection and testing must be conducted by a certified tester.

Documentation requirements

CLIENT EDUCATION

- Clients are informed regarding the possibility and hazards regarding asbestos.
- Clients will be instructed in writing not to disturb suspected ACM.
- Clients will be informed of asbestos testing results in writing if testing was conducted.
- When deferral is necessary, provide information in writing describing conditions that must be met in order for weatherization to commence.
 - Refer clients to the [US Environmental Protection Agency](#)

TEST DOCUMENTATION

Occupant must provide documentation that a certified professional performed the remediation before work continues.

Training and Resources

- [U.S. Environmental Protection Agency](#) – Asbestos training

6.3 – Biologicals and Unsanitary Conditions

(e.g., odors, mustiness, bacteria, viruses, raw sewage, rotting wood)

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral
 Unallowable Measure with DOE Funding Other Funding Source Addresses H&S Issue LIHEAP Wx

Biological and unsanitary conditions in dwellings policy

REMEDIATION

Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowed.

Addressing bacteria and viruses is not an allowable cost.

DEFERRAL

Deferral may be necessary in cases where a known agent is present in the home that may create a serious risk to occupants or weatherization workers. Units with severe issues identified by the energy auditor or contractor will be deferred. The subgrantee, or its representative, will carefully evaluate the whole house situation and make the determination if deferral is necessary.

If any issues are identified that are beyond the scope of weatherization, alternate funding sources will be considered if available.

ADDITIONAL RESOURCES

See *Mold and Moisture* and *Infectious Diseases and Preparedness* sections for more details.

Testing protocols

Auditors and contractors utilize primarily sensory inspections to identify issues related to biological and unsanitary conditions. Biological and unsanitary conditions can include: Bulk water/standing water issues, rotten wood, and raw sewage.

The [Tennessee Weatherization Field Guide](#) offers basic information on these types of occurrences.

Training and Resources

- [Tennessee Department of Health](#) offers information how to maintain a healthy home. It is encouraged auditors, QCIs, contractors, and so forth are familiar with this information to better guide their observations in a home.
- [The US Department of Housing and Urban Development](#) also offers valuable information to train what constitutes a healthy home.
- [The US Environmental Protection Agency](#) describes biological pollutants’ impact on indoor air quality and provides tips for reducing biological pollutants.

6.4 – Building Structure and Roofing (e.g., roofing, wall, foundation)

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance
 Alternative Guidance
 Results in Deferral/Referral
 Unallowable Measure with DOE Funding **Other Funding Source Addresses H&S Issue** LIHEAP Wx

Structural issues in dwellings policy

ALLOWABLE REPAIRS

Health and safety funds may be used for structure and roofing repairs, **as necessary to protect the client and/or weatherization workers.**

DEFERRAL

Building rehabilitation is beyond the scope of the Weatherization Assistance Program. Dwellings that require more than minor repairs must be deferred. *See minor repair definition below.*

Define and quantify minor or allowable structure and roofing issues. At what point are these considered beyond the scope of weatherization?

MINOR REPAIR DEFINITION

Minor repairs in this category cannot exceed \$1,237.50. Measures that exceed this cost are considered major repairs. Weatherization will be deferred unless alternative funding is used to make the necessary repairs.

ROOF REPAIRS

Weatherization health and safety funds used for roof repairs **must be associated with bulk water intrusion causing visible biological growth**. All other roof repairs shall be funded through alternative funding sources or as an incidental repair where measure costs are included in the cumulative SIR.

STRUCTURAL AND BUILDING REPAIRS

Repairs in this category that do not exceed the cost cap above are allowed as long as funding definitions are met. Subgrantees shall seek prior approval from THDA using ample written and photo justification if uncertain whether or not a repair is defined as a health and safety measure.

Training and Resources

- [Checklist for Routine Inspection of Buildings](#) – Kansas State Historical Society

6.5 – Code Compliance

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral

Unallowable Measure with DOE Funding Other Funding Source Addresses H&S Issue LIHEAP Wx

Code compliance issues in dwellings policy

MEASURE FUNDING

Allowable code compliance corrections may be funded as health and safety measures or as incidental repairs. Clear documentation to the funding source and category is necessary to be retained in the client file.

PRE-EXISTING CODE COMPLIANCE ISSUES

The correction of pre-existing code compliance issues are typically *not an allowable cost unless triggered by weatherization measures being installed in a specific room or area of the home.*

When correction of preexisting code compliance issues is triggered and paid for with health and safety funds, cite specific code requirements with reference to the weatherization measure(s) that triggered the code compliance issue in the client file.

State, local, or the authority having jurisdiction (AHJ) codes must be followed while installing weatherization measures, including health and safety measures.

DEFERRALS

Condemned properties and/or properties where “red tagged” health and safety conditions exist that cannot be corrected under this guidance shall be deferred.

Training and Resources

- [International Residential Code 2018](#)

6.6 – Combustion Gases

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral
 Unallowable Measure with DOE Funding **Other Funding Source Addresses H&S Issue** **LIHEAP Wx**

Combustion gas issues discovered during testing, including those that require an immediate response policy

IMMEDIATE RESPONSE POLICY

If ambient CO is above 9ppm and is linked to a malfunctioning combustion appliance within the living space, clients must be notified immediately and a follow up must be made in writing to the client.

[BPI 1200S –Combustion Appliance Inspection Protocols](#) will be followed.

