OMB Control No: 1910-5127
Expiration Date: 04/30/2027

U.S. Department of Energy

Weatherization Assistance Program (WAP)

WEATHERIZATION ANNUAL FILE WORKSHEET

Grant Number: EE0009910, **State:** MN, **Program Year:** 2025

Recipient: STATE OF MINNESOTA

IV.1 Subgrantees

Subgrantee (City)	Planned Funds/Units
Arrowhead Economic Opportunity Agency, Inc. (Virginia)	$686,342.00 20
Bi-County Community Action program, Inc. (Bemidji)	$381,248.00 10
Community Action Partnership of Ramsey & Washington Counties (Saint Paul)	$1,237,025.00 37
Dakota County Community Development Agency (Eagan)	$464,747.00 13
Fond Du Lac Reservation Business Committee (Cloquet)	$59,741.00 1
Inter-County Community Council (Oklee)	$212,664.00 5
KOOTASCA Community Action, Inc. (Grand Rapids)	$215,858.00 5
Lakes and Pines Community Action Council, Inc. (Mora)	$547,837.00 16
Mahube-OTWA Community Action Partnership, Inc. (Detroit Lakes)	$632,109.00 18
Mille Lacs Band of Ojibwe Indians (Onamia)	$63,375.00 1
Minnesota Valley Action Council (Mankato)	$464,678.00 13
Northwest Community Action, Inc (Badger)	$151,493.00 3
Prairie Five Community Action Council, Inc. (Montevideo)	$160,455.00 3
Semcac (Rushford)	$613,683.00 18
Sustainable Resources Center (Minneapolis)	$1,378,151.00 41
Three Rivers Community Action, Inc. (Zumbrota)	$216,055.00 5
Tri-County Action Programs, Inc. (SC) (Waite Park)	$534,080.00 15
Tri-County Community Action, Inc. (LF) (Little Falls)	$377,698.00 10
United Community Action Partnership (Marshall)	$572,008.00 16
West Central Minnesota Communities Action, Inc. (Elbow Lake)	$432,462.00 12
White Earth Reservation Tribal Council (Waubun)	$104,792.00 2
Wright County Community Action, Inc. (Maple Lake)	$196,630.00 4
Total:	**$9,703,131.00** **268**

SERC Subgrantees

U.S. Department of Energy

Weatherization Assistance Program (WAP)

WEATHERIZATION ANNUAL FILE WORKSHEET

Grant Number: EE0009910, **State:** MN, **Program Year:** 2025

Recipient: STATE OF MINNESOTA

Subgrantee (City)	**Planned Funds/Units**
Sustainable Resources Center (Minneapolis)	$0.00 0
Total:	**$0.00** **0**

IV.3 Energy Savings

Method used to calculate savings: ☑ WAP algorithm ☐ Other (describe below)

	Units	Savings Calculator (MBtus)	Energy Savings
This Year Estimate	268	29.3	7852
Prior Year Estimate	603	29.3	17668
Prior Year Actual	166	29.3	4864

Method used to calculate savings description:

IV.4 DOE-Funded Leveraging Activities

As a state agency, Minnesota Department of Commerce is deeply committed to helping Service Providers maximize and leverage their weatherization funds to enhance the impact of energy efficiency services for low-income households in Minnesota.

Two positions will provide primary support for leveraging objectives for the Minnesota Weatherization Assistance Program in PY25:

- Equity and Innovation Coordinator will use data and stakeholder engagement to identify inequities within the current program design. Additionally, they will leverage partnerships and pursue additional funding, resulting in increased resources and innovative project development.
- Lead Projects Developer will focus on implementing funding opportunities and developing partnerships with stakeholders. This includes collaborating on grant

proposals and leveraging additional funds.

MN WAP leveraging activities will consist of the following components:

1. Service Provider Leveraging Assistance Support Fund (LASF)

The Leveraging Assistance Support Fund (LASF) will continue to support WAP Service Providers undertaking local leveraging activities through direct grants. Activities can include work necessary to research, develop, and pursue leveraged funding and design, implement, and manage programs which use leveraged funding. Minnesota staff will provide ongoing support to Service Providers as technology to support leveraging and an outreach toolkit are developed.

Examples of eligible LASF activities include:

- Meeting with utility or other organizations' personnel to discuss the usage of existing leveraged funds or to jointly develop a newly funded program.
- Administrative work to account for and report the use of leveraged funds on WAP homes.
- Partnerships with AmeriCorps Program, Clean Energy Resource Teams – or other service-based organizations to assist in developing in-kind contributions to increase client education or other services.
- Grant writing to foundations to meet program gaps or address program inequities.
- Time spent implementing and tracking other locally driven partnerships.
- Implementing WAPMAP and other tools to support equitable services.
- Hiring and paying a development staff to build on the activities mentioned above.

2. Advancing Solar as a measure in MN WAP

Minnesota will increase the implementation of solar PV as a weatherization measure by working with WAP service providers and solar installers statewide.

Minnesota will support a Solar Technical Assistance Liaisons (STAL). This individual will facilitate the wider adoption of solar energy within WAP. By providing one-on-one expertise and technical support for implementing solar, Minnesota has found this role instrumental in expanding the number of Service Providers implementing this measure and technology. Additionally, the STAL will explore opportunities with utility or other partnerships to offset system costs and leverage the $1 million WAP set-aside from MN Solar for All to support the state's efforts in implementing solar energy in low-income households.

3. Increase equity-based program access throughout Minnesota

Minnesota has developed the WAPMAP tool to help Service Providers identify service gaps in specific census tract areas. Training on using the WAPMAP will be offered to Service Providers and other stakeholders. Additionally, the WAPMAP will continue to be developed and expanded as new tools are created for end users. The goal is for Service Providers to make data-driven decisions to efficiently allocate resources for underserved communities.

4. Technology to Support Leveraging

As Minnesota seeks to expand the opportunities for Service Providers to leverage and braid resources, it is imperative that the weatherization network have the tools and resources that allow for efficient management and reporting on these activities, thereby continuing the growth of the leveraging efforts.

Minnesota's WAP BIL budget has some funding for technological systems to support weatherization production. As WAPLink (Minnesota's new Energy Modeling and Production Management Software) comes online, we anticipate, the addition of a module that allows for tracking and reporting on leveraging efforts through this Leveraging Plan.

IV.5 Policy Advisory Council Members

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

CenterPoint Energy	Type of organization:	Utility
	Contact Name:	Carter Dedolph
	Phone:	6123214412
	Email:	carter.dedolph@centerpointenergy.com
Citizens Utility Board	Type of organization:	Non-profit (not a financial institution)
	Contact Name:	Brian Edstrom
	Phone:	65130047016
	Email:	briane@cubminnesota.org
	Type of organization:	Non-profit (not a financial institution)

U.S. Department of Energy

Weatherization Assistance Program (WAP)

WEATHERIZATION ANNUAL FILE WORKSHEET

Grant Number: EE0009910, **State:** MN, **Program Year:** 2025

Recipient: STATE OF MINNESOTA

Clean Energy Resource Teams	Contact Name:	Joel Haskard
	Phone:	6126258759
	Email:	haska004@umn.edu
Energy Conservatory	Type of organization:	For-profit or Corporate (not a financial institution or utility)
	Contact Name:	Jake McAlpine
	Phone:	6122542186
	Email:	jmcalpine@energyconservatory.com
Fond Du Lac Reservation Business Committee	Type of organization:	Indian Tribe
	Contact Name:	Joan Markon
	Phone:	2188782658
	Email:	joanmarkon@fdlrez.com
Great River Energy	Type of organization:	Utility
	Contact Name:	Jeff Haase
	Phone:	7634456106
	Email:	jhaase@grenergy.com
Home Performance Strategies	Type of organization:	For-profit or Corporate (not a financial institution or utility)
	Contact Name:	Kevin Brauer
	Phone:	6128680365
	Email:	kevinbrauermn@gmail.com
Lutheran Social Service of MN	Type of organization:	Non-profit (not a financial institution)
	Contact Name:	Melissa Grimmer
	Phone:	6513109443
	Email:	melissa.grimmer@lssmn.org
Prairie Five Community Action Council, Inc.	Type of organization:	Non-profit (not a financial institution)
	Contact Name:	Laura Milbrandt
	Phone:	3202696578
	Email:	Laura.Milbrandt@prairiefive.org
State of Minnesota	Type of organization:	Unit of State Government
	Contact Name:	anthony Fryer
	Phone:	6515391858
	Email:	anthony.fryer@state.mn.us
State of Minnesota	Type of organization:	Unit of State Government
	Contact Name:	Katherine Teiken
	Phone:	6512967610
	Email:	katherine.teiken@state.mn.us
State of Minnesota	Type of organization:	Unit of State Government
	Contact Name:	Tracy M.B. Smetana
	Phone:	6515391826
	Email:	tracy.m.b.smetana@state.mn.us
Tri-County Community Action, Inc. (LF)	Type of organization:	Non-profit (not a financial institution)
	Contact Name:	Jason Foy
	Phone:	3206320561
	Email:	Jason.foy@tccaction.com
United Community Action Partnership	Type of organization:	Non-profit (not a financial institution)
	Contact Name:	Jeff Gladis
	Phone:	50753714162136
	Email:	jeff.gladis@unitedcapmn.org
Xcel Energy	Type of organization:	Utility
	Contact Name:	David Hueser
	Phone:	6123306581
	Email:	david.a.hueser@xcelenergy.com

U.S. Department of Energy
Weatherization Assistance Program (WAP)
WEATHERIZATION ANNUAL FILE WORKSHEET
Grant Number: EE0009910, **State:** MN, **Program Year:** 2025
Recipient: STATE OF MINNESOTA

	transcripts.

IV.7 Miscellaneous

Minnesota, through funding from the state braided with Department of Energy Formula funds, has strived to support overall workforce development for the Weatherization Assistance Program. Our work has targeted both weatherization staff (auditors, QCIs, admin, etc.) and contractors.

1. Workforce development pipeline placement

One of the most significant barriers to expansion of weatherization services or addition of new measures is the recruitment of staff and contractors. Minnesota takes a multiprong approach through partnerships like that of AMPACT/AmeriCorps. Through this partnership, Ampact member placements in WAP have seen success in serving the Twin Cities-Metro, however the program has had difficulty supporting Service Providers in Greater Minnesota. Therefore, to expand our approach of "grow our own", WAP will work in partnership with the Minnesota Home Energy Training Centers (MHETC) launching in 2025 to support placement opportunities, with concentrated efforts to communities with contractor and staff shortages.

2. Workforce Development Retention Initiatives

One of the most significant barriers to expansion of weatherization services or addition of new measures is the recruitment of staff and contractors. In considering how best to address this concern in Minnesota, the WAP program looked to other WAP programs for models. Specifically, Vermont and Kentucky have initiated Workforce Development activities associated with their DOE State Plan.

Based on what Minnesota learned from reviewing these models, MN proposed (and was approved for) retention activities in PY24. This program year, we will build on the Vermont/Kentucky models as well as our own experience.

During PY24, Minnesota implemented this retention initiative and found early success and reception from subgrantees. Program participants shared that they would like to see the program implemented for a second full year to fully understand the impacts. Now that several agencies have successfully implemented these initiatives, the subgrantee network has framework to share to support those looking to participate in PY25.

1. **Contractor Retention Bonus**

The weatherization program aims to retain and encourage contractors by offering retention bonuses. Contractors, whether existing or new to the program, will be eligible for bonuses based on their commitment duration. Specifically:

i. **Contractor Bonuses**: Contractors who are existing or new to the weatherization program will receive bonuses based on the duration of their commitment:

- Sign-on bonus: one-time payment of up to $300
- **1Year Bonus**: $500
- **3Year Bonus**: $1,000
- **5Year Bonus**: $1,500

ii. **Eligibility Criteria**:

- To qualify for a sign-on bonus, contractors must complete all required documentation and Service Providers must input data into administrative monitoring tracking tool.
- To qualify for a retention bonus, contractors must complete 15% of the unit Production Goal Amount outlined in the state plan within the retention year.
- Contractors serving multiple subgrantees will only receive one bonus.

iii. **Attracting New Contractors**:

- The program aims to attract new contractors into the network.
- Contractors serving the network may find these bonuses appealing, encouraging them to join and remain in the weatherization network.

iv. **Expanding the Contractor Network**

- The bonuses may also attract Minority Business Enterprises (MBE) and Women Business Enterprises (WBE) contractors which have been underrepresentation in the industry. These efforts align with the state's Training for Residential Energy Contractors (TREC) program which focuses on increasing the number of qualified residential energy contractors in the energy efficiency workforce. WAP contractors will be invited to participate in upskilling opportunities as Minnesota rolls out the Empowering Contractors in Energy Professions (ECEP) portion of TREC funds in 2025.

v. **Tracking and Oversight**:

- Commerce will collaborate with Service Providers to monitor incentives and retention rates among contractors.
- Bonuses will be factored into program operations and contribute to the ACPU.

This approach seeks to enhance contractor engagement and support existing contractors within the weatherization workforce.

2. **Support workforce development with a Career Path Ladder**

To encourage Energy Auditors (EAs) and Quality Control Inspectors (QCIs) to obtain certification, and longevity to the program benefits for WAP staff, we propose a career path ladder with incentives. Additionally, we aim to attract new crew members and retain existing staff through sign-on and retention bonuses:

i. **Certification Incentives:**

- **Sign-On Bonuses**: New crew members (including RIT, crew leads, EAs, and QCIs) will receive a $250 sign-on bonus upon joining. Service Providers will include a retention policy in place for the bonus.
    - **Retention Bonuses**: We recognize commitment over time:
        - 12 Month Bonus: $500
        - 2 Year Bonus: $750
        - 5 Year Bonus: $1,250

ii. **Legacy Staff:**

- Existing staff members will be included, ensuring they are eligible for retention bonuses.
- These bonuses will be granted after the successful inspection completion of the subgrantee's first DOE unit.
- Calculation of length of service may include experience from other professional WAP roles outside of the current role.

iii. **Financial Considerations:**

- The bonuses will be factored into program operations and contribute to the ACPU.

By implementing this incentive structure, we aim to enhance certification attainment, attract new talent, and foster long-term commitment within our Service Provider Network. With many energy workforce development efforts (Energy Auditor Training grant and Training for Residential Energy Contractors), the Weatherization Assistance Program would remain a competitive employer option for workers.

Needs across Minnesota vary widely for contractors and staff in WAP. Subgrantees may opt-out of the program following procedure outlined by Minnesota. Subgrantees may also choose to offer less than the specified amount for each bonus type, but no more than what is outlined. Subgrantees are encouraged to evaluate and implement bonuses based on their individual priority workforce support needs.

SERC

U.S. Department of Energy

Weatherization Assistance Program (WAP)

STATE PLAN / MASTER FILE WORKSHEET

Grant Number: EE0009910, **State:** MN, **Program Year:** 2025

Recipient: STATE OF MINNESOTA

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

The Minnesota Department of Commerce (Minnesota) uses a combined LIHEAP/WAP application to determine eligibility for both the Energy Assistance (LIHEAP) and Weatherization Assistance Programs (WAP). For the purpose of this application, income is defined as all income and all money received by each household member. This includes:

- Wages
- Minnesota Family Investment Program, Diversionary Work Program, General Assistance
- Spousal Support or Alimony
- Disability Payments, Veteran's Benefits, Workers' Compensation, Social Security, RSDI and SSI
- Unemployment Compensation
- Self Employed, Farm, and Rental Income
- Interest, Dividend
- Retirement Income
- Pensions and Annuities
- Tribal Bonus, Judgments or Per Capita Payments

Describe what household eligibility basis will be used in the Program

A dwelling unit is eligible for Weatherization services if it is occupied by a household whose income is at or below 200% of Federal Poverty Income Guidelines or is eligible for assistance under the LIHEAP income limit of 50% of State Median Income, whichever is greater, as allowed by 10 CFR 440.22 and required under Minnesota 2009 Session Laws, Chapter 138, Article 2, Subd. 4.

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

As noted, the Minnesota Department of Commerce (Minnesota) uses a combined LIHEAP/WAP application to determine eligibility for both the Energy Assistance (LIHEAP) and Weatherization Assistance Programs (WAP). All potential recipients of WAP services are asked to provide information that ensures they are eligible as described. Per Energy Assistance Program Policy Manual produced by the Minnesota Energy Assistance Program, qualified aliens may provide an alternative to a Social Security number to meet this requirement.

V.1.2 Approach to Determining Building Eligibility

Procedures to determine that units weatherized have eligibility documentation

When occupied by an eligible household, the following dwellings are eligible for weatherization, whether owner-occupied or rental properties:

- Single Family Homes;
- Mobile Homes/Manufactured Homes;
- Multifamily buildings containing 2 or more units;
- Townhomes (treated as individual single-family dwellings provided there is a physical separation between each townhome's thermal barrier, air pressure boundary, mechanical systems, and individually metered units).

Owner Occupied Dwellings Proof of Ownership:

Service Providers must verify home ownership and add proof of ownership to the household file for owner-occupied households. Proof of ownership ensures that proper authorization is obtained prior to weatherizing a dwelling.

Proof of ownership documentation includes:

- Property tax statements;
- Mortgage statements;
- Contract for deeds recorded with the county;
- Quit claim deeds recorded with the county;
- Online or written information from a county recorder or assessor;
- Official county receipt for transfer of title;
- Ownership validation from a tribal government;
- Other documentation preapproved by the Minnesota Department of Commerce.

Mobile/manufactured homes may be owned either as personal property or real property. If the mobile home is titled through Driver and Vehicle Services, it is considered personal property and the Certificate of Title issued by Driver and Vehicle Services serves as proof of home ownership. If the mobile home title was surrendered to the county, then the home is considered real property and documentation of ownership would be the same as for other nonmobile homes.

Rental Dwelling Income Documentation Requirements:

Single-family Rental Requirements: a single-family dwelling (one unit) must be occupied by an eligible household prior to the start of any weatherization activities. Household eligibility is determined through review of household supplied information contained in eHEAT as described earlier.

Multifamily Rental Requirements:

Service Providers may weatherize multifamily buildings containing two or more units. Weatherization is designed to occur on the whole building as a systems approach. A single unit within a multi-unit building may not be weatherized.

Eligibility for each building in a multifamily complex of buildings is determined separately. For a multifamily building to be eligible for weatherization services, at least 66% of the building units (50% for duplexes and fourplexes and certain eligible types of large multifamily buildings) must meet one of the following:

- Have income eligible households in the dwelling units, or;
- Will have income eligible households in the dwelling units within 180 days under Federal/State program for rehabilitating the building.
- Meet the WAP Multifamily Specific categorical eligibility criteria as outlined in in the MN Weatherization Multifamily Procedures Guide (Appendix B).

Prior to being accepted into the Weatherization program, multifamily buildings are checked against household eligibility requirements, and the expenditure limits for Weatherization work in the building are verified.

Rented townhomes with complete separation between the building units' thermal barriers, air pressure boundaries, mechanical systems, and with individually metered units may be treated either as individual units, or, if eligibility is met, as a multifamily building.

Describe Reweatherization compliance

Minnesota maintains a centralized previously weatherized list in the production management software used by all Service Providers. This centralized list captures all homes previously weatherized using DOE funds in Minnesota and is based on the historical previously weatherized lists of all active and past Service Providers. Service Providers verify previously weatherized status via the software to ensure current eligibility prior to undertaking Weatherization work on the home. Weatherized Households are added to the list as Weatherization work is completed.

