



*Weatherization
Works*

***MINNESOTA
WEATHERIZATION
ASSISTANCE
PROGRAM
POLICY
MANUAL***

***PRODUCED WITH
U.S. Department of Energy
Weatherization Assistance Program
Funds***

***BY THE
Minnesota Department of Commerce
Office of Energy Security***

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HOUSEHOLD ELIGIBILITY

POLICY: Weatherization and related services may be provided only to eligible households. A household can establish eligibility in one of the following ways:

1. The household meets current income eligibility criteria, as specified in the LIHEAP and/or DOE State Plans.
2. There is a current eligible application in eHEAT.
3. For DOE funds only, there is categorical household eligibility. DOE categorical eligibility exists when one or more members of the household received either Supplemental Security Income (SSI) or Temporary Assistance to Needy Families (TANF) benefits at any time in the 12 months preceding the date of the application.

Note: *There is no categorical household eligibility that allows the use of LIHEAP-Transfer or other non-DOE WAP dollars.*

PROCEDURE: Household eligibility must be determined using the eHEAT software system. No other method is allowed.

STANDARD: An event properly created in eHEAT and downloaded to Weatherization Assistant demonstrates household eligibility. The eHEAT software system prevents the creation of weatherization events unless the household is eligible.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Eligible Dwelling Unit
Reweathering
Walk-Away: When Not to Weatherize

CITATION:

10 CFR 440.22(a)(1-3)
LIHEAP State Plan

PRIORITY FOR PROVIDING WEATHERIZATION SERVICE

POLICY: Service Providers must have in place a priority system that is:

1. Used to determine the order of service for program eligible clients.
2. Applied equally to both owner and renter occupied dwellings.

PROCEDURE: Client priority systems will incorporate households where one or more of the following exist:

1. Elderly member (60 years or over).
2. Handicapped member.
3. Child or children under the age of 19.
4. High energy consumption.

Service Providers may choose the order in which priority households are served.

The eHEAT WAP Priority list will be used to select clients for Weatherization energy conservation services. Applicants with a higher priority will be inserted into the waiting list ahead of applicants with lower priority criteria.

STANDARD: Service Providers must be able to show how their local priority determination is made, and how it best serves the eligible population in their service areas.

EXCEPTIONS: The priority process may be waived when there is an:

1. Emergency referral from the Energy Assistance Program (EAP).
2. Opportunity to complete other rehabilitation work with funds not directly administered through the DOE weatherization program.
3. Official state or federal disaster designation.

CROSS REFERENCE TO OTHER POLICIES: None

CITATION:

10CFR 440.3 Definitions
10CFR 440.16(b)
Weatherization State Plan

TIMELINESS OF SERVICE: AUDIT EVENTS

POLICY: Weatherization services (defined as taking place from the time of the energy audit, client education and actual work, to the final inspection) shall be provided to eligible households in a timely manner. No longer than 90 days should elapse between the earliest site visit complete date and the latest final inspection status date.

PROCEDURE: Service Providers should develop processes that allow work to move smoothly from audit to final inspection. This process should:

1. Allow jobs to be tracked at various stages in the process.
2. Enable Service Provider staff to view the status of all jobs and keep jobs moving through the system.

STANDARD: Service Providers must meet or exceed the benchmark set annually by the Department of Commerce.

EXCEPTIONS:

Delays which are clearly caused by circumstances beyond the Service Provider's control, provided that:

1. That the individual WA file adequately documents the reasons for the delay. This includes creating a delayed status date and providing an explanation for the delay in WA. **Note: Meeting the documentation requirement in this item does not eliminate the 90-day requirement; it simply notes and explains the delay.**
2. That mechanical systems are operating in a safe and dependable manner as defined in the policies listed below. Documentation or WA notes should describe the reason for delay.

