Memorandum

DATE: May 16, 2024 REPLY TO ATTN OF: SCEP-20

- SUBJECT:Supplemental Approval of the State of Indiana Energy Audit Procedures for Site-
Built Single Family, Manufactured Housing, & Low-Rise Multifamily Housing for
the Weatherization Assistance Program Adding Social Cost of Carbon (SCC)
 - TO: Julie McAlpin & Tim Petrides, Project Officers, Weatherization Assistance Program, U.S. Department of Energy

EFFECTIVE: 5/16/2024

To ensure that energy audit procedures of sufficient technical rigor are used in the U.S. Department of Energy's (DOE's) Weatherization Assistance Program (WAP), Grantees must submit their energy audit procedures to DOE for approval every five years for review and approval in alignment with <u>§440.21</u> and <u>Weatherization Program</u> Notice (WPN) 23-6.

Based on review of the submitted material, Indiana's Energy Audit Tool and/or Priority List and their procedures are approved as follows:

Table 1 – Energy Audit Tool Approvals			
Tool	Building Type	Comments	Expiration Date
WAweb (NEAT)	Site-Built Housing (SBH) (1-4 Units/building)	See Attachments	12/7/2026
WAweb (MHEA)	Manufactured Housing (MH)	See Attachments	12/7/2026
N/A	Low-Rise Multifamily (LRMF) (5+ units, 3 stories or less)	Grantee has no DOE LRMF audit approval.	N/A
N/A	Large Multifamily (LMF) (5+ units, 4 stories or more)	Grantee has no DOE LMF audit approval.	N/A

Table 2 – Priority List Approvals			
Building Type	Housing Characteristics That	Expiration	
Bunding Type	Priority List Applies To	Date	
Site-Built Housing (SBH)	DOE-Sponsored Regional Priority	12/7/2026	
(1-4 Units/building)	List for Region 3	12/7/2026	
Manufactured Housing (MH)	DOE-Sponsored Regional Priority	12/7/2026	
Manufactured Housing (MH)	List for Region 3	12///2020	
Low-Rise Multifamily (LRMF)	DOE-Sponsored Regional Priority	12/7/2026	
(5+ units, 3 stories or less)	List for Region 3	12/ //2020	
Large Multifamily (LMF)	Grantas has no DOE approved DI	N/A	
(5+ units, 4 stories or more)	Grantee has no DOE-approved PL	1N/A	

Per the procedure allowed by <u>10 CFR 440.21b</u> and set forth in WPN 23-6 the following materials/audit procedures have been approved for use in Indiana's program in addition to those allowed by <u>10 CFR 440 Appendix A</u>:

Table 3 - Special Materials/Audit Procedures Approvals		
Item	Comments	
Light Emitting Diode (LED) Lighting	Approved 4/6/2017	
Spray Foam Insulation	Approved 8/18/2018	
Refrigerators	Approved 1/7/2020	
Heat Pump Water Heaters	Approved 1/7/2020	
Measure Lifetime Increases	Approved 1/7/2020,	
wieasure Litetime increases	Updated by this Memo	
Social Cost of Carbon (SCC) Inclusion	Approved by this Memo	

Per the procedure allowed by <u>10 CFR 440.20</u> and set forth in WPN 23-6 the following General Heat Waste Reduction measures are approved for use in Indiana's program, not to exceed \$250 in total costs:

Table 4 – Approved General Heat Waste Measures		
Item	Comments	
Water heater tank wrap (i.e., insulating blanket) conforming to the Standard Work Specifications	Approved 12/7/2021	
Water heater pipe insulation (on first six feet of hot water pipe exiting water heater)	Approved 12/7/2021	
Faucet aerators	Approved 12/7/2021	
Low-flow showerheads	Approved 12/7/2021	
Limited weather stripping and caulking to increase comfort (does not include major air sealing work, which should be guided by blower door testing)	Approved 12/7/2021	
Furnace or air conditioner filters	Approved 12/7/2021	
Client Education	Approved 12/7/2021	

The following conditions apply to these audit approvals:

Table 5 - Approval Conditions		
Building Type (SBH, MH, LRMF, LMF)	Conditions Explanation	
N/A	N/A	

This approval of the State of Indiana energy audit procedures (Energy Audit Tool and/or Priority List) expires on the dates outlined in Tables 1 and 2 above. As of the effective date of this memo, all previous energy audit or priority list approvals for these housing type(s) are no longer valid. The Grantee must submit its energy audit procedures to DOE for reapproval at least 6 months prior to their expiration date.

Please forward this memorandum to the Grantee agency and answer any questions they may have concerning its contents.