Describe what structures are eligible for weatherization

Structures that are eligible for weatherization include single family, manufactured homes, and multifamily buildings. Minnesota has approved audits for single family (2026), manufactured homes (2026), and multifamily buildings (2029). Nontraditional dwelling types such as shelters, and mixed-use buildings may be allowed but must be reviewed and approved by Minnesota prior to weatherization to ensure that the dwelling meets program regulations. (Section 3.4 of the Minnesota Weatherization Assistance Program Policy Manual addresses mixed-use buildings.) If deemed necessary, Minnesota will seek approval from the USDOE Project Officer for the weatherization of a nontraditional dwelling. Single family structures must be occupied prior to weatherization. The weatherization of nonstationary campers and trailers that do not have a mailing address associated with the eligible applicant is not allowed per DOE regulation.

Service Providers are required to complete a State Historic Preservation (SHPO) review for all dwellings prior to the commencement of any weatherization activity. Minnesota's SHPO Programmatic Agreement (PA) was extended until 12/31/2025. Compliance monitoring includes verification of SHPO review and

previous weatherization status in sampled household files. Minnesota has just initiated a conversation with our new Project Officer about renewing our Programmatic Agreement (PA).

Describe how Rental Units/Multifamily Buildings will be addressed

Rental dwellings have equal access to WAP services as owner-occupied dwellings with household eligibility determined as described previously.

Per 10 CFR 440.22, Service Providers may weatherize rental properties where tenants do not directly pay heating bills, provided the benefits of weatherization accrue primarily to the income eligible tenant(s).

In those cases, property owners must provide detailed justification to Service Providers indicating how benefits of weatherization will accrue to tenants.

Examples of accrual of benefits to tenants who do not directly pay heating bills include, but are not limited to:

- Investment of the energy savings from weatherization work in specific health and safety improvements with measurable benefits to tenants,
- Longer term preservation of the property as affordable housing,
- Investment of the energy savings in facilities or services that offer measurable and direct benefits to tenants,
- Improvements to heat or water distribution and ventilation to improve the comfort of residents,
- Continuation of protection against rent increased beyond the local written agreements required under WAP regulations (10 CFR 440.22), and
- Establishment of a shared savings program.

Once deemed sufficient by the Service Provider, Minnesota approval is required prior to beginning weatherization work.

Service Providers and property owners are required to sign a Property Owner Agreement prior to the start of weatherization work which must contain several elements:

- The Property Owner Agreement must contain written permission of the building owner (or agent) for Weatherization service personnel to undertake weatherization work on the building.
- The Property Owner Agreement must state that rent on WAP weatherized properties (those using USDOE funds) cannot be increased because of the increased property value associated with the weatherization work. This agreement is required to be in force to cover “a reasonable period of time after weatherization work has been completed.”
- Property Owner agreements must contain language that no undue or excessive enhancement shall occur to the value of the dwelling unit being.
- Tenants may file complaints to Service Providers, Minnesota, or both if concerns arise over the agreed upon terms of the Property Owner Agreement. Property Owners, in response to such complaints, shall demonstrate that the rent increase concerned is related to matters other than the weatherization work performed.

During Annual Administrative Monitoring, Minnesota confirms that each Service Providers has a Property Owner Agreement in place and that it is in compliance with Minnesota WAP Policy.

Eligibility for each building in a multifamily complex of buildings is determined separately. For a multifamily building to be eligible for weatherization services, at least 66% of the building units (50% for duplexes and fourplexes and certain eligible types of large multifamily buildings).

Minnesota requires the property owner to financially contribute to the weatherization of a multifamily property with five or more dwelling units, except in cases where the property owner also qualifies for weatherization services. Service Providers have discretion in setting the level of contribution. Local Service Providers may choose to require a property owner contribution when weatherizing rental properties containing 2-4 units. Property owner participation may be used to buydown an Savings to Investment Ratio (SIR).

Property owner contributions for single family dwellings may not be required but can be accepted.

In Minnesota, duplexes and fourplexes are eligible for weatherization services if at least 50% of the building units meet one of the following:

- Have income eligible households in the dwelling units, or;
- Will have income eligible households in the dwelling units within 180 days under a Federal/State program for rehabilitating the building.
- Meet the WAP Multifamily Specific categorical eligibility criteria as outlined in in the MN Weatherization Multifamily Procedures Guide (Appendix C).

Describe the deferral Process

There are conditions or situations when an eligible dwelling unit should not be immediately weatherized, but rather deferred until unacceptable conditions are mitigated. A deferral determination may be made during the eligibility process, during the audit, or after weatherization work has begun.

Service Providers may elect to defer a home from receiving weatherization services when health and safety hazards exist for the staff, contractors, or clients, or when conditions exist in the home which cannot be addressed by WAP, and which prevent the safe and effective implementation of weatherization measures. Weatherization work will be postponed until the problems are resolved or alternative resources are found to address the hazards.

Service Providers are expected to pursue reasonable options on behalf of the dwelling owner and to use good judgment in dealing with difficult situations. Service Providers shall not defer service without pursuing other options and identifying other resources to address the identified hazards. Whenever appropriate, educational information on how to address the hazard is shared with the occupant. If corrections are made to the deferred dwelling and the corrections eliminate the issue that led to the deferral, the Service Provider may proceed with weatherization so long as the household's EAP application is current and approved.

Service Providers are required to track deferred units and deferral reasons in a centralized location in the production software. This is also the software that tracks eligibility and so those records are connected through the software. The record for each deferred household is assigned a deferral reason which may include vermiculite, clutter, structural repair issues, etc.

Conditions where Service Providers must not use DOE funds to weatherize dwellings include:

- The dwelling was weatherized less than 15 years prior to the current date;
- The dwelling is scheduled for demolition;
- The condition of the structure would make weatherization impossible or impractical (e.g. inability to meet SWS).

Other deferral situations may arise as the result of a review and judgement made by the Service Provider. Examples where the deferral may occur, depending on the Service Provider assessment, include, but are not limited to:

- The dwelling is in the process of being sold;
- The dwelling is in the process of being remodeled;
- The owners have refused cost effective measures determined by the energy modeling software tool. Service Providers must then defer that dwelling per WPN 23-6 attachment 8 unless approval from Minnesota is requested and approved;
- The building structure or its mechanical systems (including electrical and plumbing), are in such a state of disrepair that failure is imminent, and the conditions cannot be resolved cost-effectively;
- The house has sewage or other sanitary problems that would further endanger the client and or weatherization installers if weatherization work were performed;
- The house has been condemned or a major household system (electrical, heating, plumbing, or other equipment) has been "red tagged" by a local or state building official or a utility, and the unacceptable conditions cannot be resolved with WAP funds;
- The dwelling has severe moisture problems that cannot be resolved under existing health and safety measures and with minor repairs;
- The dwelling has dangerously high carbon monoxide levels in combustion appliances that cannot be resolved under existing health and safety measures;
- The extent and condition of lead-based paint in the house would potentially create further health and safety hazards;
- The energy auditor determines a condition(s) exists which may endanger the health or safety of the work crew or subcontractor, requiring that the work not proceed until the unsafe condition is corrected;
- The client has a known health condition(s) that prohibits the installation of insulation and other weatherization materials;
- Dwellings which contain vermiculite insulation, as all vermiculite insulation is assumed to contain asbestos;
- The cost to weatherize a home is so significant that it will negatively impact the Service Provider’s ability to meet the statewide average cost per dwelling and/or healthy and safety average. Service Providers are to document the reasoning and justification to utilize pre-weatherization or readiness dollars to bring the home into weatherization-ready status.

Service Providers may also defer households for the reasons below. In these cases, Service Providers must issue, in a timely manner, written notification to the client. Client signatures on a deferral form are not required in cases where Service Provider staff feel threatened or unsafe. In these cases, notification by certified mail is recommended.

- The presence or use of any controlled substance is evident or observed by auditors, inspectors, contractors, crews, or anyone else who must work on or visit the home;
- The client is uncooperative, abusive, or threatening to the crew, subcontractors, auditors, inspectors, or others who must work on or visit the house;
- In cases where an individual client feels a deferral is unfairly determined, the client may appeal a decision to defer.

Additional information about deferral process can be found in the Minnesota Weatherization Assistance Policy Manual Section 3.8 (Policy Manual attached).

A client whose home is deferred must be informed of their right to appeal. Per the client appeals policy outlined in policy Minnesota Weatherization Assistance

Policy Manual Section 1.6, clients submit the initial appeal to the Service Provider. If the client is not satisfied with the outcome, then the appeal is submitted to Commerce.

Weatherization Readiness Funds (WRF)

Weatherization Readiness Funds (WRF) are used in Minnesota to reduce the number of deferrals by providing flexibility to our subgrantees to address weatherization barriers at the local level. Weatherization Readiness Funds allow Service Providers to address the variety of unique and vexing issues present in clients' homes that lead to an inability to provide weatherization services.

Minnesota distributes Weatherization Readiness funds using our usual funding formula which is based on general population of Service Area, population living in poverty, and a number of other factors.

The spending cap is $20,000 per household. There is no pre-approval required if the measure(s) are on the Allowable Measures Chart (AMC) and under the $20,000 per household cap. If the measure(s) are not on the AMC or above $20,000, then prior approval by Commerce is required.

Minnesota seeks to allow local subgrantees appropriate flexibility in managing Weatherization Readiness Funds. Because homes and circumstances are unique, this flexibility will allow subgrantees to address the varied situations that arise in the most cost-effective manner possible with the most benefit to the homeowner. Service Providers will use the following factors to determine which dwellings receive WRF:

- WRF should be used in homes which cannot be made weatherization ready using other means.
- The total cost of required repairs in each home will be considered in deciding which homes will receive WRF to manage overall costs and benefit the widest range of eligible homeowners.

WRF may be used to complete measures in one PY with the audit measures being completed in the following PY. The project must be completed within a reasonable period. A "reasonable period" is defined as six months, or longer with documented mitigating circumstances.

Minnesota monitors WRF projects alongside our overall field monitoring in weatherized homes. Field Monitors visually inspect the WRF measures determining if the measure is complete and installed in a manner that meets quality expectations for the Weatherization Readiness Program.

V.1.3 Definition of Children

Definition of children (below age): **19**

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.

All eligible households, including those with Native American Indian members, are served equally without regard to race, color, national origin, gender, or religion. The Minnesota Weatherization Assistance Program contracts directly with three of Minnesota's Tribal Nations. Tribal subgrantees for the Minnesota WAP program are Fond du Lac Band of Lake Superior Chippewa, White Earth Reservation Tribal Council, and the Mille Lacs Band of Ojibwe Indians. The other five tribal nations within Minnesota are served by the WAP Service Providers who serve the closest geographic territory to Tribal lands.

V.2 Selection of Areas to Be Served

Minnesota serves all 87 counties in the state and provides equal access to WAP services for all eligible households. The Minnesota Weatherization Assistance Program serves these 87 counties via a network of 22 sub-grantees we refer to as Service Providers. Service Providers are either Community Action Partners, Tribal Nations, Counties, or other nonprofit organizations.

In the event that a Service Provider relationship with Commerce and the Weatherization Assistance Program is ended, regardless of the reason, a temporary provider will be identified from among the existing group of Service Providers. Commerce will identify the temporary provider and invite them into a short-term agreement with Commerce.

At the same time, Commerce will initiate a Request for Proposal Process following all DOE regulations and state requirements and processes. At the conclusion of this process, a permanent provider will be identified, and Commerce will follow usual contracting and funding processes.

V.3 Priorities

As required by federal regulation, Minnesota WAP prioritizes households which contain:

- Children under 19;
- Persons with disabilities;
- Elderly persons;
- High-energy burden;
- High-energy use.

Service Providers set the order of priorities to determine which households to weatherize first and may elect to use a combination of priorities to best serve the eligible population in their service territory. Service Providers may also choose to queue waiting households within a prioritization category based on the length of time since the EAP/WAP application approval date. Service Providers are required to have a documented policy for their prioritization system, and they must not discriminate due to housing type.

High energy use households, especially those without secondary heat sources, may be prioritized by a Service Provider when an energy crisis is anticipated or in the year following an energy crisis, especially for households using high-cost fuels such as propane.

Service Providers communicate to Minnesota the household prioritization criteria they will use and then select from eligible applicants in their Service Area based on the prioritization system they have documented. Minnesota staff monitor for performance against goals during the annual Administrative Monitoring visit.

Client designation as High Energy burden or High Energy Use is determined through the eligibility process. High Energy burden is based on the median energy burden for all low-income Minnesota households from the American Communities Survey data made available through the LEAD tool.

V.4 Climatic Conditions

Minnesota has a continental type of climate, subject to frequent outbreaks of continental polar air during the cold season and periods of prolonged heating during summer, particularly in the southern portion of Minnesota. Mean annual temperatures range from 38° F in the extreme north to 45° F along the Mississippi River in the southeast. State temperature extremes range from -60 to 115° F. Monthly average temperatures vary from 81º F (July) to -13° F (December). Mean temperatures during January in the northern portions of the State average near 5° F.

Minnesota is located in International Energy Conservation Code Climate Zones 6 and 7. Minnesota uses energy modeling software that adjusts for client's specific climatic conditions and fuel costs as appropriate.

Annual	Heating Degree Days	Cooling Degree Days
Duluth	8031	230
International Falls	8447	229
Minneapolis	5940	883
Rochester	6431	543

(Sources: National Weather Service and Minnesota Department of Natural Resources

V.5 Type of Weatherization Work to Be Done

V.5.1 Technical Guides and Materials

All weatherization work in Minnesota is performed in accordance with DOE approved procedures, including the appropriate DOE approved energy audit (single family, multifamily,

or mobile home), the Minnesota WAP Policy Manual, 10 CFR 440 Appendix A, and the Standard Work Specifications (SWS). Minnesota provides Service Providers with "RETROFITTING MINNESOTA: STANDARD WORK SPECIFICATION ALIGNED FIELD GUIDE" (retrofitting-minnesota-sws-aligned-field-guide.pdf (mn.gov)), which contains information about audits/testing, installation of energy conservation, health and safety, and incidental repair measures, final inspections, and the Minnesota SWS Variances. The Field Guide was approved and went into effect in January 2021 and the Minnesota variances were updated and reapproved by DOE in August of 2018 and went into effect January 17, 2019. A multifamily field guide based on NREL's Multifamily SWS also was approved by DOE and went into effect January 2021.

All sub-grantee Service Provider contracts contain the following language confirming the receipt of, and conformance with, all applicable USDOE WPNs and Memoranda, the MN WAP State Plan, the MN WAP Policy Manual, Policy Addendums, and the MN WAP Field Guide including the SWS for single family, multifamily and mobile homes.

> "The Grantee will perform work and expend funds within the above timeframes. Work must be performed in full accordance and to the quality of the specifications outlined in the following: The Minnesota WAP Policy Manual, Minnesota WAP Weatherization Field Guide, for single family, multifamily and mobile homes, the Standard Work Specifications (SWS), and Minnesota's DOE Approved SWS Variances."

Minnesota WAP Sub-Grantee Contracts

Sub-grantees have access to the WAP Policy Manual, Field Guide, and a number of other documents and information resources at the provider-facing Weatherization Assistance Providers / Minnesota Department of Commerce - Energy (mn.gov) website. In signing the contract, sub-grantees confirm that they have read and acknowledged the expectations for work quality as outlined in the contract. Additional information on all standards is available through training opportunities and through technical assistance received during monitoring or by sending an email to the weatherization inbox seeking technical guidance.

Service Providers are required to include similar language in their contracts with contractors who perform work for WAP. MN WAP Policy Manual Section 7.4.3 requires:

> 1. There is written agreement with all contractors specifying the terms and conditions under which work will be performed, including consequences for noncompliance or
>
> underperformance
>
> 2. Contracts confirm terms, conditions, and specification of the agreement.
>
> 3. Contractors complete work that is in accordance with the policies in this manual.
>
> 4. Service Provider must either maintain the contractor file documentation for sub-contractors hired by a contractor or include documentation in their contracts with the general contractor that it is the Contractor's responsibility to maintain that documentation.

These contracts include acknowledgement that their contractors have read and acknowledged the expectations for work quality including the Minnesota WAP Policy Manual, Retrofitting Minnesota Standard Work Specification-Aligned Field Guide, the Standard Work Specifications (SWS), and Minnesota's DOE Approved SWS Variances. Contractor signatures on the contract indicate receipt of the relevant documents and agreement to conduct weatherization work to the indicated standard. Dependent on the individual Service Provider, these are provided as hard copies or web links. Administrative monitors review contracts for compliance. Field monitors, through monitoring inspections, confirm conformance with the SWS.

The following materials are approved for use and not in Appendix A of CFR 440:

- Grantee-administered fuel switching authority 2/10/2016
- LED lighting approved by DOE 4/8/2016
- Spray foam as an insulation material 9/4/2018
- NEAT/MHEA ECM lifetimes 3/20/2019.
- Refrigerators 7/9/2019
- Domestic hot water (DHW) heater replacements 7/9/2019
- Single-Family Solar photovoltaics (PV) as a pilot 9/5/2019
- ECM Furnace Motor Replacements 4/13/2021

- Photovoltaic Systems (PV) within the constraints of the NEPA waiver 7/26/2021

Field guide types approval dates

Single-Family:	2/10/2021
Manufactured Housing:	2/10/2021
Multi-Family:	2/10/2021

V.5.2 Energy Audit Procedures

Audit Procedures and Dates Most Recently Approved by DOE

Audit Procedure: Single-Family
Audit Name:
Approval Date: 2/10/2021

Audit Procedure: Manufactured Housing
Audit Name:
Approval Date: 2/10/2021

Audit Procedure: Multi-Family
Audit Name:
Approval Date: 7/3/2024

Comments

Audit Procedures and Dates Most Recently Approved by DOE

Audit Procedure: Site-Built (includes Priority List)

Audit Name: NEAT (current) and WAPLink (pending approval)

Expiration Date: 2/10/2026

Audit Procedure: Manufactured Housing (includes Priority List)

Audit Name: MHEA (current) WAPLink (pending approval)

Expiration Date: 2/10/2026

Audit Procedure: Multifamily (includes 2-4, Low-Rise, High-Rise, and Priority List)

Audit Name: EA-Quip (approved) and WAPLink (pending approval)

Expiration Date: 7/3/2029

All dwellings scheduled for weatherization must have a comprehensive energy audit that treats the dwelling as a whole system. On December 31, 2024, Minnesota submitted for approval to the Department of Energy a request to use WAv10 via an API using a 3rd party software entitled WAPLink.

Weatherization measures for a dwelling are considered cost effective if the Savings to Investment Ratio (SIR) is 1.0 or greater for each measure and for the job as a whole. In addition to DOE approved conservation measures, Minnesota WAP Service Providers also install health and safety and incidental repair measures as dictated by the audit on each dwelling. Minnesota also uses WAPLink for multifamily audits of all buildings up to four units, townhomes treated as single-family, and low-rise multifamily buildings that meet the Regional Priority List requirements.

Multifamily buildings that do not qualify for Regional Priority List option, are entered into EA-Quip software for modeling and entered into WAPLink for work order creation, tracking, and reporting purposes.

V.5.3 Final Inspection

The Minnesota Weatherization Policy Manual specifies the activities and tests that must be completed in a final inspection and the process for rework should the need arise (MN WAP Policy Manual 4.6). Final inspections on weatherized homes are conducted to confirm that all work was done to the SWS standards and in a workmanlike and professional manner. Dwelling units may not be reported as complete until all work passes a final inspection, and all required signatures are obtained on the required forms.