CROSS REFERENCE TO OTHER POLICY:

CITATION:

Mechanical Test Standards
Combustion Appliance Safety
Dependability

ELIGIBLE DWELLING UNITS SINGLE FAMILY

POLICY: In order to be weatherized, a single family dwelling must:

1. Be occupied by an eligible owner or renter household **prior** to the start of any weatherization activities.
2. Have not been previously weatherized. *Note: Service Providers are required to maintain records by address or other property identification system (such as fire numbers) of dwellings that have received weatherization services.*

PROCEDURE:

1. Determine household eligibility using the eHEAT software system.
2. Review local electronic and/or paper records to determine if a dwelling has been previously weatherized.
3. When a dwelling meets both eligibility criteria:
 - Move the eligible household to the WAP Queue in eHEAT.
 - Create a WAP audit event in eHEAT and download it to Weatherization Assistant (WA).

STANDARD: WA and household files contain adequate documentation that the policy requirements have been met.

EXCEPTIONS:

1. MURL/Habitat for Humanity
2. Units weatherized prior to September 30, 1994.
3. Dwellings that meet the criteria in the Reweathering policy.
4. Vacant or ineligible units in a multifamily weatherization project.

CROSS REFERENCE TO OTHER POLICY:

Household Eligibility
Reweathering
Walk Away: When Not to Weatherize
Habitat for Humanity/MURL

CITATION:

10 CFR 440.22
USDOE Grant Guidance 09-1
USDOE Interpretation 2/14/95

ELIGIBLE DWELLING UNITS (MULTI-UNIT RENTAL BUILDING)

POLICY: Service Providers may use DOE funds to weatherize individual units and common spaces/systems in a building containing more than one dwelling unit provided that:

1. At least two-thirds of the dwelling units are eligible dwelling units (i.e., occupied by eligible households) OR
2. Will become eligible dwelling units within 180 days under a Federal, State or Local government program for rehabilitating the building or making similar improvements to the building.
3. In buildings with either two units or four units, eligible households must occupy at least half of the units.
4. Empty units and units occupied by ineligible households **cannot** be used to meet the two-thirds or one-half percent requirements.
5. If the two-thirds or one-half requirement is:
 - a. **Met**, then empty or ineligible units may be weatherized and counted as completed units, and work on the common space may be completed.
 - b. **Not met**, individual units occupied by eligible households may be weatherized and no work on the common space may be performed.
6. Eligibility for each building in a multifamily complex of buildings is determined separately.

Note: This policy **does not apply** to LIHEAP funds. LIHEAP funds can only be used to weatherize dwelling units occupied by eligible households.

PROCEDURE: Eligibility must be determined for each unit using the eHEAT software system **prior** to any other weatherization activities. Every unit including those which are vacant or ineligible must have its own eHEAT household file and corresponding WA event.

STANDARD:

1. An event properly created in eHEAT and downloaded to Weatherization Assistant demonstrates unit eligibility.
2. The Service Provider maintains a project master file that contains documentation of building and household eligibility.
3. Each building in a multi family complex of buildings meets the 50% or 66% rule.

EXCEPTIONS: None.

CROSS REFERENCE TO OTHER POLICY:

Household Eligibility
General Rental Policy

CITATION:

10 CFR 440.22(b) (1-2)

GROUP HOMES

POLICY: Weatherization services may be provided to group homes that have a room and board license from the Minnesota Department of Health.

PROCEDURE:

1. Review the group home's requirements for resident eligibility and the license from the Minnesota Department of Health to determine if the residents are within LIHEAP or WAP eligibility guidelines.
2. Determine if the structure has been previously weatherized.
3. Group Homes will be counted for production purposes using the method that allows the service provider to report the highest number of completions.
 - a. Each floor of the building used for living space may be counted as a separate unit; **OR**
 - b. Each 800 square feet of living space may be counted as a separate unit.

STANDARD:

Service Provider:

1. Retains documentation that the group home residents' eligibility requirements are within LIHEAP or WAP guidelines.
2. Indicates that it has viewed a copy of the appropriate Department of Health license for the building.
3. Weatherized only those portions of the building that are associated with the actual living environment of the residents. (Office space, gyms, pools, etc. must not be weatherized.)