HVAC AND APPLIANCE REPLACEMENT

Combustion HVAC and appliance replacement are allowable health and safety measures if unsafe conditions whose remediation is necessary to perform weatherization cannot be remedied by repair or tuning.

- **Replacement of gas ovens/stovetops/ranges is not allowed under DOE health and safety funding.** See section Gas Ovens/Stovetops/Ranges
- **Maintain documentation justifying the replacement** with a cost comparison between replacement and repair in the client file.
- **Replacements must meet** manufacturer safety guidelines and those specified in:
 - BPI’s 1200 Combustion Safety Standards and the Tennessee Weatherization Field Guide.
- **Energy auditors will verify within the Weatherization Assistant audit tool** to determine if the appliance can be justified as an ECM prior to replacement as an H&S measure.

MEASURE FUNDING

Health and safety funds may be used to test or correct issues related to combustion safety. This includes the repair of combustion appliances. Replacement of combustion mechanicals are allowed using health and safety funds if the above policy guidelines are met.

Testing protocols

GENERAL COMBUSTION SAFETY

Combustion safety testing is required when combustion appliances are present. Documentation of all conducted diagnostic must be included in the client file.

DIAGNOSTICS

THDA currently follows [BPI’s 1200 – S - 2017 Combustion Appliance and Fuel Distribution System Inspection Protocol](#).

Diagnostics will occur during the initial energy audit and post weatherization work.

- Test naturally drafting appliances for spillage and CO during CAZ depressurization diagnostics could affect draft.
- Inspect venting of combustion appliances and confirm adequate clearances from combustible materials.
- Proper venting to the outside is required for combustion appliances, including gas dryers and refrigerators, furnaces, vented space heaters and water heaters.

6.7 – Electrical

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral

Unallowable Measure with DOE Funding Other Funding Source Addresses H&S Issue LIHEAP Wx

Electrical hazards, including knob & tube wiring, in dwellings policy

MEASURE FUNDING

Allowable electrical repairs may be funded as health and safety measures or as incidental repairs. Clear documentation to the funding source and category is necessary to be retained in the client file.

GENERAL ELECTRICAL HAZARDS

Electrical repairs should be kept to a minimum as funding is limited and hazard repairs are meant to be associated to energy conservation measures.

Electrical hazards are primarily determined through visual inspection. Voltage drop and detection testing is allowed.

Examples of electrical hazards may include:

- Presence and condition of knob-and-tube wiring.
- Wiring or fixture alterations that may create an electrical hazard.
- Breaker size and condition.

KNOB AND TUBE WIRING

Knob and Tube wiring will not be replaced using DOE health and safety funds.

Dwellings will be deferred if the presence of knob and tube wiring discovered during the energy audit prohibits weatherization from proceeding.

[DOE Weatherization Program Notice 19-4](#) shall be followed if knob and tube wiring is discovered once a job is in progress which would prevent the installation of an energy conservation measure.

Evaluate and provide sufficient over-current protection and damming (if required) prior to insulating building components containing knob and tube wiring, as required by the authority having jurisdiction.

Define and quantify minor electrical issues. At what point are these considered beyond the scope of weatherization?

MINOR REPAIR DEFINITION

Minor repairs in this category cannot exceed \$1,237.50. Measures that exceed this cost are considered **major repairs**.

Weatherization will be deferred unless alternative funding is used to make the necessary repairs.

Minor electrical repairs that remove risks to the worker or occupant are allowed when necessary for weatherization measures.

Examples of major electrical repairs may include:

- Replacement of service panels
- Extensive replacement of wiring due to age and condition
- Overloaded electrical circuits

Training and Resources

- [Electrical Safety Foundation](#)
- [OSHA Electrical Safety Presentation](#)
- [Existing Wiring Evaluation](#) – Old House Web

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

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral

Unallowable Measure with DOE Funding Other Funding Source Addresses H&S Issue LIHEAP Wx

Formaldehyde, VOCs, flammable liquids and other air pollutants in dwellings policy

POLLUTANT REMOVAL

Removal of pollutants is allowed and is required if they pose a risk to workers. If pollutants pose a risk to workers and removal cannot be performed or is not allowed by the client, the unit must be deferred.

Refer to Hazardous Materials Disposal and Ventilation sections for more information.

Testing protocols

Formaldehyde, VOCs and other air pollutants are discovered mainly through visual and sensory inspection. Formaldehyde vapors may be slowly released by new carpets, waferboard, plywood, etc. VOCs are also emitted by some household cleaning agents and cooking. The sensory inspection will take place during all visits to the dwelling.

The energy auditor will note if there will be a recommendation for pollutant remediation or result in deferral.

Training and Resources

- [Tennessee Department of Health](#) offers information how to maintain a healthy home.
- [US Environmental Protection Agency](#) offers information how to recognize and reduce effects of VOCs inside a home.

6.9 – Fuel Leaks

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral

Unallowable Measure Other Funding Source Addresses H&S Issue LIHEAP Wx

Fuel leak remediation protocols

MEASURE FUNDING

Fuel leak remediation is not permitted under DOE health and safety funding. Alternative funding sources shall be used when repairing fuel leaks.

FUEL LEAK REMEDITATION PROTOCOLS

If a fuel leak is discovered, appropriate actions must take place.

- All fuel leaks must be repaired prior to weatherization.
- When fuel leak is found on the utility side of service, the utility service or gas company must be contacted before work may proceed.
- If a fuel leak is discovered after weatherization is complete during post audit or quality assurance inspection, the utility service or gas company must be contacted to further test and repair the leak.