Each Service Provider or its authorized representative is required to use a certified Quality Control Inspector (QCI) who is in good standing with the Building Performance Institute to conduct all final inspection of all dwelling units. The QCI may oversee and signoff on final inspection duties conducted by non-QCI certified staff related to NEAT data entry, fiscal entry, etc.

At the beginning of each program year, Service Providers will provide Minnesota the names and BPI certification numbers of the QCIs they intend to use for final inspections. Minnesota will maintain a current list of QCIs to ensure that adequate numbers are available to inspect all jobs statewide.

Minnesota uses monitoring forms that are provided to Service Providers prior to monitoring visits (Included in attachments to SF-424). These forms are structured to ensure compliance with the work quality requirements outlined in WPN 22-4 Section 1.

Service Providers provide QCI-certified inspections according to the following protocol:

> Independent QCI: A final inspection on every home will be conducted by a QCI who was not involved in the weatherization work on the home, either as the auditor or as a member
>
> of the crew. State field monitoring will be done through Minnesota by a certified QCI. Minnesota will conduct field monitoring visits of at least five percent of all completed units per SP.

Minnesota also conducts desk monitoring to ensure that QCIs are performing final inspections.

QCI Shortage: To meet production goals in a timely manner, Service Providers are responsible for maintaining staff and/or contractual relationships with QCI certified inspectors. In the case of a shortage of QCI certified inspectors in the service territory, Minnesota may choose to allow the following, in accordance with WPN 24-4:

> The QCI certified auditor performs the audit and the final quality control inspection. The auditor is not involved in any of the actual work on the home. In this case, a Minnesota certified QCI or DOE approved representative will perform quality assurance reviews of at least 10 percent of all completed units as this model does not allow for an independent review of the audit on every home.

Additionally, the Service Provider will be required to develop and submit a quality assurance plan to ensure that the individual who is functioning as both the auditor and the quality control inspector is able to consistently perform both tasks. Minnesota may choose to reduce the respective Service Provider Training and Technical Assistance allocation to cover the expense of increased monitoring.

Minnesota also offers a Quality Control Inspector Mentoring Program. Under this initiative and with prior approval, Service Providers designate QCI mentees and during the designated time period, mentees conduct final inspections with oversight from the QCI mentor. The mentor is responsible for reviewing all mentee’s field inspections and providing on the job training. When this approach is in place, Minnesota field monitors will monitor a minimum of 10% of units inspected by the mentee.

Disciplinary Actions: If a QCI is found to be negligent, either through repeat findings or gross negligence in their duties, Minnesota, with or without the support of a Service Provider, may institute the following:

1. Additional training

2. Temporary suspension (e.g., six months)

3. Permanent suspension and written notification to BPI

U.S. Department of Energy
Weatherization Assistance Program (WAP)
STATE PLAN / MASTER FILE WORKSHEET
Grant Number: EE0009910, **State:** MN, **Program Year:** 2025
Recipient: STATE OF MINNESOTA

V.6 Weatherization Analysis of Effectiveness

Weatherization Analysis of Effectiveness

Minnesota evaluates the effectiveness of Weatherization in two primary ways: evaluation of weatherization results in homes and incremental quality improvements of Service Provider delivery and Minnesota support of the program.

Results

With over 200 utilities in Minnesota, realized energy savings studies including bill analysis and comparison is not a feasible strategy for evaluating weatherization's effectiveness in the state.

As a proxy, Minnesota monitors blower door test results. While imperfect because of the multiple variables involved, blower door test results are useful to engage our Service Providers in conversation about approaches and processes.

Minnesota staff review blower door results with the goal of understanding energy conservation opportunities, those taken and those missed. When outliers are found or unexpected results are noted, the conversation with individual Service Providers begins.

Minnesota staff have an opportunity to explore missed opportunities. Discussion may include suggestions about how blower door improvements are estimated, air sealing is approached, and other best practices in weatherization. Service Providers may share information about difficult homes with unusual or unexpected circumstances, the challenges of scarcity of contractors, and the impact on Savings-to-Investment ratios.

Rather than evaluating these results in a pass/fail framework, Minnesota uses them as a starting point for identifying steps of continuous improvement around the decision-making processes that go into weatherization as well as the implementation of those decisions in the application of weatherization.

Quality Improvement

Minnesota is committed to supporting Service Providers in quality improvement as well as our own continuous improvement.

For Service Providers, Minnesota conducts both administrative and field monitoring, periodic desk reviews, and analysis of each Service Provider. The assessments delve into interviews with WAP staff, onsite visits to homes that have received WAP services, and regular desk monitoring of Service Provider production and spending statuses.

Minnesota also works with other agency partners to monitor performance. WAP staff work with LIHEAP and Minnesota Department of Human Services staff to identify any systematic issues. Minnesota's fiscal division reviews third party single audits for all Service Providers. Management decision letters are issued if the audit indicates findings related to WAP or crosscutting findings that affect the management of WAP.

When monitoring issues are found (compliance or finding, dependent on level of severity), Minnesota notes that in the Monitoring Report with a required action associated. The Monitoring Report remains open until the Service Provider satisfactorily addresses the initial concern and provides appropriate documentation. When all issues have been addressed, the Monitoring Report is closed and that is communicated to the Service Provider.

Using the information gathered through monitoring efforts, Minnesota continues to develop and offer trainings to address identified issues. Through a series of WAP IIJA-supported Workshops (Framework for Effective Planning), greater emphasis has been placed on sharing best practices among Service Providers.

Minnesota has also recently initiated a protocol that involves reaching out to new key staff (ED, Coordinators, CFO, etc.) early in their tenure. This effort of making a personal contact has been beneficial in identify individual support needs, training gaps, and overall subgrantee needs.

In pursuit of its own quality improvement, Minnesota incorporates DOE Monitoring Feedback along with feedback from its Service Provider network and review of sub-grantee performance.

Our service provider network meets regularly as the Minnesota Weatherization Advisory Group (MWAG). The chair of MWAG lead these meetings, gathers feedback from members, and funnels that feedback to the Minnesota WAP Program Director and Technical Proficiency Unit Supervisor.

As applicable, Minnesota also gathers information through DOE's American Customer Satisfaction Index. This feedback is reviewed with the weatherization staff and consideration is given as to how specific items can be improved. Past impacts have included network input on policy development and improved clarity and communication in monitoring activities.

Minnesota also reviews the full scope of monitoring issues encountered by the administrative and field monitors. Where trends or consistent issues are identified,

consideration will be given to the appropriate response which may include communication pieces, individualized technical assistance, or formal training. This review may also instigate additional focus in monitoring or additional resources for monitors to provide as technical assistance during visits.

V.7 Health and Safety

See Attachment

V.8 Program Management

V.8.1 Overview and Organization

The Minnesota Department of Commerce serves as the statewide administrator of Minnesota's Weatherization Assistance Program (WAP). The Division of Energy Resources includes not only WAP but also the State Energy Program (SEP), Low Income Energy Assistance Program (LIHEAP), and the Energy Conservation and Optimization Program (ECO), as well as other energy regulatory departments. Grouping these programs (especially LIHEAP, ECO, Home Energy Rebates – HOMES and HEAR) provides the best opportunities for coordination of programs affecting low-income households.

In addition to USDOE funds, Minnesota manages LIHEAP and Propane funds for weatherization. USDOE funds are governed by the WAP State Plan. LIHEAP funds are governed by the LIHEAP State Plan and Propane funds are governed by relevant Minnesota statute. Minnesota manages State-allocated Pre-Weatherization (deferral mitigation) funds.

WAP staffing consists of a Program Director, the Program Coordinator, Program Administrator, two Administrative Monitors, Training and Technical Assistance Principal, Training and Outreach Specialist, Technical Proficiency Unit Supervisor, Technical Proficiency Coordinator, seven Field Monitors, Equity and Innovation Coordinator, and Lead Projects Developer (Organization Chart attached to SF424). The Energy Affordability Director oversees the Weatherization team.

Minnesota annually contracts for program delivery activities with 22 local Service Providers. These Service Providers include Community Action Agencies, Tribal nations, a private nonprofit agency, and a community development authority.

V.8.2 Administrative Expenditure Limits

In PY25, Commerce will retain 5.25% of USDOE Program Year funds for statewide program administration. The remaining 9.75% will be allocated to subgrantees by the allocation formula.

Subgrantees who receive less than $350,000 in USDOE funds receive up to an additional 5% for administrative purposes. The additional funds will come from subgrantees' program allocation and will be inversely prorated according to the amount of USDOE funds received. The higher a subgrantee allocation, the less the subgrantee will receive in additional administrative dollars. The prorated formula percent decreases at a rate of 0.5% per $25,000 until the allocation reaches $350,000.

V.8.3 Monitoring Activities

The overall goals of monitoring are to ensure compliance with federal and state rules and policies and establish the efficiency, quality, and effectiveness of Service Provider operations. An additional goal is to identify and correct issues that have the potential to cause major program deficiencies and to ensure the integrity of the public purpose of the Program.

Staff with responsibility for monitoring include: the Weatherization Assistance Program Director, the Technical Proficiency Unit Supervisor, the Training and Technical Assistance Principal, Technical Proficiency Coordinator, Field Monitors (7), Program Coordinator, Administrative Monitors (2), and Accounting Officers (2). All Field Monitors are QCI Certified. Because work with Service Providers has a broader focus than just compliance, Training and Technical Assistance dollars support activities in this area. Twenty percent of TTA funds are allocated for monitoring activities.

Monitoring strategies include the following:

Weatherization Inbox

Service Providers are encouraged to submit weatherization program or policy questions to Minnesota staff via a group email box. Responding to these questions from Service Providers serves two monitoring purposes: reduction in the number of monitoring compliance issues and documentation of technical assistance and policy responses for consistency.

Desk monitoring

Desk monitoring includes ongoing review of monthly programmatic data submitted by Service Providers. Examples of reviewed data include number of units completed, number of units in progress, Average Cost Per Unit, invalid audit events, work orders paid before inspection and blower door test results. Fiscal data is also reviewed and includes Service Provider monthly expenses and cash requests against allocations.

Fiscal review also includes audit review and financial reconciliation. Each Service Provider is required to submit their annual single audit no more than nine months after the conclusion of the agency's fiscal year. Minnesota's Senior Accounting Officer reviews the audits for any internal control issues, crosscutting findings, or management issues. If there are any findings for Federal Programs, the Deputy Commissioner sends the Service Provider a management decision letter that outlines the findings from the audit report and requests follow up. If Minnesota Department of Commerce is the cognizant agency, this management decision letter is also submitted to other Federal funding agencies. Financial reconciliation involves reviewing an individual Service Providers financial documents in support of a submitted Financial Status Report/Cash Request.

Administrative Monitoring

Administrative Monitoring takes place to document local Service Providers' program management, internal controls strengths, and administrative capacity to deliver WAP services.

Field Monitoring

All Minnesota field inspections are conducted by a certified Quality Control Inspector who ensures compliance with the Standard Work Specifications.

As described in V.5.3 Final Inspection section, Minnesota operates under an Independent Quality Control Inspection model. Therefore, the technical monitoring team is responsible for monitoring no less than 5% of completed units weatherized with DOE funds.

PY25 Monitoring Visit Details and Tentative Schedule

A Risk Assessment is conducted prior to the start of the program year to help determine priority in monitoring and flag potential issues for further review. The Risk Assessment weighs issues like size of allocation, staff expertise and experience, and past monitoring results. For both field and administrative monitoring, additional visits are scheduled, as needed, to address specific Service Provider issues as they arise.

Administrative and Field Monitoring visits are usually scheduled from August through May to best fit the demands of the program year.

Administrative Monitoring

Each Service Provider receives a minimum of one administrative monitoring event annually. The components of Administrative Monitoring include:

1. Pre-monitoring Review

Administrative Monitoring Tool: Service Providers complete an Administrative Monitoring Tool prior to the monitoring. This Tool gives the monitor information about the approach used by the Provider (contractor vs crew, set price list vs. bidding, etc.) as well as other information on relevant compliance issues.

In addition, the monitor reviews household files, contractor/crew files, and various reports from the energy modeling software.

Household file reviews: Administrative monitors randomly sample files prior to visits to demonstrate compliance with DOE, Minnesota, and local Service Provider policies such as Client/Household eligibility, distribution of service, and adherence to procurement procedures.

Contractor/Crew file review: Administrative monitors randomly sample contractor files to ascertain adherence to contract requirements as outlined in the Minnesota Weatherization Assistance Program Policy Manual (and DOE guidelines).

2. Review

During the monitoring visit, Administrative Monitors review the pre-visit information with the Weatherization staff of each Service Provider as well as discuss production, spending, workflow, staffing, training and other relevant processes. These reviews include follow up on issues raised in desk monitoring and prior monitoring reports, as well as any other issues as needed, including but not limited to:

- Client/Household eligibility
- Distribution of services between renters and owners
- Geographic distribution within the Service Provider service territory
- Reporting compliance
- Internal controls related to financial management and operations

- Fiscal Audits
- Payroll/Personnel
- Vehicles and equipment
- Invoicing
- Staff qualifications and training
- Procurement procedures

Monitors conclude the visit with a brief exit interview intended to provide Service Provider staff with a high-level review of any issues found during the monitoring visit or review.

3. Monitoring Report

Monitors review all site documentation, discuss outstanding issues with the monitoring team, and generate a monitoring report. This report includes any findings, compliance issues, observations, or best practices. Workflow indicates that monitors will have those to the Service Provider within 30 days of the Site visit. The Service Provider is then asked to respond within an additional 30 days.

4. Issue Resolution

Once the Service Providers response is in, the Administrative Monitor creates a Responses and Outcomes document to analyze if the Service Provider resolved each pending issue from the report and document that resolution. When it is determined that the Service Provider has resolved all pending issues, the Response and Outcomes document is sent to them via email, concluding the administrative portion of the Service Provider's review.

Field Monitoring:

Each Service Provider receives at least one onsite field visit per year with at least 5% of all completed DOE Formula and DOE BIL units per Service Provider monitored. All Minnesota field inspections are conducted by certified Quality Control Inspectors.

1. Pre-visit Review

Field Monitors review household files for required data, forms, signatures, bids, invoices, and other documentation. Field Monitors also review audits for the households monitored including data inputs and audit library checks to determine if they are current.

2. Review

Field Monitors review the pre-visit information with Weatherization staff at each Service Provider. These reviews include follow up on issues raised in desk monitoring and prior monitoring reports, as well as any other issues as needed, including but not limited to:

- Administrative field work (Client file review, Work orders, Audit reporting)
- Energy audits, including inputs and outputs
- Fuel costs library accuracy
- Training & Technical Assistance activities and needs
- Weatherization of units
- Health and safety
- Final inspections and verification that all inspections are performed by a QCI
- How monitoring results are handled and required follow-up procedures
- Lead safe work practices Quality Assurance
- Compliance with Standard Work Specifications (SWS)

Inspections of dwellings: Inspections of completed dwellings are conducted to determine compliance with federal and state requirements, client satisfaction and work quality. Field Monitors also spot check ASHRAE measurements and calculations. Minnesota also may choose to visit "in progress" jobs. All household inspections are completed by a certified Quality Control Inspector.

At the conclusion of the visit, Service Providers are briefed on observations, compliances issues and findings in an exit interview. Health and Safety issues are noted at that time of the visit, particularly if they present an imminent danger to occupants.

3. Post Visit Report Field Monitoring Reports

A draft report is sent to the Service Provider within 30 days of the Service Provider visit and includes information on compliance issues as well as observations on best practices or client satisfaction with the option to review it with the administrative monitor before the final version is released. After this debrief meeting, final written reports are provided to Service Providers.

4. Issue Resolution

Once monitors send the final monitoring report, the Service Provider is asked to respond within 30 days. Responses may include correcting individual errors, describing new systems to avoid future errors, or return of funds for disallowed costs. All information about compliance issues and resolutions are tracked and documented including the date and number of all visits by the monitors, any findings, concerns, or other issues, and resolution.

In the interest of consistency and impartiality, all monitors bring their results of their monitoring visits before their peers for review. These discussions deepen the teams understanding of policies and how they are applied in real world settings while continually improving the quality of our monitoring visits.

Corrective Action/Removal

If a Service Provider remains out of compliance following monitoring or other interventions, Minnesota will follow the Corrective Action Process outlined in the Minnesota Weatherization Program Policy Manual Section 8.3 and as noted below.

Minnesota may impose additional requirements on a Service Provider in a written Corrective Action Plan. Corrective Action Plans may be issued in response to single issues of noncompliance or larger internal control, administrative or programmatic issues. Written Corrective Action Plans include:

- Nature of the requirements and why they are being imposed;
- Corrective actions that are needed; and
- Deadline(s) for meeting terms of the Corrective Action Plan.

With or without a Corrective Action Plan in place, Minnesota may take one or more of the following actions in response to noncompliant activity, as appropriate:

- Conduct additional monitoring visits;
- Impose additional training or technical assistance requirements on the Service Provider
- Require additional, more detailed financial reports;
- Make payments to the Service Provider on a reimbursement basis only;
- Withhold cash payments to the Service Provider, on a temporary basis, pending correction of deficiencies or until stated performance benchmarks are reached;
- Disallow costs for noncompliant activities and/or expenses;
- Suspend or terminate the current contract, either wholly or partially;
- Withhold further contracts with the Service Provider, or;
- Institute other actions as needed.

If a Corrective Action Plan is necessary, Minnesota will work with the Service Provider to resolve issues.

If noncompliance issues are still not resolved, Minnesota may terminate a Service Provider's WAP contract upon 30 days written notice. Minnesota may elect to immediately terminate the contract if it is found that the Service Provider has failed to comply with the contract, reasonable progress has not been made, or the purposes for which the funds were granted have not been or will not be fulfilled.

V.8.4 Training and Technical Assistance Approach and Activities

See Attachment

Percent of overall trainings

Comprehensive Trainings:	0
Specific Trainings:	0

Breakdown of T&TA training budget

Percent of budget allocated to Auditor/QCI trainings:	0
Percent of budget allocated to Crew/Installer trainings:	0
Percent of budget allocated to Management/Financial trainings:	0

V.9 Energy Crisis and Disaster Plan

The purpose of the Minnesota Disaster Plan is to allow the WAP program to respond quickly and effectively to disasters that affect the lives and dwellings of low-income households. This plan reflects the requirements of WPN 25-1 and will be implemented whenever and wherever there is a federal or state disaster designation. For weatherization purposes, a disaster is determined by a Presidential or Gubernatorial order declaring either a Federal or State Emergency.

Goal: In the event of a disaster, low-income households often incur the greatest hardship and have the least available resources to assist them in recovery. Minnesota's WAP goal is to assist eligible households, within the confines of WPN 25-1, in restoring their dwellings to the pre-disaster state.

Household Eligibility: Households in disaster areas must meet the same eligibility criteria as other WAP eligible households. WAP rules (10 CFR 440.16(b)) require that priority be given to identifying and providing weatherization assistance to elderly persons, persons with disabilities, families with children, high residential energy users and households with high energy burdens. It is permissible to consider households located in the disaster area as a priority as long as the households are eligible, meet one of the priorities established in regulation, and are free and clear of any insurance claim or other form of compensation resulting from damage incurred from the disaster.