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

10 CFR 440.11(f)

HABITAT FOR HUMANITY/MURL

POLICY: Service Providers may use DOE funds to participate in Habitat for Humanity or Minnesota Urban and Rural Homesteading Program (MURL) projects provided that the following criteria are met:

1. Weatherization services are provided to an **existing** single family dwelling.
2. Participation is limited to clearly defined energy conservation and/or associated Health and Safety activities.
3. The dwelling has not been previously weatherized.
4. All procedures listed below are followed.

Note: *The use of LIHEAP Transfer funds for these projects is **not** allowed because an eligible household must occupy the dwelling unit.*

PROCEDURE:

1. The household that will occupy the dwelling is identified and determined to be weatherization program-eligible using the eHEAT software system **prior** to any weatherization-funded activities.
2. There is a Weatherization Assistant (WA) audit that determines which energy conservation and associated Health/Safety activities will be completed.
3. There is a final inspection to verify that materials provided by weatherization funds have been appropriately installed.

STANDARD:

1. An audit event is created in eHEAT and downloaded to Weatherization Assistant.
2. The WA file clearly notes that the dwelling is part of the Habitat for Humanity or MURL program.
3. An eligible household is identified.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Household Eligibility
Completed Dwelling Unit
Reweatheringization

CITATION:

WAP Service Provider Contract, Item 2

WEATHERIZING MIXED-USE BUILDINGS

POLICY: Federal rules require that DOE funds may only be used on residential buildings or space. Mixed-use buildings (those which include both residential and non-residential space) therefore present some special challenges in order to determine their eligibility and the viability of providing services using WAP funds. Mixed-use buildings may be weatherized in some circumstances provided that the building (or a portion of the building) is occupied by an eligible household as delineated below:

1. Type 1: The building is a single family dwelling where the business use and the residential use completely or almost completely overlap. Example: home daycare.
2. Type 2: The residential portion of the building can be clearly separated from the business portion of the building or there is only a little overlap. Example: bed-and-breakfast or living quarters above a storefront.

PROCEDURE:

1. Type 1: Document the nature of the business in the dwelling and the amount of overlap between the business and the residential portions. Complete weatherization activities in the same manner as any other eligible single-family dwelling.
2. Type 2: Carefully evaluate the building prior to the completion of any other weatherization activities (including the energy audit) to determine feasibility of further steps. It is advisable to work with Commerce staff to develop the best plan/solution. Because situations vary widely, the following questions are intended as guidance:
 - a. Can the residential portion of the building be isolated in such a way that effective weatherization services could be provided only to this portion? This would be the same as weatherizing one unit in a multi-family building.
 - b. Does the eligible household have priority members?
 - c. What is the amount of the **residential-only** consumption? How will the residential-only consumption be determined? Is the residential-only consumption high enough to meet the high-consumption benchmarks?
 - d. Is proposed weatherization work likely to have a noticeable effect on the residential-only consumption?
 - e. Are there other funds/loans available to fund work on the business portion of the building? If so, using WAP funds for the residential portion may be considered appropriate.

STANDARD:

1. Type 1: The weatherization job meets all standards of a single family job.
2. Type 2: Weatherization Assistant and/or paper files adequately justify and document the work completed using WAP funds.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

10 CFR 440.1

REWEATHERIZATION

POLICY: Reweathering of previously weatherized dwellings is allowed subject to the following:

1. In general, a dwelling may be reweatherized if the following conditions are met:
 - a. The dwelling is currently occupied by an eligible household.
 - b. There are additional cost-effective energy conservation measures that can be completed as documented by a current energy audit.
2. USDOE funds may be used for reweatherization if the previous weatherization:
 - a. Occurred prior to September 30, 1994 AND was funded by USDOE funds OR
 - b. Was not funded by USDOE funds.
3. Other WAP contract funds may be used without regard to the date of the previous weatherization or the funds used previously.
4. Dwellings previously weatherized constitute the lowest priority for current weatherization services and should not make up any more than a small percentage of the homes weatherized in any program year.