At what point are fuel leaks considered beyond the scope of weatherization?

Minor repairs of fuel leaks cannot exceed \$1,237.50. Measures that exceed this cost are considered **beyond the scope of weatherization.**

Weatherization will be deferred unless alternative funding is used to make the necessary repairs.

Fuel leak remediation is required for weatherization services to continue. Therefore, it is important to diagnose and address fuel leaks using available funding outside of DOE health and safety.

Testing protocols

Test exposed gas lines for fuel leaks from utility coupling into, and throughout, the home.

Conduct sensory inspection on bulk fuels to determine if leaks exist.

Tests are conducted through the use of:

- BPI 1200S approved gas leak detector
- BPI 1200-S Combustion Appliance and Fuel Distribution Inspection Protocols

Training and Resources

- [Tennessee Gas Association](#)

6.10 – Gas Range/Ovens

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral

Unallowable Measure with DOE Funding **Other Funding Source Addresses H&S Issue** **LIHEAP Wx**

Unsafe gas range/ovens policy and testing protocols

MEASURE FUNDING

Health and safety funds may be used to clean, tune, or repair gas ovens and stoves when inspection results indicate unsafe operation.

Replacement of gas ovens or stoves is not allowed using health and safety funds.

GAS OVENS

Gas oven CO levels will be tested. Safe operation must be confirmed.

GAS STOVES

Cooking burners shall be visually inspected for operability and flame quality.

Stovetop CO testing is optional.

DIAGNOSTICS

Tests will be conducted in accordance with:

- [Tennessee SWS Field Guide](#)
- [BPI's 1200 Combustion Safety Standards](#).

Combustion diagnostics must be recorded in the client file.

Training and Resources

- [Tennessee Department of Health](#) offers information how to maintain a healthy home.
- [Prevent Fire](#) includes resources how clients can safely operation gas ovens and stoves, reducing risk of injury.
- [R.J. Karg Associates](#) – Protocol for gas range CO testing, *if auditor determines to perform this diagnostic*.

6.11 – Hazardous Materials Disposal [e.g., Lead, Refrigerant, Asbestos, Mercury (including CFLs/fluorescents), etc.]

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral

Unallowable Measure with DOE Funding Other Funding Source Addresses H&S Issue LIHEAP Wx

Hazardous materials disposal policy and documentation requirements

GENERAL

Hazardous waste materials generated in the course of weatherization work shall be disposed of according to all local laws, regulations and/or Federal guidelines, as applicable.

DOCUMENTATION

Document proper disposal requirements in contract language with responsible party. THDA's Contract to Provide Services template includes such language.

HAZARDOUS MATERIALS

Lead

Disposal of refrigerants will comply with:

- [Regulatory Status of Waste Generated by Contractors and Residents from Lead-Based Paint](#)
- *Collect paint chips, dust, dirt and rubble in plastic trash bags for disposal.*
- *Store larger LBP building parts in containers until ready for disposal.*
- *If possible, use a covered mobile dumpster (such as a roll-off container) to store LBP debris until the job is done.*
- *Contact local solid waste authorities to determine where and how LBP debris can be disposed of.*

Asbestos

Disposal of asbestos will comply with:

- [EPA Regulations 40 CFR Part 763, Subpart E Appendix D](#)
- *There must be no visible emissions to the outside air during waste transport.*
- *A transporter should ensure that the asbestos waste is properly contained in leak-tight containers with appropriate labels, and that the outside surfaces of the containers are not contaminated with asbestos debris adhering to the containers.*

Mercury Disposal

Mercury containing materials will be disposed of according to:

- [Tennessee Department of Environment and Conservation](#)
- [Tennessee Department of Health](#)
 - [Mercury Factsheet](#)

Common mercury containing materials:

- Thermostats
- Incandescent and fluorescent lightbulbs
- Batteries

Refrigerant Disposal

Disposal of refrigerants will comply with:

- EPA Regulations 40 CFR Part 82, Subpart F under
 - [Section 608](#) of the Clean Air Act.

6.12 – Injury Prevention of Occupants and Weatherization Workers (e.g., repairing stairs and replacing handrails)

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance

Alternative Guidance

Results in Deferral/Referral

Unallowable Measure with DOE Funding **Other Funding Source Addresses H&S Issue** **LIHEAP Wx**

Injury prevention measure(s) policy

MEASURE FUNDING

Measures under this category may be funded as health and safety measures or as incidental repairs. Clear documentation to the funding source and category is necessary to be retained in the client file.

GENERAL

Workers must take all reasonable precautions against performing work on homes that will subject workers or occupants to health and safety risks.

Repairs necessary to allow safe access to areas necessary for weatherization may be performed using health and safety funds.

DOCUMENTATION

The client file must document the need for the repair/replacement and its connection to the weatherization work being performed.

Define and quantify minor or allowable injury prevention measures. At what point are these considered beyond the scope of weatherization?

MINOR REPAIR DEFINITION

A minor repair shall remain under the cost of \$1,237.50

Minor repairs such as the installation of *interior* stairs and handrails that are *necessary in order to effectively weatherize the home* are allowed. Without the repair or installation, the weatherization worker would be subject to possible injury.

Measure costs in this category exceeding the minor repair definition is considered beyond the scope of weatherization and shall result in deferral of the unit.