Dwelling Eligibility: In order for a dwelling to be considered eligible for WAP assistance under this plan it:

- Must be occupied by an eligible household
- Must be in a federal or state designated disaster area, or is located in a county contiguous to the official disaster counties and sustained damage caused by the disaster
- Must be a habitable structure or will be once all work is complete

Either:

- Was an in progress WAP unit at the time of the disaster where already installed materials were damaged or destroyed by the disaster; or
- Was previously weatherized and materials installed with weatherization funds were damaged or destroyed by the disaster.

Priority of Service: Disaster-damaged dwellings will be a priority in designated disaster areas. Both in progress and previously weatherized dwellings are included. This priority designation will last for up to one year, depending upon the circumstances of the disaster, unless determined otherwise by Minnesota.

Eligible Activities: The use of USDOE WAP funds is limited to eligible weatherization activities and the purchase and delivery of weatherization materials. All dwellings must have a current energy audit in order to determine which of the following allowed activities are needed and feasible within the parameters of the WAP rules and guidance:

- Securing weatherization materials, tools, equipment, weatherization vehicles or protection of local agency weatherization files, records and the like during initial phase of disaster response
- The cost of incidental repairs to an eligible dwelling unit if such repairs are necessary to make the installation of weatherization materials effective
- The cost of eliminating health and safety hazards which is necessary before the installation of weatherization materials
- Removal of previously installed weatherization and/or health and safety materials that are damaged beyond repair and will be replaced as part of the current activity
- Installation of weatherization materials as described in the State Plan and the MN “Allowed Activities and Measure Type Chart”

Service Providers may use weatherization vehicles and/or equipment to help assist in disaster relief provided the WAP is reimbursed according to the OMB regulations, 2 CFR Part 200.

Work Quality/Inspection: All work must be completed according to the standards contained in the WAP Policy Manual, Standard Work Specifications, and field guides, as well as building, mechanical or other relevant codes. No unit will be counted as complete until all materials are installed in a quality manner and have passed a Quality Control Inspection by Service Provider staff.

Coordination with Other Funds: It is expected that WAP activities will be coordinated with other funded activities to the maximum extent practical. This will not only help make the most prudent and nonduplicative use of all funds but will also help to ensure that service to eligible households will be maximized. However, WAP funds will not be used to supplant other funds such as FEMA and insurance dollars, which must be applied first in renovating disaster damaged dwellings.

Deferral: Some dwellings may be found to be unsalvageable, uninhabitable, or beyond the scope of the WAP assistance because of a disaster. The Service Provider will carefully evaluate, document, and inform the client in writing of the reasons for the deferral determination.

Required Documentation: Files must contain sufficient documentation to establish the eligibility of the household and dwelling, as well as to justify the work performed, in accordance with Minnesota’s WAP State Plan and WAP Policy Manual. Such documentation includes but is not limited to:

- Household eligibility
- Certification of disaster status (ex: disaster declaration for the household’s county, FEMA letter or habitability document)
- Documentation that all other applicable funds have been used or have been denied prior to the use of WAP funds
- Existing conditions that will be remediated by WAP activities
- Amount of other funds being used in renovation of the dwelling
- Reasons for deferral, where appropriate
- Other, as specified by Minnesota

Costs/Averages: While exact costs for work in disaster-damaged dwellings are anticipated to run somewhat higher than the state average cost per unit,

U.S. Department of Energy

Weatherization Assistance Program (WAP)

STATE PLAN / MASTER FILE WORKSHEET

Grant Number: EE0009910, **State:** MN, **Program Year:** 2025

Recipient: STATE OF MINNESOTA

Minnesota will maintain its statewide average at the same level as it would be if there were no disaster completions.

Weatherization Grantee Health and Safety (H&S) Plan - *Optional Template*

State of Minnesota

1.0 – General Information

Additional information that does not fit neatly in one of the other sections of this document.

Minnesota's Weatherization Assistance Program

Acronyms/Definitions:
DOE – Department of Energy (aka USDOE)
WAP – Weatherization Assistance Program
MDH – Minnesota Department of Health
MN – Minnesota Department of Commerce Weatherization Assistance Program
MNWAP – Minnesota's Weatherization Assistance Program
LIHEAP – Low Income Home Energy Assistance Program
HH – Household
SP – Service Provider
H&S – Health and Safety
ECM – Energy Conservation Measure
IRM – Incidental Repair Measure
HSM – Health and Safety Measure
ACPU – Average Cost Per Unit
AMC – Allowable Measures Chart

Cost Justified – measure that achieves a savings-to-investment (SIR) ratio of 1.0 or greater when correctly modeled using the approved energy modeling tool.

Primary System (or system of units) – system that is most relied upon to provide heating/cooling through the season. Secondary system/unit – employed only in extreme weather and includes heating systems in adjacent spaces such as attached garages.

Minor Repair vs Major Repair – An individual measure repair that has a cost above the H&S budget limit is defined as a Major Repair. Any repair under the H&S budget limit is defined as minor.

Health & Safety Plan for Program Year 2025 (PY25)

Following DOE guidance, MNWAP) is tasked with improving the H&S of the clients we serve. The cost of eliminating H&S hazards, elimination of which is necessary before, or because of, installation of weatherization materials is allowable.

MN has followed the "House as a System" approach to weatherization since 1990. Both MN and SP staff understand that H&S concerns are important because, when addressed, the lives of low-income persons served by the program are improved, especially those that are particularly vulnerable such as the elderly, persons with disabilities, and children.

For items that require a case-by-case review (or where assistance with interpretation of policy or circumstances requires it), SP are required to submit questions to the shared Weatherization In-Box. Requests are reviewed by the Technical Proficiency team which first reviews the MNWAP Policy Manual, State Plan, Field Guide, and/or Allowable Measures Chart to see if the request is addressed or allowable. If needed, then the team reviews DOE WPNs, FAQs, and Memos to see if there is any additional guidance. Based on the review of both internal and external documents, the team evaluates the cost effectiveness and the impact to the household. Then the team evaluates available funding sources and, if needed, consults with partners or project officers for guidance and feedback. Based on the results of the review, the team makes a conclusion that is supported by its findings.

MN has developed policies that includes, at a minimum, the following documentation relating to H&S Plan implementation which require maintenance of signed copies in each client file. Each notification must include the occupant(s) (and property owner if applicable) name and address, be signed and dated by the occupant (and property owner if applicable) indicating that they understand and have been informed of their rights and options and signed by the Service Provider (SP) personnel collecting the information. Required topics are:

- Occupant Pre-existing or Potential Health Condition Screening
    - Provides documentation that allows occupant(s) to self-report known or suspected health concerns as part of initial application for weatherization, during the energy audit, or other part of the weatherization process as specified.
    - Must minimally contain the following: Any known risks associated with the measures and materials being installed
    - Subgrantee point of contact information for occupant(s)
    - Date of screening

SPs must defer a dwelling when the H&S problems are beyond the scope of weatherization activities. SPs evaluate each dwelling individually and make decisions accordingly. MN staff regularly assist SPs in problem-solving specific situations. All H&S problems and their resolutions are documented in individual household files.

Assessments of indoor air quality problems are conducted at the time of the energy audit. Because conditions in each dwelling vary greatly, potential remedies are developed on a case-by-case basis. Possibilities might include ventilation or allowable repairs within the scope of weatherization, client education, and/or referrals to other potential fund sources for work that is outside the scope of the WAP.

H&S issues are addressed at a number of levels throughout the MNWAP. The MNWAP Policy Manual is incorporated by reference into all grant contracts with SPs. The Policy Manual is updated regularly so it is compliant with current USDOE rules and guidance and the MN State Plan.

MN conducts a policy training each year to inform all SPs of policy changes for the upcoming program year. In addition, any regulatory/policy updates or new test standards are delivered to SPs via email.

MN allows SPs to budget H&S costs outside the overall per unit average and monitors statewide averages regularly. MN strives to keep H&S costs reasonable, recognizing weatherization's primary goal of energy conservation.

Rationale: The rationale for performing each HSM in an individual home and its relationship to the ECM that necessitated it (if applicable) must be noted in the audit. Some HSM (for example, carbon monoxide/fire alarms) will not be associated with a specific ECM.

Pollution Occurrence Insurance: MN strongly recommends SPs carry appropriate Pollution Occurrence Insurance to protect against claims from a property owner, tenant, or neighbor who becomes sick because they were exposed to a pollutant such as lead, asbestos, radon, or mold, or other pollutants as a result of the weatherization activities.

Client/building owner notification: MN requires that clients and rental property owners be notified in writing in all instances where a H&S issue is found. This includes but is not limited to the issues listed in the remainder of this Plan. MN developed a standard Safety Assessment form that must be signed by the SP, the client and/or property owner and must be included in the client file. Documentation given to the client and/or property owner must include client name and address, dates of the audit/assessment and when the client was informed of a potential H&S issue, a clear description of the problem, a statement indicating if or when and under what conditions weatherization could continue, the responsibility of all parties involved, and the client(s) signature(s) indicating that they understand and have been informed of their rights and options.

Referrals: In cases where the scope or cost of needed repairs is beyond the range of the weatherization program, SPs refer clients to housing rehabilitation programs and other funding sources wherever possible.

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

Pursuant to 10 CFR 440.16(h), Grantees must establish H&S expenditure limits for their Program and provide justification for those limits by explaining the basis and related historical H&S expenditures. DOE acknowledges that it may be necessary for Grantees to deviate from historical expenditures when certain circumstances arise (e.g., funding source changes).

10 CFR 440.16(h)(2) dictates that these limits must be expressed as a percentage of the ACPU. To calculate this percentage, use the following formula:

$$Total\ Average\ H\&S\ Cost\ per\ Unit = \frac{H\&S\ budget\ amount}{Program\ Operations\ budget\ amount}$$

For example, if the ACPU is $5,000 and a Grantee's Program expends an average of $750 per dwelling on energy-related H&S measures, the Total Average H&S Cost per Unit would equal 15 percent. DOE acknowledges that this percentage may vary significantly between Grantees due to different geographical areas and depending upon the availability of other funding sources, resource availability, etc. Low percentages should include a statement of what other funding supports H&S costs, while larger percentages will require greater justification and relevant historical support.

15 percent is not a maximum limit on H&S expenditures. DOE will conduct a secondary level of review on H&S Plans with a Grantee request of more than 15 percent of Program Operations used for H&S purposes. ***DOE strongly encourages using the table below in developing justification for the requested H&S budget amount.*** *In accordance with 10 CFR 440.18(d)(15), these funds are to be expended by the Program in direct weatherization activities, "of which is necessary before, or because of, installation of weatherization materials." This same section of the regulation excludes the H&S costs from the ACPU limitation if H&S costs are budgeted separately.*

DOE recommends reviewing recent budget requests and compare those to actual H&S expenditures to see if previous budget estimates have been accurate. The resulting Total Average H&S Cost per Unit multiplied by the Grantee's production estimate in the Annual File should correlate to the H&S budget amount listed in the Grantee's annual plan.

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

MN is requesting to continue to have a H&S average of $2,000 or 23.4% of ACPU. MN historically has utilized LIHEAP and Utility funding to pay for H&S measures, which has lowered DOE Health and Safety costs, however these funds may not always be available, are becoming more limited, and SPs do not have equal access to these funds. Additionally, costs continue to rise for material and labor to support this ask (see attached spreadsheet from previous PY). SPs are instructed to manage H&S costs between DOE funds and LIHEAP and Utility funding to maintain an appropriate H&S average.

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. Alternatively, the measure matrix is also available as a standalone spreadsheet located at the following link: Weatherization Program Notice 22-7: Weatherization Health and Safety | Department of Energy

Measure Matrix
Final.xlsx

4.0 – Incidental Repair Measures

Any measures that could potentially be identified as H&S, but the Grantee chooses to instead identify and treat those measures as incidental repair measures (IRMs), must be implemented consistently throughout the Grantee's weatherization program. The measure must fit the regulatory definition of an IRM and be cost justified along with the associated energy conservation measure and/or package of measures. 10 CFR 440.3 defines Incidental Repairs as, "those repairs necessary for the effective performance or preservation of weatherization materials."

H&S measures identified and treated as IRMs within your Program.

Allowable measures are detailed in the Allowable Measures Chart found in Appendix B of the MNWAP Policy Manual. This document provides guidance regarding categorizing measures and indicates when designation as an Incidental Repair Measure is appropriate.

5.0 – Occupant Pre-Existing or Potential Health Conditions and Hazard Identification and Notification Form(s)

Grantees must develop a written policy that includes, at a minimum, the following documentation relating to H&S Plan implementation and maintain signed copies in each client file. Each notification must include the occupant(s) (and landlord if applicable) name and address, be signed and dated by the occupant (and landlord if applicable) indicating that they understand and have been informed of their rights and options and signed by the Subgrantee personnel collecting the information.

Required topics are:

- ***Occupant Pre-existing or Potential Health Condition Screening***
  - *Provides documentation that allows occupant(s) to self-report known or suspected health concerns as part of initial application for weatherization, during the energy audit, or other part of the weatherization process as specified. Must minimally contain the following:*
    - *Any known risks associated with the measures and materials being installed*
    - *Subgrantee point of contact information for occupant(s)*
    - *Date of screening*
- ***Hazard Identification Notification***
  - *Provides documentation that the occupant and landlord (if applicable), have been informed of any potential hazards identified during the energy audit or intake process. Must minimally contain the following:*
    - *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, including any testing results*
    - *A statement indicating if, or when weatherization could continue*

Radon Informed Consent Form

- *Provides documentation that the occupant(s) (and landlord if applicable) have been informed of any potential hazards associated with radon in weatherized dwellings. The form must minimally contain the following:*
  - *An explanation on the potential small risk of increasing radon levels when building tightness is improved. This is based on the results of the* Buildings Assessment of Radon Reduction Interventions with Energy retrofits Expansion Study (The BEX Study)
  - *A list of precautionary measures WAP will install based on* EPA Healthy Indoor Environment Protocols.
  - *Some of the benefits of Weatherization including energy savings, energy cost savings, improved home comfort, and increased safety.*

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

Weatherization staff use the Client Participation form to prepare clients for Weatherization Services. Staff also use the Safety Assessment and Safety Assessment – Mold and Moisture Form to inform occupants of H&S concerns and how weatherization activities may affect their home and health.
Procedure for determining whether occupants suffer from health conditions which may be negatively impacted by the act of weatherizing their dwelling
In PY25, MN will continue to screen occupants self-reported known or suspected health concerns as part of the weatherization process, including informing clients in writing of any known risks and providing clients with the subgrantee point of contact regarding potential health concerns related to weatherization work.
Procedure for addressing potential health concerns including pre-existing health conditions when they are identified
Weatherization staff will be trained in remediation strategies including options for avoiding blowing insulation in the home or departure of the client from the home. On a case-by-case basis, MN allows temporary relocation for client household members for whom being at home during weatherization work would present a health risk or aggravate a preexisting health concern. Allowable costs include lodging only. Weatherization work is coordinated to minimize the length of relocation. Accommodations provided reasonably reflect the prices and availability of the client household's community. Lodging receipts and the related health concern noted in the Safety Assessment Form are maintained in the HH file.
Location where forms have been uploaded/submitted

Separate attachment to SF424 ☐	Separate attachment to H&S Plan ☐

6.0 – HEALTH AND SAFETY CATEGORIES

For each of the following H&S categories identified by DOE in the following tables, follow the directions below.

- Any section that is "Required" below must be explicitly detailed in the H&S Plan regardless of funding source used. If the Grantee checks the box for "Concurrence with DOE Guidance" the contents of the box may be left as it exists or reference the section/location within Grantee Policy and Procedure manual that contains language or insert Grantee specific language. If the "Alternative Guidance" box is checked, the Grantee must provide that alternative guidance in the box.
    - If a Grantee is proposing an alternative action/allowability for a "Required" item, the alternative requires comprehensive explanation of how it meets the intent of the DOE program notice.
    - If a "Required" item/category will not be addressed with any funding source and will always result in deferral, the H&S Plan must state that.
- Any section that is "Allowable" below must be detailed only if DOE WAP funds are used to implement the measures. If the Grantee uses DOE funds for any "Allowable" activities from the Table of Issues then they must be described here in detail, including defining "minor", "major", "limited", "case-by-case", and "at-risk" if the term is applied. If you only check the box "Allowed with Alternative Funds" then no additional information is required.
- Any section that is "Prohibited" below may not be addressed with DOE WAP H&S funds and does not need to be specifically addressed in the H&S Plan. The Grantee simply needs to check the "Concur with DOE guidance" box and indicate if the condition will result in deferral/referral.
- The Grantee H&S Plan may address additional H&S hazards specific to their program that are not included in the Table of Issues. If a Grantee chooses to include additional measures as DOE WAP funded H&S costs, the H&S Plan must include details pertaining to the measures allowed, testing required, and client education for these specific hazards.
- All required "Testing/Inspection" related items must be documented in the client file to verify completion and results.

6.1 – Air-Conditioning, Heating Systems, and Combustion Appliances

Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

MN requires that combustion safety testing of all combustion appliances at the home regardless of location within the home. This means that even when located in adjacent unconditioned spaces such as garages, attics, crawlspaces, etc. they must be tested and inspected for safety (spillage, Carbon Monoxide (CO), Steady State Efficiency (SSE), venting, etc.).

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

Federal regulation and local codes require permanently installed heating systems in all jurisdictions. After weatherization, all homes must have a permanently installed primary heat source that provides heat for the entirety of the conditioned dwelling space. If there is not a central system previously installed in the home, then the home should have a new system installed using either WAP funds or an alternative source (e.g., Low Income Home Energy Assistance Program, Utility). This new system may be installed as a H&S item, or as an ECM if the energy audit supports its.

Heating Systems: Primary heating systems (space and water heating plants) are evaluated at the energy audit following current testing protocols, and results are recorded in the client file. Any unsafe or non-functional system is corrected (repaired, replaced, or rendered inoperable) before calling for additional work. If an unsafe primary system cannot be corrected, the dwelling must be deferred. All other heating system work must be completed prior to or in conjunction with building shell work following all testing protocols.

All primary heating systems are first modeled in WAPLink for replacement as an ECM. If the replacement measure is not cost justified, a clean & tune measure is evaluated. In the case where the replacement/clean & tune measure is either not cost justified or does not correct the unsafe condition, H&S funds are used to correct the unsafe situation. Heating plant replacements require a Manual J calculation based on estimated post weatherization housing characteristics.

In cases where unsafe conditions such as back drafting or high in-flue or ambient carbon monoxide levels are identified by a crew or contractor during the course of weatherization, work that will contribute to the unsafe condition will stop immediately and the WAP SP that issued the work will be contacted and informed of the situation. Together the SP and crew/contractor will take actions to ensure that the dwelling is left in a safe condition.

Air Conditioning: MN includes Air Conditioning systems (central, window or wall, and heat pumps) in its energy modeling. MN will repair or replace air conditioners as an ECM. MN allows repair or replacement of air conditioners as a HSM in any of the following situations:

- medical necessity
- leaking component causes a mold hazard
- leaking component could drip onto a heat exchanger of a heating plant

MN does allow repairs or replacements to air conditioning components as an IRM when needed to protect heating plant components from water damage or to ensure proper effectiveness of appliance.

Procedure for unsafe or non-functioning secondary heating systems, including unvented secondary space heaters, and heating systems in attached garages

Heating Systems: Secondary heating systems (space and water heating plants) are evaluated at the energy audit following current testing protocols and results are recorded in the client file. Any unsafe system is corrected (repaired, removed, or rendered inoperable) before additional work is called for. If an unsafe secondary system cannot be corrected the dwelling must be deferred. Replacement of secondary heating systems is not allowed. Garage heaters are not evaluated as part of the energy model.