Carrie Smith Readiness and Retrofit Program Manager Weatherization Assistance Program U.S. Department of Energy

Attachment 1 - Approved Lifetimes for Indiana's Audit Tools Attachment 2 – Approved Indiana Social Cost of Carbon Inclusion Policy

Attachment 1 - Approved Lifetimes for Indiana's Audit Tools

Indiana Weatherization Assistance Program Approved Maximum Lifetimes of Weatherization Measures As per Attachment 9 of WPN 23-6

NEAT Measures Considered

Indiana Weatherization Assistance Program requires all Subgrantees to enable for evaluation the Measures listed below on the NEAT audit tool with the DOE- approved Life Expectancy in the audit.

Measures Considered	Life Expectancy
Attic insulation R-11	30 Years
Attic insulation R-19	30 Years
Attic insulation R-30	30 Years
Attic insulation R-38	30 Years
Attic insulation R-49	30 Years
Fill Ceiling Cavity	30 Years
Floor Insulation R-11 (airtight cavity only)	30 Years – loose insulation installed in airtight
	cavities only, otherwise 20 years must be used
Floor Insulation R-19 (airtight cavity only)	30 Years – loose insulation installed in airtight
	cavities only, otherwise 20 years must be used
Floor Insulation R-30 (airtight cavity only)	30 Years – loose insulation installed in airtight
	cavities only, otherwise 20 years must be used
Floor Insulation R-38 (airtight cavity only)	30 Years – loose insulation installed in airtight
	cavities only, otherwise 20 years must be used
Wall Insulation	30 Years
Kneewall Insulation (airtight cavity)	30 Years
Replace heating system (fossil fuel systems only)	20 Years
High Efficiency Fossil Fuel Boiler	20 Years
High Efficiency Fossil Fuel Furnace	20 Years

MHEA Measures Considered

Indiana Weatherization Assistance Program requires all Subgrantees to enable for evaluation the Measures listed below on the MHEA audit tool with the DOE- approved Life Expectancy in the audit.

Measures Considered	Life Expectancy
Wall Fiberglass Batt Insulation	30 Years
Wall Fiberglass Batt Insulation in Addition	30 Years
Wall Fiberglass Loose Insulation	30 Years
Wall Fiberglass Loose Insulation in Addition	30 Years
Floor Fiberglass Loose Insulation (airtight cavity only)	30 Years
Floor Fiberglass Loose Insulation in Addition (airtight cavity only)	30 Years
Roof Cellulose Loose Insulation in Addition	30 Years
Roof Fiberglass Loose Insulation	30 Years
Roof Fiberglass Loose Insulation in Addition	30 Years
Replace Heating System (Fossil Fuel Furnaces only)	20 Years

Fuel Cost

Fuel costs must be updated annually. IHCDA will provide annual statewide averages for propane to subgrantees costs from the U.S. Energy Information Administration (EIA) prior to the start of the Program Year and include the modified social cost of carbon over the lifetime of the measure in the cost. Subgrantees must include the Social Cost of Carbon in fuel costs for their specific natural gas and electric fuel costs. These fuel costs include a SIR adjusted to the Social Cost of Carbon (SCC) per <u>WPN 22-10 following option 2</u>. Fuel price indices to account for SCC over a 30 year lifetime can be calculated via the <u>"Fuel Price Index SCC Calculator."</u> Subgrantees must utilize the following approach to fuel-costs:

SCC Modified Subgrantee Specific Fuel Costs: Subgrantees must add new libraries for input of new rates and add the adjusted SCC modifier to the specific rate per WPN 22-10's option 2 for SCC. In utilizing this option, the naming convention must include the date and utility provider. IHCDA will monitor the implementation of the fuel cost libraries. Fuels with extreme price fluctuations, such as LP, Oil, and K1, must use averages based on the 3 years of the fuel's cost. These prices must be calculated solely by the Subgrantee. Each fuel cost in the library from the grantee and subgrantee must include in the comments the source (web address if available) from which it was derived.

Fuel Switching

Fuel-switching with DOE WAP funds must be approved by DOE on a case-by-case basis.

As part of IHCDA's approval to accept or deny fuel switch analyses, the following is in effect. Each fuel switch request must include an analysis determining that the site-specific energy audit demonstrates cost-effectiveness of the fuel-switch over the life of the measure as indicated by the SIR. If to obtain approval for a fuel-switch, then subgrantees must provide analysis of the heating/cooling annual cost for each potential fuel type without the inclusion of the SCC in the fuel prices, including any cooling costs that did not previously exist in the home due to the addition of cooling via installation of heat pump systems. The following documentation is needed as part of each fuel-switch request:

Supporting documentation must include a copy of the client utility bill(s) which list all charges for the pre-weatherization energy source(s). Cost information must include but is not limited to; the costs charged for the current energy commodity, base and service charges, taxes, supply and transmission charges and renewable energy or energy conservation adjustments.