Training and Resources

- **OSHA 10 & 30 Training**

6.13 – Lead Based Paint

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral

Unallowable Measure with DOE Funding **Other Funding Source Addresses H&S Issue** **LIHEAP Wx**

Lead safe work protocols

EPA RRP

Weatherization workers must follow EPA's Lead; Renovation, Repair and Painting Program (RRP) when working in pre-1978 housing unless testing confirms the work area to be free.

It is encouraged for subgrantees to seek out local lead programs to partner in the testing, training, and potential funding of lead safe work.

MEASURE FUNDING

Health and safety funds may be used to address weatherization related costs associated with working in dwellings where lead based paint may exist and weatherization work may disturb the paint.

Only those costs directly associated with the testing and lead safe practices for surfaces directly disturbed during weatherization activities are allowable.

DEFERRAL

Deferral is required when the extent and condition of lead-based paint in the house would potentially create further H&S hazards

Testing protocols

Testing to determine the presence of lead in paint that will be disturbed by weatherization measure installation is allowed with EPA-approved testing methods.

If not tested, then all work in pre-1978 units must be completed by an RRP certified contractor and lead safe work practices must be followed.

Testing methods must be economically feasible and justified. Subgrantees shall contact THDA with any questions on lead testing feasibility.

Documentation requirements

DOCUMENTING LEAD SAFE PRACTICES

Job site set up and cleaning verification by a Certified Renovator is required.

Certified Renovators are to provide the Pre-Renovation form signed by the client and photographs to document that the procedures were followed.

Subgrantees will keep on file verification weatherization workers are following lead safe practices through proper documentation which includes:

- EPA RRP Certified Renovator certification
- Written or photo description of on-site lead safe practices
- Photos of site and containment setup
- Lead testing and assessment, if applicable

Training and Resources

- [RRP Training Information](#)

6.14 – Mold and Moisture

(e.g., drainage, gutters, down spouts, extensions, flashing, sump pumps, dehumidifiers, landscape, vapor retarders, moisture barriers)

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral
 Unallowable Measure Other Funding Source Addresses H&S Issue LIHEAP Wx

Moisture related issues in dwellings policy

MEASURE FUNDING

Water damage repair and moisture source control may be funded as health and safety measures or as incidental repairs. Clear documentation to the funding source and category is necessary to be retained in the client file.

The costs of surface preparation where weatherization measures are being installed (e.g., cleaning mold off window trim in order to apply caulk) must be charged as an additional cost to the energy conservation measure, not as a separate line item funded through health and safety.

WATER DAMAGE AND MOISTURE SOURCE CONTROL

Water damage repair and source control measures are allowed when necessary in order to weatherize the home and to ensure the long-term stability and durability of the energy conservation measures.

Deferral is required where severe mold and moisture issues cannot be addressed.

Source control is the first step in solving moisture problems.

Examples of source control repairs include:

- **Site drainage/run off modifications** - Regrading along a foundation wall to keep water away from building
- **Gutter repair or minor replacement** – Reduce excess roof runoff along building walls and foundations
- **Down spouts repair/replacement** - Reduce water pooling along building walls and foundations
- **Flashing** - Eliminate or reduce water entry at windows or doors
- **Sump pumps** - Removal of water in a basement or crawl space. Sump pits must be covered with an airtight lid and allow one way drainage of bulk water into the pit.
- **Vapor barriers** – Cover exposed earth in crawlspaces and cellars to reduce migration of water vapor
- **Ventilation** – To remove water vapor inside dwellings. See Ventilation category.

MOLD

Mold cleanup and/or testing cannot be funded through health and safety funds.

Jobs where mold is present may continue with weatherization if:

- The mold is located in an area outside the direct vicinity where weatherization work is taking place and/or won't be disturbed.
- The area containing mold is less than 10 total square feet (appx. 3' x 3') as referenced in EPA's Brief Guide to Mold and Moisture.

Define and quantify minor or allowable moisture-related measures. At what point are these considered beyond the scope of weatherization?

MINOR REPAIR DEFINITION

A minor repair shall remain under the cost of \$1,237.50

Minor mold and moisture repairs are considered repairs that can be completed with hand tools. Repairs exceeding the minor repair cost cap or that require heavy machinery are considered outside the scope of weatherization.

Training and Resources

- [Tennessee Department of Health](#) offers additional resources concerning cleaning/maintaining drainage systems and proper landscape design.
- [Department of Energy](#) also offers information on moisture control in the home.
- [US Environmental Protection Agency](#) offers training how to prevent and remediate mold.
- [WxTV](#) offers a 14 minute episode on mold and moisture concerns

6.15 – Pests

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance **Alternative Guidance** Results in Deferral/Referral

Unallowable Measure with DOE Funding **Other Funding Source Addresses H&S Issue** **LIHEAP Wx**

Pests and pest intrusion prevention policy

PEST REMOVAL

Pest removal is allowed only where infestation would prevent weatherization.
Subgrantees will refer clients to alternative programs for assistance to the best extent possible.

PEST PREVENTION

Preventing pest intrusion can occur through air sealing efforts and possibly other common energy conservation measures. If pest intrusion prevention is a specific action in order to install weatherization, the costs shall be modeled as additional costs into the ECM.

Define and quantify pest infestation thresholds. At what point are these considered beyond the scope of weatherization?

MEASURE FUNDING

Pest removal is not allowed using DOE health and safety funds.
Additional costs included in air sealing or insulation is allowed to prevent pest intrusion. Examples include the screening of windows and points of access into attics or crawlspaces.