Definition of and documentation required for "at-risk" occupants

The client must provide a signed letter from a medical doctor, or other medical professional defined by MN Stat 216B.098,subd 5, that justifies the medical need for air conditioning. Medical conditions requiring air conditioning could include but are not limited to asthma, emphysema, or heart disease.

Allowable Actions	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Prohibited Actions
Concur with DOE Guidance ☐

Required Testing/Inspection	
Concur with DOE Guidance ☑	Alternative Guidance ☐

Required tests are listed in MNWAP Policy Manual Section 4.5.3 and Appendix D. For combustion equipment, a visual inspection of the chimney and flue is conducted. For solid fuel appliances, a visual inspection for soot on building assemblies near the unit or flue is conducted.

Grantee Combustion Testing Action Levels

Testing of combustion appliances, including heating plants, water heaters, ovens (excluding burners, visual inspection only), and space heaters, is required during the energy audit. Acceptable test procedures are included in the current MN Field Guide, the MNWAP Policy Manual, and supplemental documents that can be found on the MNWAP website. The Policy Manual, Field Guide, and supplements provide standards that must be met before weatherization can proceed.

The MNWAP Policy Manual requires that naturally drafting appliances are tested for spillage under Greatest Depressurization Achievable (GDA) in the Combustion Appliance Zone (CAZ) and are verified to be operating safely before and after any weatherization activities that change the pressure balance in the dwelling, such as: air sealing, increasing exhaust ventilation, duct sealing, insulating, etc. At times, mechanical work must be completed before or in conjunction with air sealing/insulation work. In extreme cases, a family may be asked to leave the dwelling until a problem is remedied. USDOE funds cannot cover costs for temporary relocation in these instances.

MN also requires the measurement and recording of the pressure in the CAZ under worst-case conditions. This information is collected as part of the worst-case CAZ spillage test. The worst-case CAZ pressure is compared to the CAZ limit defined in the SWS for each appliance. Measured CAZ pressures that exceed the CAZ limit may, depending on the situation, require action to correct. MN has developed a detailed procedural document with the help of local building science experts to help guide field staff through the decision-making process around H&S remediation of CAZ and spillage issues.

As part of the worst-case CAZ test the effect of unsealed return ducts is measured. In cases where return ducts inside the thermal boundary on single-family homes cause negative pressure, action will be taken to reduce the negative pressure. This is typically done through duct sealing or relief venting between the CAZ and the rest of the house. Duct sealing within the thermal boundary will be to remediate depressurization concerns.

In addition, an inspection of the venting for all combustion appliances is conducted. All combustion appliances designed to be vented must be properly vented to the outside. When testing indicates an issue with the venting, it will be corrected in accordance with the SWS. If unsafe conditions, whose remediation is necessary to perform weatherization, cannot be remedied by repair or tuning, replacement is an allowable H&S measure. In cases where both repair and replacement are an option, a cost comparison of the options will be included in the client file.

When all weatherization activities are completed, testing is repeated at final inspection. Tests performed at the audit and the final inspection include carbon monoxide in the flue, worst case CAZ spillage, CAZ pressure, and fuel leaks. Every dwelling must pass a worst-case CAZ spillage test during the energy audit, before the installers begin work, daily while completing work, once installers complete work, and again at final inspection.

Grantee Woodstove & Fireplace inspection/testing policy including actions/limits	
Concur with DOE Guidance ☑	Alternative Guidance ☐
Fireplace or woodstove venting that is left operational after weatherization must meet current local or national standards or the home must be deferred.	
Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐

1. Appropriate use and maintenance of units.
2. Provide all paperwork and manuals for any equipment installed by weatherization.
3. Discuss and provide information on proper disposal of bulk fuel tanks when not removed as part of the weatherization work.
4. Where combustion equipment is present, provide combustion safety and hazards information including how to recognize depressurization, dangers of CO poisoning, and fire risks associated with combustion appliance use.

6.2 – Asbestos (Confirmed and/or Presumed Asbestos Containing Material)		
Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

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:

Space heating systems in single or multifamily dwellings may have components that contain asbestos such as duct and boiler pipe wrap or parts of the heating plant itself. Testing to determine if a material is an ACM is an allowable H&S expense as is the encapsulation or removal of an ACM under the following conditions:

- At any point during the WAP process, if the ACM is friable, it must be encapsulated or removed prior to the resumption of work or blower door testing by a Minnesota Department of Health (MDH) certified professional, in accordance with the Asbestos Hazard Emergency Response Act (AHERA).
- If the ACM is intact (not friable) but will be disturbed as part of the WAP work (i.e. duct sealing or heating plant replacement) it must be encapsulated or removed by a MDH certified professional in accordance with the Asbestos Hazard Emergency Response Act (AHERA).

Any additional asbestos removal may not proceed without MN approval.

In the cases above, the clients are provided with asbestos safety information and are instructed not to disturb the suspected asbestos containing material.

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

SPs and contractors will take reasonable and necessary precautions to prevent asbestos contamination in the home. The general abatement of asbestos siding or replacement with new siding is not an allowable HSM. All WAP workers that are removing, or reinstalling asbestos siding will follow all working safety protocols as detailed in the SWS.

1-4 Unit dwelling: Asbestos siding, commonly called slate or Transite siding, is assumed to be an ACM. The presence of slate siding that is in good condition does not prevent the installation of dense packed insulation. To insulate walls in dwellings where asbestos-containing siding is present, the siding must be removed in a manner that allows the siding to remain as intact as possible. Drilling asbestos-containing siding is not allowed. WAP installers are allowed to remove asbestos-containing siding as long as asbestos-safe work practices are performed when doing so. The cost of removal and reinstallation of slate siding can be included in the associate ECM.

After the walls have been insulated, the siding must be reinstalled in a manner that allows the siding to remain as intact as possible. Keeping asbestos-containing siding intact greatly reduces a health risk to workers or clients. Chipped, cracked or brittle asbestos-containing siding may require that walls be insulated from the interior of the dwelling.

5+ Unit dwelling: Dwellings with five or more units fall under EPA asbestos regulations, which have more stringent requirements governing removal. EPA asbestos regulations apply to structures or dwellings used for, or once used for, commercial purposes. Removal of siding from these structures may be allowed once the applicable standards are determined and applied. If removal of asbestos-containing siding is not necessary, other weatherization measures may be applied to these structures.

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

Vermiculite insulation in attics is assumed to be contaminated with asbestos fibers. The Asbestos Containing Material (ACM) test that is utilized for contiguous materials such as heating chamber liners and pipe wrap is not designed to work with a material that is contaminated by friable asbestos, as is the case with vermiculite. Therefore, MN does not allow SPs to test vermiculite.

When vermiculite is present within a home, SPs may choose from the following courses of actions:

- Defer the home.
- Utilize non-DOE funds as available to hire a contractor certified by the MDH to remove the vermiculite from the home. The contractor must obtain a permit from MDH and all work done in accordance with MDH asbestos removal protocols. As the MDH only regulates asbestos removal that has tested positive according to the ACM test mentioned above, MN requires that all abatement of vermiculite being conducted with non-DOE funds be done so, assuming the vermiculite is positive for asbestos according to the ACM test.

Additional notes on vermiculite:

- The cost for removal of vermiculite insulation is not allowed using DOE funds.
- When deferral is necessary due to the presence of vermiculite, and the homeowner has the vermiculite removed, the homeowner must provide documentation that a MDH certified professional performed the remediation before weatherization work continues.
- All WAP workers operating in areas with vermiculite will follow all safety protocols as detailed in the SWS. The cost of removal is not allowed using DOE funds.
- Once asbestos is properly removed, a previously deferred home can be weatherized.

Grantee ACM policy

Grantee Blower Door Testing Policy When Suspected ACM Exists

Positive pressure blower door testing can be used when vermiculite insulation is present. When a material within the pressure boundary of the dwelling (other than vermiculite) is suspected of being an ACM and is friable, blower door testing is not allowed until the friable material is either confirmed to be a non-ACM or it has been encapsulated or removed in accordance with all applicable rules. After removal, negative blower testing can be completed.

Allowable Actions

Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Prohibited Actions

Concur with DOE Guidance ☐

Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

1. Visually inspect all surfaces (i.e., walls, floors, ceilings, roofs) for suspected ACM prior to drilling or cutting.
2. Assume asbestos is present in suspect materials unless testing reveals otherwise.

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☑

A visual inspection of exterior wall surface and subsurface, floors, walls, and ceiling for suspected ACM is conducted during the energy audit and again prior to drilling or cutting.

In dwellings, which contain vermiculite insulation, all vermiculite insulation is assumed to contain asbestos. Weatherization of a dwelling containing vermiculite may only proceed if an MDH certified contractor removes the vermiculite and the work is done assuming the material is an Asbestos Containing Material.

Required Occupant Education

Concur with DOE Guidance ☑	Alternative Guidance ☐

Formally notify the occupant, and landlord if applicable, in writing:

- of suspected ACMs that are present and what precautions will be taken to ensure the occupants' and workers' safety during weatherization.
- of results if testing was performed.
- not to disturb suspected ACM.
- When deferral is necessary due to asbestos, occupant, or landlord if applicable, must provide documentation that a certified professional performed the remediation before work continues.

6.3 – Biologicals and Unsanitary Conditions

Required Actions

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑		Alternative Funds ☑

SPs are continually alert to potential and actual problems with biological contaminants such as mold, moisture, and rotting wood. Each energy audit contains a sensory assessment of these issues with photos and other documentation such as moisture meter readings, as needed. Auditors and inspectors are trained to identify mold and moisture problems. The presence of large amounts of mold or mildew are grounds for deferral. SPs are encouraged to contact MN in situations where mold is present in more than isolated areas or where a moisture source is not apparent. Work may proceed in cases where there is a small amount of mold or mildew where the source can be determined and, in the judgement of the SP staff, can be addressed through a combination of controlling the moisture source and the addition of ventilation (ASHRAE 62.2-2016). Testing for mold, mildew or other biological contaminants or the cleaning of mold are not allowed USDOE expenses. Instructions on general cleaning of small amounts of mold can be provided to the homeowner.

Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowed as an HSM or IRM within MN prescribed requirements noted on the most current version of the AMC and cost averages or limits. Remediation of odors, viruses or bacteria problems is beyond the scope of weatherization and is not allowed. If a known agent in a dwelling may create a serious risk to occupants or weatherization workers, then deferral may be necessary. Limited cleaning of the workspace to protect the H&S of workers and occupants is allowed.

In addition, weatherization installers and contractors are also alert to the possibility that biological contaminant issues, not evident at the time of the energy audit, could arise in the course of installing weatherization materials. If post-audit problems are discovered, crews and contractors are required to notify SP staff to determine if weatherization work can continue.

Basements and crawlspaces can be a source of potential biological contaminants. Auditors are trained to identify and evaluate how best to address each situation and determine allowable measures to address situations or recommend deferral for cases outside the scope of the program.

- Crawlspaces that are physically connected to a building but not within the pressure boundary as determined by pressure diagnostics are not part of the house as a system. Examples include:
  - Foundation under a small entryway
  - Cantilevered floor with vented soffit (site built or mobile home).
- Accessible basements and crawlspaces within the pressure boundary shall have all exposed soil and sump systems covered in accordance with the SWS. The home will have ventilation installed to meet the ASHRAE 62.2 standard. Auditors will evaluate any grading or drainage issues that may cause bulk moisture to enter the home and call for mitigation within allowed measures and cost limits on the allowable measures chart.

Allowed Actions	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐
Required Testing/Inspection	
Concur with DOE Guidance ☑	Alternative Guidance ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑
Sensory inspection as part of the energy audit, moisture meter testing as needed.	
Prohibited Testing/Inspection	
Concur with DOE Guidance ☐	
Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
Inform occupant in writing of observed biological and unsanitary conditions.	

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

Allowable Actions	
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑

Structural issues in dwellings policy

As part of the energy audit, a visual assessment of any roofing and/or structural problems along with photos and other documentation is needed. Repairs are allowed in order to protect the safety of clients and installers both during and after the weatherization process. Repairs must be an allowable IRM as defined by WPN 19-5 and be within the cost limitations as defined by the current DOE State Plan as noted below. Dwellings in need of rehabilitation beyond the scope and cost limits of weatherization are referred to other programs and funding sources including the active Enhancement and Innovation Grant supported WIRE Access project. Weatherization activities are either deferred until rehabilitation activities are complete or, in some instances, are completed simultaneously with rehabilitation activities.

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

Repairs are beyond the scope of weatherization if they involve:

- More than 160 square feet of missing drywall.
- Roofing or structural repairs that exceed $2,000 in material and labor to correct.

If priority lists are used and these repairs are designated as IRMs, at what point is a site-specific electronic energy audit required?

Projects will not exceed $500 in IRM for site-built and manufactured homes. Projects will not exceed 10% of the total ECM package in Low-Rise Multifamily. If costs exceed those thresholds, the Optional Regional Weatherization Priority List is not allowed.

Prohibited Actions
Concur with DOE Guidance ☐
Define “major” repairs

Major repair is a measure that has a cost over the H&S budget limit.

Required Testing/Inspection		
Concur with DOE Guidance ☐	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
Visual inspection of building structure and roofing for damages that compromise building durability and to verify that portions of the home where weatherization will occur are safe for entry and performance of assessments, work, and inspections.		

Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Prohibited Testing/Inspection
Concur with DOE Guidance ☐

Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
Notify occupant in writing of structurally compromised areas.	

6.5 – Code Compliance

Allowable Actions	
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑
All weatherization work in MN is required to be completed to the standard contained in the applicable code. This applies in places where codes are actively enforced and as a work standard where code enforcement is lacking. SP staff and contractors are expected to be aware of H&S issues associated with building codes. Correction of pre-existing code compliance issues is not an allowable expense other than where weatherization measures are being conducted. In these situations, the specific code triggering the work must be documented in the client file. State codes must be followed when installing WAP measures.	

Prohibited Actions
Concur with DOE Guidance ☐
•

Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
Visual inspection.		

Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
Inform occupant in writing of observed code compliance issues when it results in a deferral.	

6.6 – Electrical

Required Actions

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

Electrical – Other Than Knob and Tube: Weatherization audits in MN assess and document electrical hazards, especially as they pertain to weatherization activities. Both the MNWAP Policy Manual and the Field Guide contain information on how to identify and address electrical issues. Wires are inspected to ensure that they are not bare or frayed. Service boxes are inspected to ensure that they have secure covers.

Correcting general electrical wiring problems is generally not an allowable weatherization measure. However, instances where electrical issues are directly related to the weatherization process, H&S funds may be used for repairs. If it is determined that a hazardous situation exists, the problem is corrected before weatherization work commences. If a hazardous situation is discovered during weatherization work, all work must cease until the hazardous situation is corrected. If repairs are beyond the scope of the weatherization program to address, SPs refer clients to rehabilitation programs and other fund sources (including the active Enhancement and Innovation Grant-funded WIRE Access project) where possible. A licensed electrical contractor must perform any electrical work needed to correct a problem.

Electrical – Knob and Tube: MN uses H&S dollars to address knob and tube wiring when it has a direct impact on weatherization activities. Any insulation activities completed where knob and tube wiring is present must conform to applicable codes. Knob and tube wiring repair/replacement in attics and walls is completed before insulation activities begin. In consultation with the MN Board of Electricity, the following protocol has been developed:

- SPs must verify if the knob and tube system is in service before proceeding with any additional measures.
- SPs must inspect the wiring that will be covered to determine the type(s) of wiring present, the circuit protection, wiring condition, and to identify any other hazards.
- SPs must obtain permission from the homeowner or authorized agent to install proper over-current protection. If permission is not given, insulation cannot be installed.
- Install insulation only as follows:
    - After the knob and tube wiring has been replaced. Commerce may allow on a case-by-case basis, to remove existing insulation to properly access wiring and perform work.
    - Document whether sidewall cavities are insulated. Sidewalls containing live knob and tube wiring are not allowed to be insulated.
- When knob and tube wiring is replaced, it must be done in accordance with all state building codes and statutes.

The presence of knob and tube wiring may dictate that some insulation activities may not be completed. Clients receive education on the dangers and implications of knob and tube wiring in their homes. If knob and tube repairs or replacements are beyond the scope of the weatherization program to address, SPs refer clients to rehabilitation programs and other funding sources as feasible (including the active Enhancement and Innovation Grant-funded WIRE Access project) .

Define and quantify minor electrical issues. At what point are these considered beyond the scope of weatherization? SPs may make minor repairs to correct hazardous situations for items up to $2,000 in labor and materials for non-knob and tube electrical work without MN approval. In cases where the non-knob and tube electrical hazard is greater than $2,000, MN approval is required. MN will consider these situations on a case-by-case basis. Factors considered are total cost, total energy savings of the WAP activities, location of the hazard, status of WAP activities, etc.

Knob and tube replacement in areas where insulation is being installed is allowable. The cost is first considered an IRM when the replacement protects an installed ECM or ensures the effectiveness of an installed ECM. Replacement is considered an HSM measure only if no funds are available for an IRM, and it directly poses a H&S risk to the workers or occupants.

Allowable Actions	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Prohibited Actions
Concur with DOE Guidance ☐
Define "major" repairs
Major repair is a measure that has a cost over the H&S budget limit.
Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑		Alternative Funds ☑

1. Visual inspection for presence and condition of knob-and-tube wiring.
2. Evaluate knob-and-tube wiring for safety prior to work.
3. Check for alterations that may create an electrical hazard.

Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐
Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐

1. Provide occupant with written documentation of any electrical hazards identified that will not be addressed by weatherization.
2. Provide information to occupant on over-current protection, overloading circuits, and basic electrical safety/risks if conditions warrant.

6.7 – Fuel Leaks

Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑		Alternative Funds ☑

Fuel leak testing is a required part of all energy audits and QCI inspections. When a minor gas leak is found on the utility side of service, the utility must be contacted before work may proceed. Fuel leaks that are the responsibility of the client (vs. the utility) must be repaired by the SP before additional weatherization measures are installed.

Fuel leak repairs that are accessible are an allowable expense.

Allowable Actions	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐
Prohibited Actions	
Concur with DOE Guidance ☐	
•	
Required Testing/Inspection	

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑		Alternative Funds ☑

MN follows the combustion gas detection protocols from BPI 1200.

Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Prohibited Testing/Inspection
Concur with DOE Guidance ☐
Required Occupant Education

Concur with DOE Guidance ☑	Alternative Guidance ☐
Inform occupants in writing of fuel leak testing results, including specific location if fuel leaks are detected.	

6.8 – Gas Ovens/Stovetops/Ranges

Allowable Actions

Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑
Ovens are tested at the audit in accordance with the current BPI standards and include a combustion test of the oven, a visual inspection of the burners, and gas leak detection where gas lines are accessible. Service or repair is allowable when CO limits are exceeded as detailed in the MN Field Guide. Testing of stovetop burners is not required. Replacement of stoves is not an allowable DOE expense.	

Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

1. Test gas ovens for CO.
2. Grantee H&S plan defines action levels and resulting actions.
3. Visually inspect cooking burners and ovens for operability and flame quality.

Define action levels for oven CO testing and resulting actions

See Appendix D. of the MNWAP Policy Manual (which references the MN Field Guide and the BPI 1200 Standard)

Allowable Testing/Inspection

Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Required Occupant Education

Concur with DOE Guidance ☑	Alternative Guidance ☐
Inform occupants of the importance of using exhaust ventilation when cooking and the importance of keeping burners and broilers clean to limit the production of CO.	