PROCEDURE: In addition to following all the regular procedures for determining eligibility and weatherizing a dwelling, **reweatherized dwellings must be reported as such.** Use the “Previously Weatherized” check box in Client Screen of the Weatherization Assistant software to indicate the dwelling’s status as a reweatherization job.

STANDARD: WA file documents that the dwelling meets the requirements listed above.

EXCEPTIONS: Dwellings located in a federal or state declared disaster area may be reweatherized without regard to the date of previous weatherization activities. The dwelling must meet the requirements in the Minnesota WAP Disaster Plan.

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

10 CFR 440.18(e)(2)(iii)
USDOE Grant Guidance 09-1

WALK-AWAY: WHEN NOT TO WEATHERIZE

Revised July 2014

POLICY: There are sometimes conditions or situations when a service provider should not, or may choose not, to weatherize an eligible dwelling unit. Information for making this determination may become evident during the eligibility process, during the audit, or after work has started.

PROCEDURE 1 of 2:

1. The Service Provider must:
 - a. Make a documented determination that circumstances exist which prevent weatherization activities from proceeding.
 - b. Inform the client and landlord (if rental property) of the problem in writing and how the problem relates to the decision not to weatherize or not to continue work.
2. The letter may contain any or all of the following, as appropriate:
 - a. Corrective actions required before weatherization work can take place.
 - b. A time frame for all corrective actions must be in the letter.
 - c. The letter must notify the client of their right to appeal the local decision.
3. A copy of the letter and any other notes or communication related to the circumstances of the case must be in the household's file.

STANDARD:

1. Service Provider **must not** weatherize if:
 - a. The unit was weatherized after September 30, 1994 (this pertains to the use of only DOE funds. Non-DOE money, such as EAP/WX, may be used).
 - b. The dwelling is vacant. (Exception: multifamily units using DOE funds and the 50% or 66% client eligibility rule.)
 - c. Demolition of the dwelling is scheduled within the next 12 months.
 - d. The dwelling is condemned.
 - e. The dwelling has serious structural problems which make weatherization impossible, unsafe, or impractical.
 - f. The dwelling is a mobile home which is not adequately installed, supported, or permanently connected to required utilities.
 - g. The dwelling is a camper, recreational vehicle, boat, railroad car, bus, or other structure designed and constructed as temporary living quarters.
 - h. The dwelling's heating and/or mechanical systems components have not passed necessary safety tests.
 - i. The client/owner refuses to allow any weatherization work and/or necessary diagnostic and safety tests.
 - j. There are uncorrected mold problems or other documented health and safety issues that make weatherization impossible, unsafe, or impractical.
 - k. The dwelling unit is being remodeled and weatherization work is not coordinated with a rehabilitation program.
2. A service provider may choose not to weatherize a dwelling unit under the following conditions:
 - a. There are vermin, unsanitary, or other health and safety problems on the property that

- present a hazard to the weatherization workers.
- b. The client or occupants are physically or verbally abusive.
 - c. There are moisture problems not correctable through weatherization.
 - d. The client/owner refuses to allow cost-effective measure(s). The Service Provider must determine whether other cost-effective weatherization services can be provided.
 - e. There are unusual situations which, in the judgment of the Service Provider, must be corrected before providing weatherization services.
 - f. If a low income household will not receive the benefit of weatherization for at least a year after the work is done.

EXCEPTIONS: None

PROCEDURE 2 of 2: Service Providers must maintain an electronic database of all walk-away and deferral jobs beginning in Program Year 2014. Data may be requested at any time by the Department of Commerce. Databases must include, at a minimum:

1. Household number
2. Address including city and county
3. Date of walk-away or deferral
4. Reason for walk-away or deferral

STANDARD: Databases are complete and up to date.