DEFERRAL

Infestation of pests may be cause for deferral where it poses health and safety concern for workers.

Training and Resources

- [Tennessee Department of Health](#) offers additional information how to keep a home pest free.

6.16 – Radon

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral
 Unallowable Measure with DOE Funding Other Funding Source Addresses H&S Issue LIHEAP Wx

Procedure for radon in dwellings and testing protocols

MEASURE FUNDING

Radon mitigation is not an allowable health and safety cost.

Radon testing is allowable based on the guidance below.

PRECAUTIONARY MEASURES

Exposed ground shall be covered with a vapor barrier, whenever site conditions permit - except for mobile homes.

Mobile homes may have a vapor barrier if the home is on a permanent foundation. Otherwise, the vapor barrier will not be installed in a mobile home.

Because radon migrates through the soil, precautionary strategies include the following:

- Installing plastic vapor barrier and sealing all seams.
- Sealing the walls and floor of the basement.
- Installing airtight sump pump lids that will also allow for one way drainage into the pit.
- Installing mechanical ventilation

TESTING

Costs associated with radon testing using health and safety funds may be approved on a case by case basis from THDA.

Subgrantees and technical workers shall refer to the Tennessee Department of Environment and Conservation on the availability of state funded radon kits.

If known, or tested, radon levels are above 4 pCi/l, the unit will be deferred.

Documentation requirements

Test results shall be delivered to the client. A copy shall be retained in the client file.

All clients must acknowledge receipt of the Radon Informed Consent Form. The form includes a list of precautionary measures WAP may install based on EPA Healthy Indoor Environment Protocols.

Training and Resources

- [EPA’s Publications about Radon](#)
- [Radon Zone Map](#)
- [Tennessee Department of Health](#)
- [US Environmental Protection Agency](#)

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

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance
 Alternative Guidance
 Results in Deferral/Referral
 Unallowable Measure with DOE Funding **Other Funding Source Addresses H&S Issue** **LIHEAP Wx**

Installation or replacement policy for the following safety devices:

SMOKE ALARMS

Installed in every bedroom and at least one in the common space on every floor of the unit.

Smoke alarms may be installed where not present or are inoperable.

Notify THDA prior to bid release if safety devices are necessary to be installed for occupants that are hearing impaired.

CARBON MONOXIDE ALARMS

All units are required to have an operable Carbon Monoxide Alarm.

Notify THDA prior to bid release if safety devices are necessary to be installed for occupants that are hearing impaired.

FIRE EXTINGUISHERS

Providing fire extinguishers is an allowable using health and safety funds *when solid fuel is present*.

Testing protocols

Check existing alarms for operation.

Verify operation of installed alarms.

Training and Resources

- [NFPA Smoke Alarms](#)
- [NFPA Carbon Monoxide Alarms](#)
- [NFPA Fire Extinguishers](#)

6.18 – Ventilation and Indoor Air Quality

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance
 Alternative Guidance
 Results in Deferral/Referral

Version of American Society of Heating Refrigeration and Air-conditioning Engineers (ASHRAE) 62.2 Implemented (optional: identify Addenda used)

ASHRAE 62.2 - 2016

Implementation of ASHRAE 62.2-2016 is required.

Client refusal of mechanical ventilation, when evaluated and called for pursuant to the Standard, **must result in deferral.**

If the ASHRAE normative Appendix A is employed and an existing fan is being replaced or upgraded to meet whole-house ventilation requirements, *do best* to take action to prevent zonal pressure differences greater than 3 pascals across the closed door, if one exists.

Existing exhaust fans do not necessarily need replacement as long as they are properly ducted to the outside, have adequate airflow, and proper controls.

Procedures for complying with implemented ASHRAE standard

ASHRAE 62.2 2016 standards shall be followed and consulted regularly.

Energy auditors will determine a target exhaust flow rate based on estimated air sealing target along with all existing exhaust ventilation in the dwelling.

Precautions must be made to any combustion appliances that may be impacted through additional ventilation. Make up air shall be installed if necessary.

Impacts of estimated air sealing targets shall be considered by all weatherization workers as any measured air leakage post weatherization may increase the ventilation rate or even remove the need for continuous mechanical ventilation altogether.

QCIs will verify and/or set the actual rate of continuous mechanical ventilation upon final inspection.

ASHRAE 62.2 compliant fans may be installed to provide exhaust, supply, or balanced ventilation.

Testing protocols

Testing includes measuring fan flow of both existing fans and newly installed equipment to verify performance.

[Residential Energy Dynamics ASHRAE 62.2 calculation sheet](#) shall be referenced to determine and verify exhaust flow calculations.

Training and Resources

- [ASHRAE 62.2-2016](#) – read only version. Scroll down page to select the ASHRAE 62.2 2016 standard.
- [DOE WAP Health and Safety FAQ](#) – Pages 26 through 35 provide descriptive answers to a number of ventilation questions.

6.19 – Window Repair, Door Repair

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral

Unallowable Measure with DOE Funding **Other Funding Source Addresses H&S Issue** **LIHEAP Wx**

Window repair and door repair H&S policy

MEASURE FUNDING

DOE health and safety funds **will not be used for replacement of windows and doors.**

Window and door repair is allowed using health and safety funding as long as guidance below is met.

REPLACEMENT AND REPAIR

Window and door replacement will be determined by the energy audit tool as an energy conservation measure **or** meet the definition of an incidental repair.