6.9 – Hazardous Materials

Required Actions

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

Hazardous materials disposal policy (existing material/appliance and hazardous material)
When hazardous materials (refrigerant, mercury thermostats, lead paint dust/chips, etc.) are generated in the course of weatherization work, proper disposal is required, and removal/disposal costs must be included.

Refer to lead and asbestos sections for more information on those topics.

Limited removal of hazardous materials for the protection of workers is required. Limited removal of hazardous materials for the protection of occupants is allowed.

Refrigerant Issues: Refrigerator replacements may be completed using USDOE funds. The cost of disposal of the appliance (including refrigerant) may be included in the replacement measure providing it does not drop the measure SIR below one. If the replacement measure SIR drops below one, the cost of reclaiming the refrigerant may be covered as a H&S cost. Refrigeration appliances that are replaced must be disposed of according to the environmental standards in the Clean Air Act (1990), Section 608, as amended by the Final Rule, 40 CFR 82, May 14, 1993. The party recovering the refrigerant must possess an EPA- approved Section 608 Type II license or an approved universal certification. Clients should be cautioned not to disturb refrigerant.

Define "limited" removal of pollutants		
Allowable Actions		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
Prohibited Actions		
Concur with DOE Guidance ☐		
Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
Sensory inspection.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
Prohibited Testing/Inspection		
Concur with DOE Guidance ☐		
Required Occupant Education		
Concur with DOE Guidance ☑	Alternative Guidance ☐	

1. Inform occupant in writing of hazards associated with hazardous waste materials being generated/handled in the home.
2. Inform occupant in writing of observed hazardous condition and associated risks.
3. Provide occupant written materials on safety issues and proper disposal of household pollutants.

6.10 - Injury Prevention of Occupants

Allowable Actions	
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑

Injury prevention measure(s) policy
SP staff is instructed to be alert to any possible client health issues relevant to a broad range of potential weatherization activities. Energy auditors are the primary staff responsible for identifying such issues, either as a part of the actual energy audit or through required interviews with household members. Because these issues may also arise when they are in the dwelling, installers are also trained to identify H&S issues. Once an issue is identified, SP staff works with the client to address the hazard either directly through the allowable weatherization activities, referrals, or deferral of work. All issues and efforts to resolve them must be documented in the household file and must include a client signature.

In some instances, uncorrected hazards could result in injury to weatherization workers or preclude the completion of weatherization measures. In these instances, SPs are allowed to make repairs with IRM dollars to enable weatherization activities to be completed, provided they are within the Allowable Measures Chart and within required cost limits. Photos and other documentation of the hazard are required.

Crew/Contractor H&S: The MN Field Guide is incorporated by reference into all SP weatherization contracts with MN. The field guide is SWS-aligned and describes SP responsibilities for staff and contractors. The Field Guide address common worker safety issues including vehicle safety, falls, back injuries (proper lifting procedures), exposure to hazardous materials, electrical hazards, repetitive stress injuries, and the use of personal protective gear.

The Field Guide language requires that local SPs and their installers comply with OSHA rules pertaining to worker safety. SPs are also required to provide annual training for their crews, auditors, and contractors in all worker and weatherization-related health/safety topics that may include OSHA 10, HAZCOM, and Confined Spaces training, so that they understand and meet the rules and regulations of the USDOE WAP. Or they may alternatively send them to state-based training to meet this requirement.

Define and quantify minor or allowable injury prevention measures. At what point are these considered beyond the scope of weatherization?
Allowable measures are detailed in the Allowable Measure Chart in appendix C of the MN Policy Manual. Minor is defined as work up to $2,000 in labor and materials.

Prohibited Actions
Concur with DOE Guidance ☐
Define "major" repairs
Major repair is a measure that has a cost over the H&S budget limit.
Required Testing/Inspection

Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
Visually inspect for dangers that would prevent weatherization.		

Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐
Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
If identified hazardous conditions will not be corrected during weatherization, inform occupant in writing of observed hazards and associated risks utilizing the Safety Assessment and Mold and Moisture forms to meet the Hazard Identification Notification Form requirement per WPN 22-7.	

6.11 – Lead-Based Surface Coverings (Paint, Varnishes, Roofing, etc.)		
Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

Lead safe work protocols

Unless approved testing confirms the work area to be lead free, appropriate containment and clean up procedures must be used to protect occupants from lead-based surface covering hazards while weatherization work is in progress. Proper notification of the existence of these hazards must be provided to the occupants. MN will verify lead safe containment through photos or on-site monitoring.

When weatherization work is in progress the following steps must be followed, as referenced in WPN 22-7:

- Renovations must be completed by Certified Renovation firms.
- Crews and contractors must use containment procedures to ensure protection of the occupants.
- Occupants, especially young children or pregnant women, may not enter the work site.
- Occupants are allowed to return only after the work is completed and the dwelling has passed a visual inspection or a wipe test, if applicable.
- Occupants' belongings must be protected from lead contamination.
- The work site must be set up to prevent the spread of lead dust and debris.
- Warning signs must be posted at entrances to the worksite when occupants are present; at the main and secondary entrances to the building; and at exterior work sites. The signs must be readable from 20 feet from the edge of the worksite. Signs should be in the occupants' primary language, when practical.
- The work area must be contained.
- If containment cannot be achieved with occupants in the unit, occupants must move out of the unit or the work must be deferred until containment can be achieved. MN does not use USDOE funds for temporary relocation of clients.
- Measures to ensure that containment procedures do not interfere with occupant and worker egress in the case of an emergency must be established.
- Photos of lead safe work containment procedures and other documentation are required in all dwellings where lead safe work practices are used.

Containment procedures must ensure that any dust or debris will not be spread beyond the work area to non-work areas. The level of containment must be determined by the auditor/inspector or supervisor before work is assigned to a crew or contractor. The level of containment is based on the hazards present, the age of the home, the scope of work activities, and any customer health issues or at-risk occupants. Lead safe work generally falls into two levels of containment: Level 1 and Level 2 containment

Level 1 containment is required in pre-1978 homes when less than 6 sq. ft. of interior painted surface per room, or 20 sq. ft. of exterior painted surface will be disturbed. Level 1 containment consists of methods that prevent dust generation and contains all debris generated during the work process such as wet methods and tool shrouds, no dry sweeping, using a HEPA vacuum, and cleaning and inspecting work areas to ensure dust and debris were removed. The containment establishes the work area that must be kept secure.

Level 2 containment is required when Weatherization activities will disturb more than 6 sq. ft. of interior surface per room, or more than 20 sq. ft. of exterior surfaces in homes built prior to 1978. Level 2 containment consists of methods that define a work area that will not allow any dust or debris from that work area to spread. Level 2 containment requires the covering of all horizontal surfaces, constructing barrier walls, posting warning signs, sealing doorways, covering HVAC registers with approved materials, and closing windows to prevent the spread of dust and debris.

Exception: Level 2 containment must always be used where any of the following is conducted, even if the activities will disturb less than the minimum hazard levels mentioned within the Level 1 category:

- Window replacement

- Drilling of interior walls for dense packing
- Demolition of painted surfaces

Proper lead safe work clean-up and disposal of debris is required to adequately clean up the job site. All dust, dirt, material scraps, containers, wrappers, and work-related debris must be removed from the client's home. A HEPA vacuum must be used to clean up the work areas. Further cleaning may be necessary, based on the hazard. Disposal of debris must meet federal, state and local regulations.

A visual inspection by the crew or contractor must be completed to ensure that the cleaning process is complete. Clearance must be achieved in accordance with RRP rules. Verification is conducted by the QCI at the time of final inspection of the weatherization work. If debris, paint or surface covering chips, or dust is observed, the weatherization crew or contractor must repeat the cleaning process. Client files will contain lead testing documentation, a description of lead work done, the certified renovator certificate, photos of lead safe containment and setup, and any training offered on site. In cases where extensive lead testing will take place to determine whether lead-based paint or surface covering is present, an analysis of the economic feasibility will be conducted by the SP.

Allowable Actions	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐
Prohibited Actions	
Concur with DOE Guidance ☐	
•	
Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☐
EPA approved lead testing	
Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐
Follow pre-renovation education requirements per EPA RRP rules.	

6.12 – Mold and Moisture

Allowable Actions	
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑

Moisture related issues in dwellings policy

Drainage: DOE funds may be used to remedy moisture issues resolved by repair or replacement of gutters, downspouts, grading, flashing, or sump pumps, where the total cost is less than $2,000. Drainage issues above that cost must be deferred until these issues are addressed by the client or by other funding sources. Clients are notified of such problems in writing.

Mold and Moisture: Energy auditors use the following to identify potential moisture problems when assessing a client's home:

- Damp atmosphere or a musty smell in the dwelling, basement, or crawlspace
- Client complaints of allergy-like symptoms
- Mold growth on walls and ceilings, especially in bathrooms and kitchens
- Mold growth or water damage on attic roof sheathing
- Signs of condensation on walls or windows
- Evidence of crawlspace moisture
- Rusted metal in basements, crawlspaces, bathrooms and/or kitchens
- Efflorescence (white, powdery deposits) on concrete or masonry surfaces
- Water stains on foundation walls

Although the entire dwelling is inspected for mold, particular attention is paid to the following areas: bathrooms, kitchens, laundry areas, basement walls, ceilings next to exterior walls, attics, and crawlspaces. The mold assessment, completed in tandem with the moisture assessment, is performed by the auditor.

Auditors document the presence of visible mold. Details are filed in the client file. The existence of mold is documented to confirm that mold was pre-existing and that weatherization activities were not the cause of mold growth.

When a moisture problem is identified, energy auditors determine the source of the problem and outline solutions or generate specific work order measures to mitigate the problem.

Energy auditors inform clients of any mold that is found and of its location. Auditors explain to clients that the auditor is not a mold expert and that the mold assessment was a visual assessment only and that no testing for mold was completed. Auditors use forms provided by MN and WAPLink software to document and generate specific H&S measures that address or alleviate moisture problems. Whole Dwelling, Equipment, and Building Shell tabs within WAPLink detail individual remedies, all addressing H&S concerns. Many of these concerns are related to moisture issues.

Identifying and solving the source of moisture problems is the first priority when a problem is discovered. The following are possible solutions to moisture problems:

- Mechanical Ventilation. One of the main strategies for solving moisture problems in a home is mechanical ventilation. Installing intermittent or continuous ventilation is allowed and may be paid for with H&S funds. Moisture problems may be reduced or eliminated by ventilating areas that routinely generate large moisture loads such as bathrooms, kitchens and laundry areas. MN requires SPs to implement ASHRAE 62.2-2016 on all dwellings weatherized effective July 1, 2017. Clients are reminded of the importance of using kitchen exhaust fans while cooking and using bathroom exhaust fans after showers or baths. Clients are instructed how to operate the fans properly.

- Plumbing/Sewer Repairs. Leaking water pipes and sewer lines cause moisture and pose serious health problems for affected dwellings. Auditors carefully note any problems. Minor repairs, costing less than $2,000 related to

plumbing and sewer repairs, may be completed as a part of the weatherization process, provided the repairs are necessary to weatherize the home. Referrals are made to non-weatherization resources that may assist the household in making more substantial repairs to pipes or sewer lines. Cleanup of any unsanitary conditions due to plumbing leaks is the responsibility of the client.

- Attic Bypass Sealing. Attic bypass sealing must be completed on all homes. One of the most important benefits of attic bypass sealing is that it prevents the migration of moisture into the attic where it could cause ice dams, wood rot, and mold growth. Pressure diagnostic measurements are taken on both a 'pre' and 'post' basis to ensure and measure bypass-sealing effectiveness. Bypass sealing is completed as an air-sealing measure when it achieves an SIR of one or more. Additional air sealing may be allowed as an HSM and must be justified by the energy auditor or QCI and notes added in WA.

- H&S funds are used only in dwellings where necessary bypass sealing has an SIR of less than one (including the associated diagnostic testing) this may include items such as open block tops, foundation air sealing and air sealing mobile home bellies. An HSM must be justified by the energy auditor or QCI and notes added in WA.

- Crawlspace Ground Moisture Barriers. Crawlspace moisture can lead to condensation, mold, and rot. Air passing through the soil can contain radon and pesticides. It is important to prevent moisture, radon and other soil gasses from entering the dwelling. This is accomplished by covering the accessible crawlspace ground with a vapor barrier with a perm rating of less than 0.1. This vapor barrier must be installed continuously over the top of the exposed soil with all seams and penetrations sealed to establish a continuous air barrier to seal out water vapor and soil gasses.

- Bulk Water Control. H&S dollars may be used to make repairs to deteriorated roofs and other framing members where such repairs are needed to eliminate or prevent moisture or water from entering the dwelling. These repairs are allowed when necessary to address moisture sources that create health/safety hazards in the dwelling. Door and window replacement, repair, or installation is generally not an allowable H&S expense. Per WPN 19-5, door and window repairs are allowable H&S expense to resolve a bulk water intrusion issue that is the cause of visible biological growth.

- Crawlspace Foundation insulation. Since below grade soil has a higher level of moisture and vapor pressure, it is important to treat foundation walls to reduce the moisture load on the home. If site conditions exist for foundation insulation to be installed in a crawlspace, and is not cost effective as an ECM, H&S funds may be used to treat the foundation. It is important to seal at the top and bottom of the insulation. Commerce approval is required and H&S averages must be adequately monitored with DOE funds.

Limited Water Damage Repair: Limited water damage repairs that can be addressed by weatherization workers are allowed when necessary to weatherize the home and to ensure the long-term stability and durability of the measures.

Mold Remediation: Controlling moisture is critical to controlling mold. If mold is found in a home, it is likely the result of moisture, excessive humidity or water intrusion. Moisture problems must be solved before any mold problem is addressed. If the auditor determines that moisture problems can be solved satisfactorily, the SP may determine that the mold will not be disturbed by weatherization activities and work may proceed without the need for remediating the mold.

The SP may defer any work on the home until the mold is remediated by the client or property owner. This is recommended if there are large areas of mold growth. If the auditor determines the moisture problem cannot be satisfactorily eliminated, weatherization work must be deferred.

Mold Clean-up Information and Referral: If the weatherization work can be completed without disturbing mold/mildew, or if cleanup is not required, work may be completed at the discretion of the auditor or program manager. If cleanup is required by the client, information on cleanup procedures will be provided via the EPA's Mold, Moisture, and Your Home A Brief Guide to Mold, Moisture, and Your Home EPA-402-K-02-003, September 2010
Procedures are designed to protect the health of the occupants and cleanup personnel during remediation.

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

See Sections above

Prohibited Actions		
Concur with DOE Guidance ☐		
•		
Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
Visual assessment for moisture or mold damage including exterior drainage.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
Prohibited Testing/Inspection		
Concur with DOE Guidance ☐		
Required Occupant Education		
Concur with DOE Guidance ☑	Alternative Guidance ☐	
Provide occupant written notification of identified mold/moisture hazards and information regarding the associated hazard.		

6.13 - Occupant Pre-existing or Potential Health Conditions

Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
•		
Allowable Actions		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
•		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
Required Occupant Education		
Concur with DOE Guidance ☑	Alternative Guidance ☐	

1. Inform occupant in writing of any known risks and provide pre-weatherization screening form.
2. Provide occupant with Subgrantee point of contact information in writing

6.14 – Pests		
Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
Pest removal is allowed only where infestation would prevent weatherization. Screening of windows and points of access and incorporating pest exclusion into air sealing practices to prevent intrusion is allowed. In cases where a pest issue is seasonal, SPs are encouraged to defer weatherization until the problem can be resolved. Example: Stinging insects are not active in colder weather. If there is a menacing domestic animal in a dwelling or if the worker is uncomfortable around the animal, weatherization workers may require the client to restrain the animal before proceeding with weatherization. If the client refuses, weatherization workers may document the situation and defer the work until the situation is resolved. Animal bites should be immediately responded to and reported. If necessary, workers should seek medical care. If a worker is bitten by a bat, an attempt should be made to kill the bat without destroying the head. The bat should be placed in plastic and shipped to a local lab to test for rabies. Weatherization may be deferred until after temperatures are consistently at or below freezing if stinging insects are found. Infestation of pests may be cause for deferral where removal costs exceed $2,000.		
Allowable Actions		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
Required Occupant Education		
Concur with DOE Guidance ☑	Alternative Guidance ☐	
Inform occupant in writing of observed conditions and associated risks.		

6.15 – Radon		
Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

Radon mitigation is any system specifically installed to reduce radon gas concentrations in the breathing zones of occupied buildings or from water supplies. Mitigation of radon in the air is accomplished through ventilation, either collected below a concrete floor slab or membrane on the ground, or by increasing the air changes per hour in the building. This is not to be confused with installing ventilation to meet ASHRAE 62.2-2016 requirements which is required for all DOE WAP projects. Radon mitigation is not an allowable H&S cost.

The radon report (Building Assessment of Radon Reduction Interventions with Energy Retrofits Expansion (BEX) Final Report (ORNL/TM-2020/1769).) recently released by DOE laid out a basic package of measures that is recommended for all site-built dwelling that includes three basic measures: sump pump well/pit covers, sealed soil-gas retarder ground coverings inside the pressure boundary, and ventilation strategies. These three measures now have updated specifications located in the H&S section of the Standard Work Specifications (SWS) that apply to installing these measures. These measures are now a required part of the radon precautionary measures for all homes that receive weatherization utilizing DOE WAP funding.

Clients must sign an informed consent form prior to receiving weatherization services. This form must be kept in the client file. Since all counties in MN are considered to have moderate-to high-potential radon levels by the EPA, precautionary measures will be installed as part of weatherization based on EPA Healthy Indoor Environment Protocols for Home Energy Upgrades, to reduce the possibility of making radon issues worse, where feasible. Whenever site conditions permit, weatherization workers will cover exposed dirt floors within the pressure/thermal boundary with 6 mil (or greater) polyethylene sheeting, lapped at least 12" and sealed with appropriate sealant at all seams, walls, and penetrations. Other precautions may include, but are not limited to, sealing any observed floor and/or foundation penetrations, including open sump pits and open block tops, isolating the basement from the conditioned space, and ensuring crawl space venting is in place or installed. Radon assessments are not part of weatherization in MN. Dwellings with previously identified radon problems should not be left with an increased negative pressure in the contaminated area after weatherization work. Vapor barriers are installed in dwellings with accessible crawlspaces where there is exposed soil.

Testing protocols
Not applicable

Documentation requirements
Client informed consent form is required on all houses.

Allowable Actions	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐
Prohibited Actions	
Concur with DOE Guidance ☐	
Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐
Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐

1. Provide all occupants EPA's A Citizen's Guide to Radon and inform them of radon related risks.
2. Occupants must sign an informed consent form prior to receiving weatherization services

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

Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

Smoke Alarms: Installation of individual or combination smoke and CO detectors and/or alarms is required when absent, inoperable or expired. Replacement of operable non-expired units is not allowed however, battery replacement with Lithium batteries is allowed. SPs are required to meet State and local fire codes for the number and placement of installed units. Smoke alarms will be installed in legal bedrooms that are not being used as bedrooms and will be installed in areas being used as bedrooms even if not technically defined as a legal bedroom.

Carbon Monoxide Alarms: Every weatherized home must have functioning CO alarms. If they are already present in all required locations and functioning properly, installation of new ones in not necessary. If absent or inoperable, then CO alarms must be installed per the requirements of the SWS and NFPA 72. The ASHRAE 62.2-2016 standard requires the installation of CO alarms in every home.