EXCEPTIONS: None

CROSS-REFERENCE TO OTHER POLICY: None

CITATION:

US DOE Grant Guidance 02-5
MN State DOE Plan, Master File

GENERAL MULTI-FAMILY RENTAL REQUIREMENTS AND ELIGIBILITY

Revised July 2014

POLICY: DOE guidelines not only encourage weatherization of multi-family buildings, but specifically state that to exclude multi-family building “would appear contrary to prioritization required under WAP.” (WPN 11-4) A multi-family energy audit protocol is available in Minnesota to identify cost effective conservation measures and calculate energy savings and is required for multi-family buildings with five (5) or more units.

BENEFITS AND REQUIREMENTS: Multi-family buildings may be eligible and receive conservation services provided that the following requirements can be demonstrated:

1. The benefits of weatherization assistance will accrue primarily to the low-income tenants residing in the building.
2. Low income tenants will not be subjected to rent increases due to weatherization work for a reasonable period of time after the weatherization work is complete and that:
 - a. Low income tenants have been advised of their right to appeal any rent increases made after the completion of weatherization work.
 - b. Building owners have shown that any rent increase is related to matters other than the weatherization work.
3. No undue or excessive enhancement of the weatherized building shall occur to the value of the dwelling units without the need for further evaluation or verification.
4. Certain multi-family buildings under a specifically assisted or public housing program identified by the federal Department of Housing and Urban Development (HUD) or the United States Department of Agriculture (USDA), or included on a list published by DOE, may meet certain automatic income eligibility requirements and may not need further evaluation or income verification.
5. Instances in which tenants of multi-family buildings pay directly for their energy costs, the accrual of the benefits requirement may be assured by demonstrating a reduction in the tenants’ energy bills. However, DOE recognizes that there are instances in which a tenant does not pay directly for energy. An example would be when energy costs are paid through rent or under certain housing assistance programs where energy costs are paid through vouchers.

When a tenant does not pay for energy directly, a combination of categories of benefits could be used to demonstrate that the direct benefits of weatherization accrue primarily to the tenant.

Benefits that could be combined include:

- Longer term preservation of the property as affordable housing;
- Continuation of protection against rent increases beyond the local written agreements required under the WAP regulations (10 CFR 440.22(b)(3)(ii));
- Investment of the energy savings in facilities or services that offer measurable direct benefits to tenants;
- Investment of the energy savings from the weatherization work in specific health and safety improvements with measurable benefits to tenants;
- Improvements to heat or hot water distribution and ventilation to improve the comfort of residents; and
- Establishment of a shared savings program.

In addition to the requirement that all multi-unit building owners submit sufficient detail on the accrual of benefit requirements, building owners will be asked to contribute to weatherization costs to the extent that they are able to do so. All agreements between the building owner and the Service Provider should be documented in writing.

ELIGIBILITY AND GRANT EXPENDITURES FOR BUILDINGS OF TWO TO FOUR UNITS:

1. In a four-unit building, two units must be occupied by income eligible households in order to begin any work on the building. In a duplex, only one unit must be program eligible. In a three-unit building, two of the units must be eligible to proceed with weatherization.
2. Energy conservation work may be completed on all units in each of these cases, including the units that are not income eligible. There is no grant or expenditure limit on the amount spent per unit in buildings of four or fewer units. The actual final expenditure amount for these units is counted in the Service Provider's overall number of completed units and the current DOE average per unit. Refer to the DOE Annual State Plan for the per unit average. **Note:** It is recommended that the per unit DOE average be used for a total cost budget for buildings of two to four units.
3. LIHEAP EAP/WX transferred funds may not be spent on any unit that is not income eligible or is only income eligible under the 200% Federal Poverty Income Guideline determination.