Window and door repair may be funded as a health and safety measure if associated with the removal of visible biological growth.

Lead Safe RRP contractors must be used if windows and doors are being replaced in pre-1978 homes.

DEFERRAL

Deferral may be necessary if windows or doors are in such a state of disrepair that they would prevent weatherization. When deferral is necessary, provide information in writing which describe conditions that must be met in order for weatherization to commence.

6.20 – Worker Safety (e.g., OSHA)

Concurrence, Alternative or Deferral/Referral

Concurrence with DOE Guidance Alternative Guidance Results in Deferral/Referral

Unallowable Measure with DOE Funding Other Funding Source Addresses H&S Issue LIHEAP Wx

Federal, state and local worker safety requirements policy

OSHA REQUIREMENTS

Workers must follow OSHA standards where required and take precautions to ensure the health and safety of themselves and other workers.

All subgrantees and contractors must maintain compliance with the current [OSHA Hazard Communication Standards](#), including on-site organized Safety Data Sheets (SDS) (formerly called MSDS).

All weatherization technical workers receive training on the use and importance of PPE and safety training appropriate for job requirements.

- **OSHA 10 certification** – Required for energy auditors, QCIs, and weatherization installers.
- **OSHA 30 certification** - Required for weatherization crew leaders.

Training and Resources

- [Tennessee Weatherization Field Guide](#)
- [OSHA Courses](#)
- [OSHA Hazard Communication Standards](#)

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**



RECIPIENT: Weatherization Assistance Program Grantees with a DOE executed Historic Preservation Programmatic Agreement*

STATE: Mult

PROJECT TITLE : Weatherization Assistance Program Fiscal Year 2023 Formula Awards - Recipients with a DOE executed Historic Preservation Programmatic Agreements

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
WAP-ARLD-2023	WAP-ALRD-2023A	GFO-WAP-ALRD-2023A	

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

- | | |
|--|---|
| A9 Information gathering, analysis, and dissemination | Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.) |
| A11 Technical advice and assistance to organizations | Technical advice and planning assistance to international, national, state, and local organizations. |
| B1.16 Asbestos removal | Removal of asbestos-containing materials from buildings in accordance with applicable requirements (such as 40 CFR part 61, "National Emission Standards for Hazardous Air Pollutants"; 40 CFR part 763, "Asbestos"; 29 CFR part 1910, subpart I, "Personal Protective Equipment"; and 29 CFR part 1926, "Safety and Health Regulations for Construction"; and appropriate state and local requirements, including certification of removal contractors and technicians). |
| B1.34 Lead-based paint containment, removal, and disposal | Containment, removal, and disposal of lead-based paint in accordance with applicable requirements (such as provisions relating to the certification of removal contractors and technicians at 40 CFR part 745, "Lead-Based Paint Poisoning Prevention In Certain Residential Structures"). |
| B2.2 Building and equipment instrumentation | Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, water consumption monitors and flow control systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment). |
| B3.1 Site characterization and environmental monitoring | Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing; (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells; (d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment; (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes); (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); (i) Sampling of flora or |

fauna; and (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

B5.1 Actions to conserve energy or water

(a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix. (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

B5.16 Solar photovoltaic systems

The installation, modification, operation, and removal of commercially available solar photovoltaic systems located on a building or other structure (such as rooftop, parking lot or facility, and mounted to signage, lighting, gates, or fences), or if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

B5.17 Solar thermal systems

The installation, modification, operation, and removal of commercially available smallscale solar thermal systems (including, but not limited to, solar hot water systems) located on or contiguous to a building, and if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) administers the Weatherization Assistance Program (WAP) as authorized by Title IV, Energy Conservation and Production Act, as amended. The goal of WAP 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. Each home weatherized under WAP would receive approximately \$8,250 as determined by site-specific outcomes of the energy audit process. Many Recipients supplement DOE funds with other federal and non-federal resources for the activities listed below.

This NEPA determination is specific to the 55 WAP Recipients* with a DOE executed Historic Preservation Programmatic Agreement for activities that are funded by the WAP Program Year 2023 Formula Grants Administrative and Legal Requirements Document (WAP ALRD 2023) and WAP Community Scale Pilot Projects Memorandum dated 12/13/2022, as applicable. Some WAP Recipients may also be awarded funds under a separately competed process for WAP Community Scale Pilot Projects. Approved activities funded under WAP Community Scale Pilot Projects are included in this NEPA determination. WAP Recipients without a DOE executed Historic Preservation Programmatic Agreement have a separate NEPA determination: GFO-WAP-ALRD 2023B.

DOE has determined the following activities that are funded by the WAP Program Year 2023 Formula Grants Administrative and Legal Requirements Document (WAP ALRD 2023) and WAP Community Scale Pilot Projects, as applicable, are categorically excluded from further NEPA review, absent extraordinary circumstances, cumulative impacts, or connected actions that may lead to significant impacts on the environment, or any inconsistency with "integral elements" (as contained in 10 CFR Part 1021, Appendix B) as they relate to a specific activity.

Any activities on tribal lands or tribal properties are restricted to homes/buildings less than forty-five (45) years old and without ground disturbance. Recipients may contact their Project Officer for a Historic Preservation Worksheet to

request a review of activities that are listed below on tribal homes/buildings forty-five(45) years and older and/or ground disturbing activities. Approval from DOE is required prior to initiating activities reviewed on a Historic Preservation Worksheet.