Fire Extinguishers: Installation allowed only in cases where solid fuel is burned as part of the primary heating system.

Testing protocols
Smoke or Carbon Monoxide Alarm Units are tested at energy audit by pressing the test button.

Allowable Actions	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Prohibited Actions
Concur with DOE Guidance ☐

Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

Verify operation and age of installed alarms.

Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐

Provide occupant with verbal and written information on use of newly installed devices and the potential risks of not properly maintaining these devices.

6.17 – Ventilation and Indoor Air Quality

Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

MN implements the 2016 version of American Society of Heating Refrigeration and Air-Conditioning Engineers (ASHRAE) 62.2 with no additional addenda utilized. Ventilation is installed as required by ASHRAE 62.2 - 2016. This is met through either exhaust only ventilation or through balanced ventilation with either a Heat Recovery Ventilator (HRV) or Energy Recovery Ventilator (ERV). If an occupant refuses ventilation as required by ASHRAE 62.2, the home must be deferred. This is met through either exhaust only ventilation or through balanced ventilation with either a Heat Recovery Ventilator (HRV) or Energy Recovery Ventilator (ERV).

Procedures for complying with implemented ASHRAE standard: Exhaust fan flow rates are measured at the energy audit and during the QCI inspection. Required tests are detailed in Appendix D of the MNWAP Policy Manual. The continuous flow setting at the QCI is based on the actual final blower door results. Balanced ventilation is tested, measured, and verified to meet the needs to the calculation.

Room to room pressure tests are conducted and action to relieve pressure is taken when the pressure differential between a room and the house is greater than 3 Pa.

If contractor diagnostics, such as blower door testing, cannot be completed as part of an ECM measure, testing is allowable as an HSM for ASHRAE requirements.

Allowable Actions	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	

Exhaust fan and balanced ventilation flow rates testing is required to verify performance for compliance with ASHRAE 62.2 standard based on post-weatherization results.

Allowable Testing/Inspection	
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐

Required Occupant Education	
Concur with DOE Guidance ☑	Alternative Guidance ☐

1. Provide occupant with information on function, use, and maintenance (including location of service switch and cleaning instructions) of ventilation system and components.
2. Provide occupant with equipment manuals for installed equipment.
3. Include disclaimer that ASHRAE 62.2 does not account for high polluting sources or guarantee indoor air quality.

6.18 – Water Heaters

(see Combustion Appliances for combustion related requirements)

Allowable Actions	
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑

Replace or repair primary water heaters when existing primary water heater is unsafe, inoperable, or nonexistent. Air Source Heat Pump water heaters are allowable when site conditions exist for successful installation based on auditor's findings. The installation of temperature/pressure discharge pipes or temperature/pressure valves is an allowable H&S expenditure ensuring client and worker H&S. Gas lines, sediment traps, flexible connectors, or gas shut off valves are not allowed to be replaced unless they are damaged or leaking or part of the replacement.

Required Testing/Inspection		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
1. Visual inspection of all water heaters and related piping for safety and leaks. 2. See Combustion Appliance section for related combustion safety testing requirements.		
Allowable Testing/Inspection		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	
Required Occupant Education		
Concur with DOE Guidance ☑	Alternative Guidance ☐	
1. Appropriate use and maintenance of appliance. 2. Provide all paperwork and manuals of any installed equipment. 3. Where combustion equipment is present, provide combustion safety hazards information including how to recognize depressurization, dangers of CO poisoning, and fire risks associated with combustion appliance use.		

6.19 – Worker Safety		
Required Actions		
Concur with DOE Guidance ☑	Alternative Guidance ☐	Results in Deferral/Referral ☐
DOE WAP H&S Funds ☑	Alternative Funds ☑	
MN SPs must comply with OSHA (29 CFR 1910 and 1926) regulations, local H&S plans, and use of Material Safety Data Sheets. MN currently performs monitoring for OSHA rules and regulations, as it pertains to the SWS, when performing monitoring on in-progress units.		
Allowable Actions		
Allowed with DOE WAP H&S Funds ☑	Allowed with Alternative Funds ☑	
Minor repairs and installations (e.g., repairing stairs, handrails, etc.).		
Prohibited Actions		
Concur with DOE Guidance ☐		
Define “major” repairs		
Major repair is a measure that has a cost over the H&S budget limit.		
Allowable Testing		
Allowed with DOE WAP H&S Funds ☐	Allowed with Alternative Funds ☐	

Training and Technical Assistance(T&TA) Plan

1.0 – General Information

Comments that do not generally fit into the available tables below

Training and Technical Assistance activities (T&TA) for both Service Provider and Minnesota Weatherization Assistance Program (WAP) staff are instrumental in the provision of high-quality weatherization services to low-income households in Minnesota.

T&TA activities increase the efficiency, quality, and effectiveness of the Minnesota WAP. All T&TA activities have the following objectives:

- Maximize energy savings.
- Improve the quality of weatherization work on dwellings.
- Minimize production costs and maximize production efficiencies.
- Ensure the health and safety of low-income households and weatherization workers.
- Increase the effectiveness of client education.
- Improve program management and administrative procedures.
- Avoid the potential for waste, fraud, abuse, and mismanagement.

After extensive development in Program Year 2024 (PY24), Minnesota will launch the Minnesota Home Energy Training Centers (MHETC) in PY25. Minnesota has previously offered comprehensive training through contracted, IREC-accredited providers and responsive training through a combination of qualified state staff, industry professionals, online trainings, and certified trainers. The MHETC will streamline these activities under one Minnesota-based, IREC-accredited organization. The MHETC leverages both federal and state funding to both expand training opportunities and more efficiently use Training and Technical Assistance funds. The MHETC is intended to make Minnesota a leader in Home Energy training.

In PY24, Minnesota offered numerous in-person and online trainings. In-person trainings included Building Performance Institute (BPI) trainings for Weatherization job classifications, as well as Minnesota-developed HVAC training, advanced mechanical training, energy modeling training, and policy update and compliance sessions.

In PY25, through the new Minnesota Home Energy Training Centers (MHETC), Minnesota will continue to offer a full complement of comprehensive training with additional trainings to provide on-demand responsive training and learning pathways support to all technical staff in the network. The MHETC will also offer continuing education for both technical and administrative staff. Training will be delivered primarily in-person, although online learning will also be used in various training situations where the remote format is more effective or resource-efficient.

Training and technical assistance needs, including client education, are assessed in a number of ways:

- Minnesota staff members compile and compare individual Service Provider monitoring results to determine multi-agency needs and trends.
- Service Provider surveys are used to elicit input for general policy/procedural issues and T&TA needs.
- The Minnesota Weatherization Advisory Group (MWAG) provides an excellent source of input and feedback regarding T&TA. MWAG membership is comprised of representatives of Service Providers.
- Cooperation with other energy program units within the MN Department of Commerce provides sharing of information about energy conservation issues, some of which may be addressed by T&TA activities.

Evaluation forms are distributed as a part of every group T&TA event. The completed evaluations provide information about the effectiveness of the workshop, class or other group activity. Evaluations may also prompt Minnesota to consider additional training. The results of these evaluations become part of future T&TA plans.

State field and administrative monitoring visits are also used to evaluate T&TA training effectiveness and to determine specific training that may be necessary.

Minnesota retains 65% of the total T&TA allocation for training, planning, oversight, and monitoring activities. The remaining 35% of the T&TA allocation passes to Subgrantees (known as Service Providers in Minnesota and throughout this document).

Training and Technical Assistance funds allocated to Service Providers may be used to pay for weatherization workers' wages during training, as well as travel and registration for training events. Service Provider T&TA funds may also be used to train contractors, including providing a reasonable stipend to contractors who attend WAP training at the Service Provider request. All such contractors must sign a retention agreement in accordance with DOE guidelines.

The completion of regular job task analysis (JTA)-aligned comprehensive (Tier 1) training is required for staff in JTA-identified positions. Minnesota monitors both Tier 1 and Tier 2 training through the Service Provider's local plan, quarterly training activities report, and regular reporting from training providers.

In late PY24, and PY25 Minnesota will train staff and provide support for the transition to WAPLink (Minnesota's web-based energy modeling software based on the WAweb API). Trainings will include online, and in-person offerings delivered by Department of Commerce staff.

2.0 – Overall T&TA plan

Your overall T&TA plan must incorporate suggestions and feedback the following elements.

Feedback from internal and external reviews, examples include:

- Feedback from Department of Energy (DOE) Project Officer (PO) monitoring visits
- Internal state audits
- Grantee monitoring of the subgrantees
- Office of Inspector General (OIG) reports
- American customer satisfaction index feedback, and
- Other. Examples include:
    - Training feedback
    - Training retention activities

In PY25, Minnesota—through the launch of the Minnesota Home Energy Training Centers – Minnesota plans to continue and expand both in person and remote comprehensive and responsive training based on training needs identified by the DOE, Minnesota Department of Commerce, and Service Providers.

A quarterly updated training activities report is required for each Service Provider and includes a list of trainings taken by each employee. Minnesota reviews and analyzes those reports to ensure essential trainings have taken place and to determine trends.

Additionally, Minnesota sends a detailed survey to subgrantees each year for additional narrative feedback that may not have been captured in monitoring visits or through training reports. All comprehensive trainings, as well as in-person responsive trainings include an opportunity for subgrantees to provide anonymous feedback on the course content, format, and teaching.

Minnesota will also continue to provide responsive technical assistance through the Weatherization Inbox – an active shared inbox that connects Service Provider staff with State of Minnesota staff on a daily basis. In PY23 over 3,150 individual requests received responses.

Minnesota's Training and Technical Assistance Specialist meets weekly with both field and administrative monitors to determine gaps in technical or program knowledge. Identified gaps for individual agencies are addressed with direct technical assistance and gaps identified at multiple agencies inform statewide training offerings. In PY24, this monitoring feedback resulted in the development of a new "Advanced Mechanical" training course that covers balanced ventilation strategies and air-to-air heat pumps.

Minnesota is a member of the WAP Training Consortium, and utilizes resources from various national organizations including DOE, IREC, and NASCSP.

Existing or planned Accredited Training Center partnership or working relationship.

In the past, Minnesota has partnered with several weatherization Training Centers through direct contracts and indirectly through a state interagency agreement with Fond Du Lac Tribal and Community College (FDLTCC). Commerce, through FDLTCC, has previously partnered with Slipstream, (WI) Everblue (NC), and Community Housing Partnership (VA) to provide comprehensive training, including BPI Energy Auditor (EA), Quality Control Inspector (QCI) and Multifamily Quality Control Inspector (MFQCI).

In November of 2024, Minnesota released a Request for Proposals for a Training Center partnership known as the Minnesota Home Energy Training Centers (MHETC). In late February, Commerce selected a proposal.

The MHETC is intended to make Minnesota a leader in Home Energy training, with two training and testing facilities in regionally distinct parts of Minnesota. The MHETC will bring together many resources, creating new training opportunities as well as ensuring the more efficient and effective use of training resources. The partnership also leverages non-federal investments in training to ensure the stability of the MHETC.

In PY25, the MHETC will launch and become IREC accredited to conduct training for single and multifamily Energy Auditor (EA), single and multifamily Quality Control Inspector (QCI), Crew Leader, and Weatherization Installer Badges. In PY25, the MHETC plans to offer in-person Retrofit Installer Training as a complement to the online Weatherization Installer Badges which were launched in 2022.

MHETC will also provide direct training for entry-level Building Science courses including BPI Building Science Principles (BSP), Building Analyst-Technician (BA-T) and Building Analyst-Professional (BA-P).

Additionally, the MHETC will provide on-site responsive training for subgrantee staff, as well as a host of subject-specific trainings, including HVAC training, balanced ventilation and heat pump training, RRP training as well as safety training, including OSHA 10.

Preparations for future/upcoming program requirements, examples include:

- **Updated standard work specifications (SWS)**
- **Migration to online weatherization assistant**
- **Inclusion of specific language from weatherization program notices (WPN)**

Minnesota incorporated the Standard Work Specification-Aligned Field Guide (SWS) field guide into a badges training program in 2022 that offers micro-badge certifications upon review and field approval by senior staff. This program will be transitioned into and supervised by the Minnesota Home Energy Training Centers, which will attain IREC Crew Leader certification to offer these badges both online and in-person.

Minnesota will also transfer other courses on its current Learning Management System to the MHETC, which will expand online, on-demand training offerings.

At the beginning of PY25, Minnesota will be transitioning to the WAPLink energy modeling tool for single-family and manufactured housing. This tool, which uses the WAweb engine to run audits, provides program management features as well. In the first year of WAPLink implementation in Minnesota, the State will provide both online and in-person trainings for field staff. These trainings will be 6-8 hours in length and comply with BPI/ANSI standards for energy modeling training.

In PY25, Minnesota plans to launch a dedicated training page on the Department of Commerce website that provides Career Pathway information and onboarding for Service Provider technical, administrative and coordinator staff.

What protocols are in place which ensure untrained staff are not left without supervisions during field operations?

Upon hire, Energy Auditors must successfully complete the Building Performance Institute (BPI) Building Science Principles (BSP) certificate, followed closely by Building Analyst-Technician (BA-T). After achieving BA-T certification, auditors may optionally pursue Building Analyst-Professional (BA-T).

Minnesota policy requires that Energy Auditors must be closely supervised by their agency until they achieve Energy Auditor certification, which often requires at least six months of work experience. The goal of this supervision is to ensure compliance to program guidelines.

Additionally, all inspectors must be QCI certified prior to completing inspections for DOE-funded work.

In PY2025, Minnesota will also update and clarify its policy requiring Core Installer Badges training for crews and will move this training to a 5-year cycle to align with upcoming changes to Energy Auditor and QCI training.

Certifications for all Service Providers are tracked annually during administrative monitoring to ensure compliance.

Partnerships with the statewide home performance industry on training issues; if applicable.

As noted, in PY25 Minnesota will launch the Minnesota Home Energy Training Centers (MHETC). This dynamic collaboration is intended to make Minnesota a leader in Home Energy training, with two training and testing facilities in regionally distinct parts of Minnesota. This collaboration will bring together many statewide resources, creating new training opportunities as well as ensuring the more efficient and effective use of training resources. The partnership will also leverage non-federal investments in training to ensure the stability of the MHETC.

Minnesota also encourages and sponsors grantee and subgrantee participation in the Minnesota Energy Conference and various in-state presentations and conferences put on by the Center for Energy and the Environment (CEE), Clean Energy Resource Teams (CERTS) and others.

How does analysis conducted, as detailed in section v.6 of the annual application, influence the development of T&TA activities and priorities?
Individual Service Provider T&TA needs are assessed in four ways: • Monitoring activities (dwelling inspections, fiscal/administrative monitoring, desk monitoring, DOE Inspections, and all other types) are used to identify specific areas where improvement is needed. In addition, informal conversations with Service Provider personnel, not connected to monitoring are used as a means of identifying specific T&TA needs at the Service Provider level. • Service Providers assess their own T&TA needs and objectives via the submission of a local plan as a part of their annual budget. • Monthly desk monitoring reports direct responsive training to Service Providers to improve effectiveness and drive continuous improvement. • Each Service Provider's work plan and budget are reviewed as part of the contract submission process and are evaluated during monitoring activities.

3.0 – Workforce Credentials

Describe the following aspects of your T&TA plan related to workforce credentials.

Federally required credentials. Examples include:

- **Environmental protection agency lead renovation, repair, and painting program**
- **Home energy professionals Quality Control Inspector certification**

- The Home Energy Professional Quality Control Inspector (QCI) certification is required for all staff inspecting work paid for with DOE funds.
- All WAP contractors must follow EPA's Lead Renovation, Repair and Painting Program (RRP) if performing projects that disturb lead paint. RRP requires:
    - The contractor firm (or their sub-contractors) must be certified by the EPA as a RRP (Renovation, Repair, Painting) Lead Firm.
    - Have an EPA Certified RRP Renovator on site at projects needing lead-safe work practices, as dictated by EPA requirements.
    - All job-site employees working in a WAP household must be trained to install measures in a lead- safe manner in accordance with the Standard Work Specifications (SWS) and EPA protocols.

Grantee/state required credentials. Examples include:

- **Building Performance Institute Building Science Principles**
- **Grantee-developed certifications**

Upon hire, energy auditors must successfully complete the Building Performance Institute (BPI) Building Science Principles (BSP) certificate, followed closely by Building Analyst-Technician (BA-T). After achieving BA-T certification, Minnesota policy requires that auditors must be closely supervised by their agency until they achieve Energy Auditor (EA) certification. The goal of this supervision is to ensure compliance to program guidelines. In PY25, the MHETC will offer BSP Certification continually, and will regularly offer BA-T and BA-P training so that new staff can have access to training immediately upon hire.

Additionally, all inspectors must be QCI certified prior to completing inspections for work paid for with DOE funds. Typically, Minnesota offers HEP QCI training within a few months of offering the HEP Energy Auditor certification and exams thus allowing qualified staff to gain both HEP certifications as quickly as possible after meeting prerequisites.

Minnesota also requires that subgrantees who undertake multifamily projects have at least one Inspector who has successfully completed an approved Multifamily QCI Gap training. Multifamily QCI trainings will be offered annually.

Minnesota has also developed a "core" set of 15 Retrofit Installer Badges, as identified in the Installer Badges Toolkit. Any subgrantee staff or crew members who are installing weatherization measures in a dwelling must complete the Core Installer Badges within 6 months of their date of hire. These Core Badges can either be completed through in-person training, or through the online Weatherization Installer Badges, with additional field verification by a qualified supervisor.

Equivalents to BPI certification are recognized by Minnesota on a case-by-case basis.

Subgrantee/local required credentials. Examples include: • **Contractor licensing**
All contractors and their subcontractors and crews must be licensed and bonded as required by pertinent laws, ordinances, regulations, or local codes.
Industry required credentials. Examples include: • **Equipment/material manufacture certification** • **Vendor certification** **(e.g. equipment/material manufacture certification, vendor certification)**
Minnesota does not require industry credentials beyond those mentioned elsewhere in this plan.
Process for maintaining workforce credentials
Minnesota (through the MHETC) will provide BPI re-certification training and exams to weatherization program staff on a regular basis, responsive to the recertification needs of the Service Provider network. Recertification will be required on a 5-year cycle, to reflect the changes in WAP Memo 126. Minnesota also provides opportunities to gain certification CEUs through sponsorship of local weatherization and building performance conferences. Weatherization agencies additionally use Service Provider TTA funds to provide training for their staff, including online training, conferences, and other responsive training.
How credentials are tracked
Minnesota keeps record of the certifications and dates for all Energy Auditor and Inspector staff and uses this information to schedule and coordinate re-certification training and exam offerings. All required credentials are reported annually by subgrantees during programmatic monitoring.

4.0 – Training

Grantees have two options to describe their training.

A) Use the embedded spreadsheet* to identify and describe the training schedule for grantee and Subgrantee staff. Include technical and non-technical training.
B) Or use the fields below to identify and describe the training schedule for grantee and subgrantee Staff. Include technical and non-technical training.

Grantee's are to include the following in their descriptions regardless of what option is being used todescribe their training plan:

- Specify whether attendance is mandatory, and the ramifications for non-compliance.
- Specify if the T&TA plan spans multiple program years (PY), indicate which trainings are intended in the current PY and which are planned for future PYs.