ELIGIBILITY AND GRANT EXPENDITURES FOR BUILDINGS OF FIVE OR MORE UNITS:

1. For multi-family buildings with five (5) units or greater, two-thirds or 66% client eligibility is required to begin work on the building. When 66% of the clients in a building are determined to be program eligible, the entire building is eligible. A \$5,408 figure per eligible unit is allowed as a maximum expenditure for the entire building when using DOE funds. (For example, in a 30 unit building, 20 units must be eligible. Multiply 20 units by \$5,408 = \$108,160. This is the maximum dollar amount allowed for the total building project using DOE funds in this example.)
2. LIHEAP EAP/WX transferred funds may only be used on units meeting the EAP 50% State Median Income (SMI) guidelines. Average expenditure amounts must follow the Minnesota LIHEAP State Plan submitted to HHS.
3. Lists of buildings that have been prequalified at 66% or 100% DOE eligibility have been provided by HUD for Weatherization purposes. These buildings are categorically eligible. Review Weatherization Program Notices (WPN) 10-14, 10-15, and 10-15A for details.

PROCEDURE: The project master file must contain written and signed documents that:

1. Give the Service Provider permission from the owner to perform weatherization activities.
2. Delineate the scope of work including:
 - a. Weatherization related mechanical measures to be performed on the project.
 - b. Detailed Ea-Quip or Weatherization Assistant (WA) software information on cost-effective measures, estimated costs, and SIR calculations. An energy audit, with a Savings-To-Investment-Ratio (SIR) and dollar figure 'buy-down' from the landlord, may be combined with DOE funds. These are for specified and partnered conservation measures requiring an SIR of least one. See Weatherization Program Notice (WPN) 10-17 for details.

- c. Estimated dates for completion of work.
 - d. Other estimated or shared costs.
 - e. Who will pay for each measure (i.e., Service Provider, owner or both). *NOTE: If the owner is unable to contribute to the cost of installing weatherization measures, the owner must sign a statement to that effect.*
3. Secure the owner's agreement not to raise the rent for a set period of time (not less than one year) due to the completion of weatherization measures.
 4. Contain documentation detail or owner statements describing or quantifying the outcomes and benefits of how the weatherization work will primarily benefit the low income building residents (as opposed to the owner). See ***Benefits and Requirements*** of this policy.

STANDARD: The project master file contains all required forms/documents spelled out in the *PROCEDURE* above. The Service Provider's statement of benefit is deemed adequate to Department of Commerce WAP staff.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY or DOE PROGRAM NOTICES:

Eligible Dwelling Unit Single Family
 Household Eligibility
 Eligibility for Multi-Family Rental Buildings
 Health and Safety
 Standalone
 Allowed Activities and Measures Types Chart
 Heating Plant Replacement Sizing
 Heating Plant Replacement
 General Repair
 Combustion Appliance Safety
 Combustion Appliance Performance Indicators

March 2, 2010, DOE posted listings of eligible properties to the DOE web site:
http://apps1.eere.energy.gov/wip/eligibility_hud.cfm.

CITATION:

10 CFR 440.22 (c-e)
 Weatherization Program Notices (WPA):10-14, 10-15, 10-15A, and 10-17

SINGLE FAMILY RENTAL DWELLING ELIGIBILITY

POLICY 1: In order to be weatherized, a single family rental dwelling must:

1. Be occupied by an eligible household **prior** to the start of any weatherization activities.
2. Have not been previously weatherized. *Note: Service Providers are required to maintain records by address or other property identification system (such as fire numbers) of which dwellings have received weatherization services.*
3. Have written permission from the owner/landlord prior to the start of any weatherization activities, including the energy audit.
4. Have included an owner/landlord contribution wherever possible.

PROCEDURE 1:

1. Household eligibility must be determined by using the eHEAT software system.
2. Review local electronic and/or paper records to determine if the dwelling has been previously weatherized.
3. When a dwelling meets both eligibility criteria:
 - a. Move the eligible household to the WAP Queue in eHEAT.
 - b. Create a WAP audit event in eHEAT and download it to Weatherization Assistant.