1. Administrative activities associated with management of the designated Weatherization Office and management of programs and strategies in support of weatherization activities.
2. Development and implementation of training programs and strategies for weatherization effort, including initial home energy audits, final inspections, and client education.
3. Purchase of vehicles and equipment needed for administrative activities, weatherization energy audits, installation of measures indicated below, and quality control inspections.
4. Weatherization activities provided that activities adhere to the requirements of the respective Recipients' DOE executed Historic Preservation Programmatic Agreement, are installed in existing buildings, are appropriately sized, are covered by Appendix A of 10 CFR 440, and/or approved as part of the energy audit approval procedures and material approvals process, and limited to:
 - a. Building Shell Measures:
 - i. Install insulation where needed
 - ii. Perform air sealing
 - iii. Repair and replace windows, install window film, awnings, and solar screens
 - b. Mechanical Measures
 - i. Clean, tune, repair, or replace heating and/or cooling systems
 - ii. Install duct and heating pipe insulation
 - iii. Repair leaks in heating/cooling ducts
 - iv. Install programmable thermostats
 - v. Repair/replace domestic water heaters
 - vi. Install domestic hot water heater tank insulation
 - c. Electric and Water Measures
 - i. Install efficient light sources
 - ii. Install low-flow showerheads
 - iii. Replace inefficient refrigerators with energy-efficient models
5. Energy-related health and safety measures per the most recently approved DOE Weatherization Program Notice (WPN), currently WPN 22-7, provided that activities adhere to the requirements of the respective Recipients' DOE executed Historic Preservation Programmatic Agreement, occur in existing buildings, and are limited to:
 - a. Combustion appliance safety inspections
 - b. Air quality assessment and limited removal of formaldehyde, volatile organic compounds, flammable liquids, and other air pollutants
 - c. Gas and bulk fuel leak inspections
 - d. Limited testing and/or containment, removal or disposal of lead, asbestos, mold, moisture, refrigerant, mercury, and other materials so WAP activities may be completed.
 - e. Conduct radon testing and precautionary measures, including but not limited to, sump pump covers, covering exposed dirt floors with polyethylene sheeting which contains a rating of no more than 0.1 perm, which is sealed and attached at all seams, walls, and foundation penetrations.
 - f. Inspect and install carbon monoxide and smoke alarms
 - g. Install ventilation as required by the American Society of Heating and Air-Conditioning Engineers (ASHRAE) 62.2-2016 standard, including blower door testing addressing infiltration, ventilation, and exhaust.
6. Weatherization Readiness activities focused on structural, health, and safety issues required before weatherization measures can be completed to help reduce the frequency of deferred homes, provided that activities adhere to the requirements of the respective Recipients' DOE executed Historic Preservation Programmatic Agreement, are installed in or on existing buildings, and are limited to:
 - a. Repair/replace damaged windows and doors
 - b. Minor electrical and plumbing repairs
 - c. Roof repair or replacement including, replacing decking material and roof, and/or changing roof material (e.g., shingles to metal) NOTE-These activities would likely require SHPO consultation on buildings 45 years or older, as applicable per each recipient's Historic Preservation Programmatic Agreement (PA). Recipients must review their PA to understand their responsibilities for SHPO consultation.
 - d. Interior and exterior wall repairs
 - e. Ceiling repairs
 - f. Floor repairs
 - g. Foundation or subspace (crawl space) repairs

h. Exterior drainage repairs limited to gutter repair or replacement, trimming shrubs, and/or grading in close proximity to the perimeter of the foundation.

i. Clean-up or remediate beyond typical scope of WAP activities:

i. Lead paint

ii. Asbestos (confirmed or suspected, including vermiculite)

iii. Mold and/or moisture

7. Incidental and necessary energy-related repairs and replacements:

a. Repair/replace damaged windows and doors

b. Electrical and plumbing repairs

8. Development, implementation, and installation of onsite renewable energy technology, provided that activities adhere to the requirements of the respective Recipients' DOE executed Historic Preservation Programmatic Agreement, are installed in or on an existing structure, do not require ground disturbance, no trees are removed, and limited to:

a. PV systems would be appropriately sized and would not exceed 60 kW

b. Solar hot water heating systems would be appropriately sized and would not exceed 200,000 BTU/HR

c. Battery storage, if applicable, would be attached to structure (e.g. inside a garage) and would not be visible from the public right of way.

Activities/projects not listed above, including ground disturbing activities and tree removal, are not included under the ALRD categorical exclusion and are subject to additional NEPA review and approval by DOE. For activities/projects requiring additional NEPA review, states must complete the environmental questionnaire (EQ-1) found at <https://www.eere-pmc.energy.gov/NEPA.aspx> and receive notification from DOE that the NEPA review has been completed. A DOE Contracting Officer must provide approval prior to initiating the project or activities.

All incidental measures relating to hazardous materials identified during the WAP activities would be managed in accordance with applicable federal, state, and local requirements.

Recipients are required to participate in DOE led training on NEPA and Historic Preservation prior to commencing work on the above activities. The training is available at www.energy.gov/node/4816816. Recipients are responsible for contacting NEPA with any NEPA or historic preservation questions at GONEPA@ee.doe.gov.

Recipients are responsible for identifying and promptly notifying DOE of extraordinary circumstances, cumulative impacts, or connected actions that may lead to significant impacts on the environment, or any inconsistency with the "integral elements" (as contained in 10 CFR Part 1021, Appendix B) relating to any proposed activities. Additionally, Recipients must demonstrate compliance with Section 106 of the National Historic Preservation Act (NHPA) and inform DOE of activities in the 100-year floodplain.