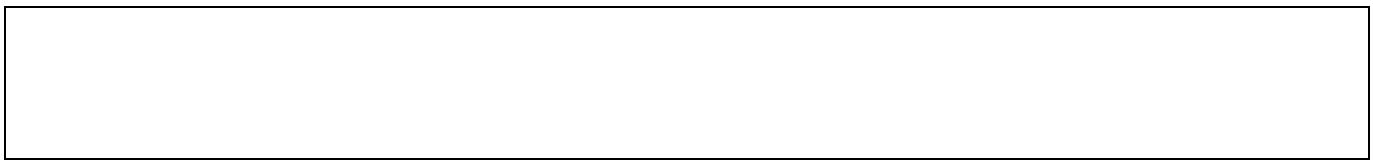
* the embedded spreadsheet, if completed at the end of the year to record delivered training, can be used as Documentation for the required annual T&TA report. Double click to open spreadsheet. Enter Information and close. It will automatically save your information

TTA planning and
reporting template f

Programmatic/administration training

- Financial (i.e. 2 CFR 200)
- Management (i.e. 10 CFR 440)

- **Required** -- Office of Management and Budget Uniform Guidance Training
  - Any fiscal staff (Grantee or Service Provider) working with the weatherization program must attend initial training on OMB guidelines within one year of the hire date. In addition, staff must take refresher courses within one year of changes to the OMB guidelines.
- In PY25, Minnesota will continue to meet regularly with the Minnesota Weatherization Advisory Group (MWAG) and the MN Community Action Partnership (MINNCAP) Executive Directors meeting to provide programmatic guidance and policy training.
- In PY25, Minnesota will continue to encourage Service Provider Program Coordinators and administrative staff to utilize NREL's WAP Administrative Training.
- A website with specific training pathway guidance for both administrative and field staff will be available in PY25. This information is intended to provide new hires and their managers a clear "pathway" from day of hire through the first year of training and employment for various positions within the Weatherization Assistance Program.
- In PY25, Minnesota will continue to provide annual and mid-year policy updates to Service Providers.



Comprehensive technical training aligned to the job task analysis (identify at what intervals workers will receive regular, comprehensive training as required by weatherization program notice (WPN) 15-4)

- Quality Control Inspector
- Energy Auditor
- Crew lead
- Retrofit installer/technician

PY25 Comprehensive Trainings will be conducted through the Minnesota Home Energy Training Centers and include Retrofit Installer Badges, Crew Leader, Energy Auditor, and Quality Control Inspector trainings. As the MHETC build-out continues, Multifamily Energy Auditor and Multifamily Quality Control Inspector will be offered and eventually conducted in a new facility designed for multifamily training.

Additionally, as a scaffolded approach for new staff, the MHETC will offer BPI Building Science Principles training, as well as JTA-aligned Building Analyst-Technician and Building Analyst-Professional trainings. Minnesota has found that offering these trainings to new employees greatly improves their readiness for the Home Energy Professional (HEP) Energy Auditor and Quality Control Inspector certifications.

Energy Auditor, Quality Control Inspector, Crew Leader certifications, and a set of 15 Core Installer Badges will be required by Minnesota for workers whose work aligns with the respective JTA for those trainings. In PY25, Minnesota will be amending its policy to move to a 5-year renewal cycle on all required comprehensive trainings. This aligns all trainings with the new EA/QCI exam schedule and simplifies tracking and reporting.

Additionally, Minnesota requires that all agencies doing multifamily work have at least one QCI staff who has completed Multifamily QCI Training.

Minnesota communicates directly with Service Providers remedy any non-compliance with required certifications. This collaborative approach is effective in resolving any certification issues, but Minnesota reserves the right to issue a Corrective Action Plan to Service Providers if more formal action becomes necessary.

Trainings will be offered on the following cycle:

Energy Auditor - EA training is offered at least quarterly. Training consists of 1-2 weeks of in-person training (dependent on class size) followed by written and field exam.

Energy Auditor Review - EA review will be offered at least quarterly. This review is intended for experienced, renewing auditors and consists of one day of in-person training followed by field exams.

Quality Control Inspector – QCI training will be offered quarterly, in rotation with Energy Auditor training, allowing for new Energy Auditors to quickly gain QCI certification.

Multifamily Energy Auditor Training - MFEA training will be offered at least once per year, with additional courses offered if demand warrants.

Multifamily Quality Control Inspector – MFQCI gap training will be offered to QCI-certified individuals at least once per year, with additional courses offered if demand warrants.

Retrofit Installer– Installer training will be offered in two formats in PY25. The MHTEC will become IREC accredited to offer the offer this course at least twice per-year as an in-person course. Additionally, this training is available on-demand through Minnesota's online Weatherization Installer Badges training, which will be supervised by the MHETC. In alignment with the recommendations in the Installer Badges Toolkit, Minnesota has defined a set 15 badges as "Core Minnesota Installer Badges" that will be required for installer crews.

In-person Retrofit Installer Training is provided for both crew-based agencies and contractors with an agency retention agreement in place. Minnesota has six crew-based Service Providers and the remaining 16 are contractor based. While crew-based agencies consistently send their staff to offered trainings, agencies that utilize contractors have historically had difficulty convincing building shell contractors to attend JTA-aligned trainings despite the offer of stipends.

The implementation of the online Weatherization Installer Badges training has increased participation by contractors and the field approval pathway is vital to the participation of contractors in training.

Crew Leader - Minnesota will offer crew leader training at least biennially. Minnesota's small number of crew-based agencies necessitates a more sporadic offering of this course.

Analysis of Training Needs for HEP Certifications

Quality Control Inspector (QCI) -- As of the third quarter of PY24, Minnesota WAP has 64 QCI certified individuals in its statewide network as well as 8 QCI certified individuals in its state staff. All Service Providers currently have access to a QCI through direct employment or a contractual agreement. At least 31 QCIs will require recertification in PY25. Minnesota expects to add up to 20 new QCIs across its network in PY25.

Energy Auditor (EA) -- As of the third quarter of PY24 Minnesota WAP has at least 102 Energy Auditors (EA) certified individuals in its statewide network as well as 9 EA certified individuals in its state staff. An additional 14 auditors are BA-T and/or BA-P certified and expected to progress to EA certification in PY25. In PY25, Minnesota anticipates that Service Providers will hire up to 30 new Energy Auditors due to attrition and production needs.

Specific Technical Training

- Topics identified during monitoring visit(s)
- Energy modeling
- Health & safety. All H&S topics in WPN 17-7 require some level of training for all affected workers, the frequency of this training is a grantee decision. Examples include:
    - Air conditioning and heating systems
    - Asbestos
    - Biologicals and unsanitary conditions
    - Building structure and roofing
- Code compliance Combustion gases

- Electrical
- Formaldehyde, volatile organic compounds (VOCS), flammable liquids, and other air pollutants
- Fuel leaks
- Gas range/ovens
- Hazardous materials disposal
- Injury prevention of occupants and weatherization workers
- Lead based paint
- EPA's lead renovation, repair & painting program (RRP)mold/moisture
- Pests
- Radon
- Safety devices
- Ventilation and indoor air quality
    - American society of heating refrigeration and air-conditioning engineers (ASHRAE)
- Window repair, door repair
- Worker safety
    - OSHA
- Additional topics as described in health & safety plan
- Client education (training workers to conduct client education). Examples include:
    - Energy savings strategies
    - Program-specific information. Examples include:
        - What to expect
        - Additional resources
    - Health & safety issues

Health and Safety Training: Minnesota has developed an online health and safety curriculum which will be updated in PY25 (in coordination with the Minnesota Home Energy Training Centers) to reflect the most current DOE program guidance. In PY25, Minnesota will amend policy to make this training required within 6 months of hire, and repeated every 5 years, as it is an essential training for new technical or field staff.

Mechanical Systems/CAZ Training: The Minnesota Home Energy Training Centers will offer a Minnesota-specific two-day course covering topics such a heating and cooling systems, combustion, and CAZ depressurization testing, and ventilation. This training will be offered up to six times in PY25.

Advanced Mechanical Systems Training: In PY25, The Minnesota Home Energy Training Centers will offer an advanced version of the Mechanical Systems Training that was developed in PY24 which will cover balanced ventilation, including HRVs and ERVs. It will also cover technologies with emerging importance to the WAP, including heat pumps and home electrification.

Energy Modeling Training - WAPLink: In the first year of WAPLink implementation in Minnesota, the State will provide both online and in- person trainings for field staff. These trainings will be 6-8 hours in length and comply with BPI/ANSI 1100 standards for energy modeling.

Policy Changes Introduction and Implementation: Minnesota will continue to host both a PY25 and PY25 Mid-Year Policy Roll-out. This full-day in-person training informs Service Providers of state specific policy changes, driven by DOE Weatherization Assistance Program Notices and Memos, State-initiated changes and Service Provider feedback.

Individualized Responsive Training: Responsive training will be provided by the Minnesota Home Energy Training Centers in PY25 based on Service Provider need and feedback. This will include on-site training with individual Service Providers, as well as remote options.

Individualized Technical Assistance: Responsive technical assistance will continue to be provided directly, through the newly established TECH team within the Minnesota Department of Commerce. This innovate approach closes the gap between technical assistance and field monitoring activities and ensures that technical assistance is provided rapidly and in compliance with all state and federal regulations, as well as building science best practices.

Multifamily Weatherization Training and Technical Assistance: Minnesota will continue a contract with the Association for Energy Affordability to provide multifamily energy modeling training and technical assistance in PY25. This will be offered on-demand to agencies as they complete multifamily weatherization.

Manufactured Home Training: Manufactured home specific weatherization training will be offered at least annually through the MHETC.

New Staff Training: In PY25, the MHETC and Minnesota Commerce will offer orientation training that introduces new Service Provider staff to building science concepts and Minnesota Weatherization Assistance Program requirements. This may include BPI Building Science Principles (BSP) training for both field and administrative staff, as well as additional Minnesota-specific training pathways, which are being developed for several job classifications.

RRP Lead Renovator Training: In PY25 Minnesota will begin to offer RRP Lead Renovator training through the MHETC.

BPI Heathy Home Evaluator: In PY25, Minnesota will make efforts to connect Service Provider staff to BPI Healthy Homes evaluator trainings and may offer dedicated training to Service Provider staff if demand dictates.

In addition to these grantee-sponsored trainings, Service Providers will be responsible for costs related to:

- Travel and labor related to state sponsored comprehensive and specific training
- Continuing education credits for any relevant certifications (e.g., QCI or Building Analyst)
- OSHA training as appropriate
- Additional specific training not available through Commerce
- Contractor stipends, if any

Service Providers will provide a T&TA budget as part of the contracting process that communicates a thorough plan to expend all T&TA funds in an effective manner and support an effective program.

Conferences. Examples include:

- **Energy OutWest**
- **Building Performance Association**
- **National Association for State and Community Service Providers**
- **Community Action Partnership**

The annual Minnesota State Energy Conference, which is organized by a Service Provider working group and supported by the Department of Commerce is held annually and will be held again in May of 2026. As it regularly has, Minnesota plans to sponsor this conference and help develop the conference content, so it aligns with Minnesota's training objectives.

National Weatherization Conferences: Minnesota approves out of state travel requests from Service Providers for national conference attendance based on availability of funds and the relevance of conference content for weatherization staff including the BPA National Home Performance Conference, Energy OutWest, and other DOE-approved conferences and events.

Minnesota regularly sends state staff to the fall and winter conferences sponsored by the National Association of State and Community Service Providers (NASCSP).

Other, please specify:

5.0 – Technical Assistance

Describe the technical assistance activities included in the T&TA budget category.

Programmatic/administration support

Minnesota provides regular responsive training and technical assistance through the Weatherization email inbox, including over 3,150 individual requests last program year. Additionally, Minnesota provides administrative support through phone calls, monitoring events, policy training and regular Service Provider calls with the Director and Program Effectiveness Coordinator.

Technical support

Minnesota provides regular responsive training and technical assistance through the Weatherization email inbox, including over 3,150 individual requests last program year. Additionally, Minnesota provides technical support through field monitoring visits and phone calls Minnesota has also designated members of the technical and field monitoring team to provide direct assistance in specialty needs. Areas of individual focus for monitors include multifamily, solar, heathy air/asbestos, and several E&I or SERC grant-funded programs.

Health & safety support activities

Health and Safety Training: Minnesota has developed an online health and safety curriculum which will be updated in PY25 (in coordination with the Minnesota Home Energy Training Centers) to reflect the most current DOE program guidance. In PY25, Minnesota will amend policy to make this training required within 6 months of hire, and repeated every 5 years, as it is an essential training for new technical or field staff. Additional health and safety support is provided though phone calls, monitoring events and the Weatherization inbox.

Monitoring

What percentage of T&TA funding is allocated to monitoring? (if defined in section b of the budget details within the annual application, include that within your description below.)

Sixteen percent of T&TA funding is allocated to monitoring.

Other, please specify

Minnesota has developed numerous technical guidance documents located in the appendices of its Policy Manual. These contain technical guidance for specific programmatic and technical areas. Appendices found at Weatherization Assistance Providers / Minnesota Department of Commerce - Energy

6.0 Client Education

Describe what current and planned client education materials and/or activities are included in the T&TA budget category. Only those paid for with T&TA funds need to be mentioned.

Note: this DOEs not include training workers to deliver client education. This should be described in the Training section, above.

Client education activities prior to, during and after weatherization which address the weatherization Process and energy savings details

Service Provider weatherization staff provide client education through required client forms. In addition, the following written resources are available both online and in hard copy for Service Providers. Minnesota has translated most client education into Spanish, Hmong and Somali, in addition to the English language versions.

- Weatherization Basics (Español, Hmoob, Soomali)
- Your Weatherization Project (Español, Hmoob, Soomali)
- Energy-Saving Tips for Heating and Cooling Season (Español, Hmoob, Soomali)
- Clean Fans Work Better (Español, Hmoob, Soomali)
- EPA Renovate Right--Lead Safety (Español)
- Home Energy Guide
- Weatherization and Your Health

Additionally, Minnesota created a series of animated client education videos that provide information about weatherization services, the process of having one's home weatherized, and Building Science and health and safety related information. Videos are in English, Somali, Spanish, and visually impaired format.

Client education activities regarding H&S issues as indicated in WPN 22-7

- Air conditioning and heating systems
- Asbestos
- Biologicals and unsanitary conditions
- Building structure and roofing
- Code compliance
- Combustion gases
- Electrical
- Formaldehyde, volatile organic compounds (VOCS), flammable liquids, and other air pollutants
- Fuel leaks
- Gas range/ovens
- Hazardous materials disposal
- Injury prevention of occupants and weatherization workers
- Lead based paint
- EPA's lead renovation, repair & painting program (RRP)mold/moisture
- Pests
- Radon
- Safety devices
- Ventilation and indoor air quality
  - American society of heating refrigeration and air-conditioning engineers (ASHRAE)
- Window repair, door repair
- Worker safety
  - OSHA
- Additional topics as described in health & safety plan

Client education activities regarding H&S issues as indicated in WPN 22-7

For Service Providers, many of these topics are covered in Minnesota's online Health and Safety Training, developed to be in alignment with WPN 22-7 More information on specific client education is below.

- Air conditioning and heating systems: Verbal or written material covering operation, maintenance, and how to identify health and safety concerns. In cases of installations, all manuals are provided to the homeowner. In cases where bulk fuel tanks are not removed as part of weatherization, written or verbal instruction of proper disposal is provided.
- Asbestos (all): Clients are informed in writing of any suspected Asbestos Containing Materials that will be disturbed during the weatherization process and the precautions that will be taken to ensure the occupant and workers safety through the weatherization process.
- Biologicals and unsanitary conditions: The Energy Auditor will review any findings from the audit with the client.
- Building structure and roofing: Any situations discovered during the energy audit that would require deferral or correction are reviewed with the client and documented on the appropriate form or scope of work.
- Code compliance: Any situations discovered during the energy audit that would require deferral or correction are reviewed with the client and documented on the appropriate form or scope of work.
- Combustion gases: Combustion safety is a topic that Energy Auditors discuss with clients after each energy audit.
- Electrical: When a hazard is identified, it is reviewed with the client and noted on the Safety Assessment form.
- Formaldehyde, volatile organic compounds (VOCS), flammable liquids, and other air pollutants: When this hazard is identified, it is reviewed with the client and noted on the Safety Assessment form.
- Fuel leaks: When this hazard is identified, it is reviewed with the client and noted on the Safety Assessment form.
- Gas range/ovens: When this hazard is identified, it is reviewed with the client and noted on the Safety Assessment form.
- Hazardous materials disposal: When this hazard is identified, it is reviewed with the client and noted on the Safety Assessment form.
- Injury prevention of occupants and weatherization workers: Energy Auditors will work with clients to address client injury prevention related to weatherization work including issues related to deferrals and pre-existing conditions.
- Lead based paint: If lead testing is conducted, the owner will be informed in writing of the results. The renovate right pamphlet is provided to all clients who live in homes built prior to 1978 to ensure they are aware of EPA's lead Renovation, Repair & Painting Program (RRP).
- Mold/moisture: Auditors provide one-on-one general education to all clients regarding high indoor moisture levels or actual moisture penetration, including the cause of moisture problems and how to avoid moisture problems. Clients are taught how to maintain acceptable relative humidity levels in the dwelling and how to operate any newly installed bath and/or kitchen fans. Energy Auditors educate clients on moisture if they identify practices that might result in high moisture levels in the home. Clients are informed that the following practices may affect moisture levels:
    - Cooking and use of kitchen exhaust fans
    - Bathing, showering and use of bathroom exhaust fans
    - Proper use and placement of humidifiers and dehumidifiers
    - Indoor plants
    - Aquariums
    - Storage of firewood inside the dwelling or attached garage
    - Plastic window covers
    - Keeping gutters clean

- Leaky plumbing or fixtures
- Site drainage
- Sump pumps

If moisture problems in a dwelling are severe and cannot be resolved under existing allowable health and safety measures, Weatherization Readiness Funds or other repair allowances, Service Provider auditors must explain to clients that weatherization measures could make the situation worse (e.g., attic and wall insulation and high-efficient furnace installation) and may not be completed until moisture problems are remedied by the client or property owner.

- Pests: client education videos inform clients that Energy Auditors will inform them of the presence of the evidence of pests; whether program funds can be utilized to remediate; and if community resources are available to the client.
- Radon: Radon mitigation is not an allowable H&S cost. As such, radon assessments are not part of weatherization in MN. Clients must sign an informed consent form prior to receiving weatherization services. This form must be kept in the client file. Energy Auditors review the confirmation of Receipt of a Citizen's Guide to Radon pamphlet form with clients at the energy audit.
- Safety devices: Energy Auditors are required to educate the client on operating procedures, care, and replacement of safety devices, such as smoke and carbon monoxide detectors.
- Ventilation and indoor air quality: clients are presented with information on combustion safety and hazards, including the importance of using exhaust ventilation when cooking as a part of client education on combustion appliances. Client education is conducted during the QCI and includes information on the location of service switches and cleaning of any ventilation equipment installed to meet the American Society of Heating Refrigeration and Air-Conditioning Engineers (ASHRAE) 62.2 ventilation standard.
- Window repair, door repair: Client education videos emphasize that window and door repair are not typical in WAP and almost always limited to windows or doors that are broken or not structurally sound.

State Plan Development – Budget

PY25 Formula Award	Commerce	Service Provider
Admin	$685,922	$1,273,854
Training	$1,323,008	$712,389
Program		$7,929,276
Weatherization Readiness Fund		$1,140,723
Total	$2,008,930	$11,056,242
Grand Total	$13,065,172	