PROCEDURE 2:

The Service Provider must:

1. Secure written permission of the owner/landlord prior to the start of any weatherization services, including the energy audit.
2. Actively pursue owner/landlord contributions to the proposed energy conservation activity. *Note: While owner/landlord contributions are not required in every instance, the effort to secure such contributions and the reasons for the success or failure must be adequately documented in service provider records.*

STANDARD: Service Provider records adequately document that the procedures above have been followed.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Eligible Dwelling Unit Single Family
Household Eligibility
Eligibility for Multi-Family Rental Buildings

CITATION:

10 CFR 440.22 (c-e)

CLIENT APPEALS

Revised July 2014

POLICY: Applicants/recipients have the right to appeal decisions made by subgrantees and the Department of Commerce (Commerce). The appeals process:

1. Helps applicants and recipients receive fair consideration and appropriate assistance
2. Is designed to be non-confrontational and reasonably resolve disputes

Appeals can be at any of three levels. Remedies at one level must be exhausted at one level before an appeal can be filed at the next level. The appeal levels must be completed in the order in which they are listed in the procedure below.

PROCEDURE:

LEVEL 1 (Local): Appeals at this level may be initiated by phone, but must be in writing to allow the subgrantee to take action. The letter must state what part of the weatherization process was unsatisfactory and provide sufficient documentation of the problem. Once the letter and any documentation provided by the client have been received, the subgrantee will:

1. Review the following:
 - a. Appeal letter and documentation provided by the client
 - b. Weatherization Assistant data or notes, household file information, and any other documentation
 - c. Pertinent federal/state rules and WAP policies
2. Take no more than fourteen calendar days to reach a decision on the appeal, AND
3. Inform the client in writing of its decision, including:
 - a. Reasons for the decision
 - b. Any action the subgrantee will take to resolve the issue
 - c. Information about how to appeal to the next level that includes at least the following information:
 - i. That the appeal to Commerce must be postmarked no more than fourteen calendar days from the Service Provider's decision
 - ii. Commerce address
 - iii. Name/phone number of the Commerce Appeals Officer

LEVEL 2 (State): If the applicant/recipient is not satisfied with the subgrantee's determination, he/she may file a written appeal to Commerce. In order to be considered by Commerce, the appeal must be postmarked within fourteen calendar days of receiving the subgrantee's decision. Commerce will:

1. Notify the local agency that an appeal has been received.
2. Request that the subgrantee forward all documents in the household file, including the client's local appeal letter and the subgrantee response to the appeal. Documents may be faxed, sent by overnight express or scanned and sent via email. In addition, Commerce will request the most recent Weatherization Assistant file data.
3. Review all documents/details relevant to the appeal
4. Analyze the appeal issues in relation to federal and state rules and policies
5. Issue a written decision to the applicant/recipient by certified mail within fourteen calendar days of the receipt of all appeals material, including at least the following:
 - a. Reasons for the decision.

- b. Information on how to appeal to the next level, including the fact that at the next level is a public process and that all information related to the applicant/recipient and his/her appeal will become public information at the Office of Administrative Hearings, State of Minnesota.

LEVEL 3 (Office of Administrative Hearings): If the applicant/recipient is not satisfied with the Commerce decision, he/she may make a written request to the Manager of the State Energy Office for an appeal to the Office of Administrative Hearings (OAH). When a request for appeal is received, Commerce will:

1. Arrange a hearing date that allows adequate time for notification of the applicant/recipient, the subgrantee, and other applicable persons as described below
2. Reserve a room for the hearing
3. Prepare/mail proper forms and documents
4. Prepare Commerce testimony

The OAH hearing is a fact-finding process presided over by an Administrative Law Judge. Hearing attendees may include:

1. Applicant/recipient (complainant)
2. Applicant/recipient's lawyer (if desired by the complainant)
3. Commerce and State Attorney General representatives
4. Subgrantee representative

Once the hearing is complete:

1. The Administrative Law Judge considers the facts that have been presented and renders a written opinion with recommendations to the Commissioner of Commerce
2. The Commissioner reviews the opinion/recommendations and makes the final decision with regard to the appeal
3. The Commissioner's decision constitutes the last step in the administrative appeals process

STANDARD: All appeal-related activities conform to the steps in this policy.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

WAP Service Provider Contract, Item 2

DATA PRIVACY

POLICY: All electronic and hard copy individual and/or household information and records are private data. Service Provider weatherization staff have access to the data needed to complete WAP activities and related services to households.