Recipients shall adhere to the restrictions of their DOE executed Historic Preservation Programmatic Agreement. DOE executed historic preservation programmatic agreements are available on the Weatherization and Intergovernmental Programs website: <https://www.energy.gov/eere/wipo/historic-preservation-executed-programmatic-agreements>

DOE is required to consider floodplain management and wetland protection as part of its environmental review process (10 CFR 1022). As part of this required review, DOE determined requirements set forth in Subpart B of 10 CFR 1022 are not applicable to the activities described in Allowable Activities 1-7b above that would occur in the 100-year floodplain (hereinafter "floodplain") or wetland because the activities would not have short-term or long-term adverse impacts to the floodplain or wetland. These activities are administrative or minor modifications of existing facilities to improve environmental conditions. All other integral elements and environmental review requirements are still applicable. All activities (except those under Allowable Activities categories 1-7b) must document those activities do not occur in the floodplain or wetland. Activities occurring in the floodplain or wetland (except those under Allowable Activities 1-7b) are subject to additional NEPA review and approval by DOE.

For activities requiring additional NEPA review, Recipients must complete the environmental questionnaire (found at <https://www.eere-pmc.energy.gov/NEPA.aspx>) for review by DOE.

Most activities listed under "Allowable Activities" are more restrictive than the Categorical Exclusion. The restrictions must be followed for the Allowable Activities to be applicable.

* WAP Recipients with a historic preservation programmatic agreement: AL, AK, AS, AZ, AR, CA, CO, CT, DE, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MP, MS, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, PR, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY, and VI.

NEPA PROVISION

DOE has made a conditional NEPA determination.

The NEPA Determination applies to the following Topic Areas, Budget Periods, and/or tasks:

This NEPA Determination only applies to activities funded by the WAP Program Year 2023 Formula Grants Administrative and Legal Requirements Document and WAP Community Scale Pilot Projects, as applicable. Recipients must have a DOE executed Historic Preservation Programmatic Agreement.

The NEPA Determination does not apply to the following Topic Area, Budget Periods, and/or tasks:

This NEPA Determination does NOT apply to activities funded by sources other than the WAP Program Year 2023 Formula Grants Administrative and Legal Requirements Document or WAP Community Scale Pilot Projects, activities that do not fit within the restrictions of the Allowable Activities listed above, or to Recipients that do not have a DOE executed Historic Preservation Programmatic Agreement.

Include the following condition in the financial assistance agreement:

1. This NEPA Determination only applies to activities funded by the WAP Program Year 2023 Formula Grants Administrative and Legal Requirements Document and WAP Community Scale Pilot Projects, as applicable.
2. Activities not listed under "Allowable Activities" including ground disturbing activities and tree removal, are subject to additional NEPA review and approval by DOE. For activities requiring additional NEPA review, Recipients must complete the environmental questionnaire found at <https://www.eere-pmc.energy.gov/NEPA.aspx> and receive notification from DOE that the NEPA review has been completed. A DOE Contracting Officer must provide approval prior to initiating the project or activities.
3. Any activities on tribal lands or tribal properties are restricted to homes/buildings less than forty-five (45) years old and without ground disturbance. Recipients may contact their Project Officer for a Historic Preservation Worksheet to request a review of activities that are listed below on tribal homes/buildings forty-five(45) years and older and/or ground disturbing activities. Approval from DOE is required prior to initiating activities reviewed on a Historic Preservation Worksheet.
4. This authorization does not include activities where the following elements exist: extraordinary circumstances; cumulative impacts or connected actions that may lead to significant effects on the human environment; or any inconsistency with the "integral elements" (as contained in 10 CFR Part 1021, Appendix B) as they relate to a particular project.
5. The Recipient must identify and promptly notify DOE of extraordinary circumstances, cumulative impacts or connected actions that may lead to significant effects on the human environment, or any inconsistency with the "integral elements" (as contained in 10 CFR Part 1021, Appendix B) as they relate to project activities.
6. Recipients must have a DOE executed Historic Preservation Programmatic Agreement and adhere to the terms and restrictions of its DOE executed Historic Preservation Programmatic Agreement. DOE executed historic preservation programmatic agreements are available on the Weatherization and Intergovernmental Programs website: <https://www.energy.gov/eere/wipo/historic-preservation-executed-programmatic-agreements>.
7. Most activities listed under "Allowable Activities" are more restrictive than the Categorical Exclusion. The restrictions listed in the "Allowable Activities" must be followed.
8. Recipients are responsible for completing the online NEPA and Historic preservation training at www.energy.gov/node/4816816 and contacting NEPA with any questions at GONEPA@ee.doe.gov.
9. This authorization excludes any activities that are otherwise subject to a restriction set forth elsewhere in the Award.

Notes:

Office of State and Community Energy Programs - WAP
This NEPA Determination requires legal review of the tailored NEPA provision.
NEPA review completed by Diana Heyder, 04/04/23

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

A portion of the proposed action is categorically excluded from further NEPA review. The NEPA Provision identifies Topic Areas, Budget Periods, tasks, and/or subtasks that are subject to additional NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

 Electronically Signed By: Casey Strickland
NEPA Compliance Officer

Date: 4/6/2023

FIELD OFFICE MANAGER DETERMINATION

- Field Office Manager review not required
- Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____

Field Office Manager

Date: _____