Weatherization staff may release relevant data to their contractors to enable them to perform tasks for client households. Staff should caution contractors that the data provided is:

1. Private and must not be shared with anyone else.
2. Not to be used to solicit other business with client households.

Weatherization Staff may also release private data to external third parties in order to better assist clients provided that:

1. There is a written Release of Information that specifies the reason for the release and contains an expiration data (see Appendix).
2. The client understands and has signed the Release.

All client data must be stored in a secure fashion that limits access as much as possible, and provides access to those who have the right to see the data. Example: Federal and state funding source representatives. Note that clients have the right to see the contents of their own files upon request.

PROCEDURE: None

STANDARD: Private data held by Service Provider is maintained and used in accordance with the criteria in the policy above.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

MN Statute §216C.266

RENEWABLE ENERGY EQUIPMENT GRANT

POLICY: Use the Renewable Energy Equipment Grant Fund to complete allowed activities in accordance with the criteria outlined below. Allowed activities include the installation of solar equipment, wood-fired boilers, and bio-fuel heating plants.

PROCEDURE:

1. All households must:
 - a. Be currently eligible using the eHEAT application process.
 - b. Live in a dwelling that is currently in the process of being weatherized **or** has previously been weatherized.
2. The following forms must be completed by the service provider and approved by the Department of Commerce (DOC) **prior** to installing any materials or equipment:
 - a. Renewable Energy Equipment Grant form (applied to all three types of projects).
3. Dwellings currently in the process of weatherization must have an Audit Event created in eHEAT and downloaded to Weatherization Assistant. The renewable measures to be completed must be included in a **separate** work order in the Audit Event.
4. Dwellings previously weatherized must have a Standalone Event created in eHEAT and downloaded into Weatherization Assistant.
5. All renewable work orders in Audit and Standalone Events must meet the following criteria:
 - a. Work order type must be "Other."
 - b. Measure type must be "HVAC."
 - c. Measure name must be solar air panels, wood boiler or bio-fueled heating plant.
 - d. All or part of the work must be costed to the Renewable Energy Equipment Grant.
6. Report costs to DOC in the Weatherization Assistant software.

STANDARD:

All materials and equipment are installed in accordance with the criteria in the Work/Materials policy. The following more specific standards apply:

1. Solar equipment: Show a simple payback of fifteen years or less, depending on the type of fuel that the panels will be supplementing.
2. Wood-fired boilers: Meet the EPA Outdoor Wood-Fired Hydronic Heater voluntary emission standard.
3. Bio-fuel heating plants: Must meet the EPA Phase II emission standard.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Household Eligibility
Eligible Dwelling Unit Single Family
Work and Material Standards

CITATION:

MN Statute §239.01

HOUSEHOLD FILE CONTENTS

Revised July 2014

POLICY: All household (paper) files must contain sufficient forms and documentation to meet the requirements below:

1. All household (paper) files must contain the following documents: (*Forms provided by Commerce)
 - * 1. Weatherization Service Agreement
 - * 2. State Historical Preservation Office Review Form
 - * 3. Blower Door and Pressures Form
 - * 4. Mechanical Testing Form
 - * 5. Final Inspection Form
 - * 6. Lead Safe Renovate Right Sign Off Form
 - * 7. Client Education Form
 - * 8. Notice of a Safety Problem Form
 - * 9. Mold and Moisture Assessment Form
 10. ASHRAE 62.2 Calculation (the form must be approved by Commerce)
 11. Client Interview Form
 12. All handwritten notes regarding the weatherization job. This includes but is not limited to notes about existing conditions, problems encountered, work completed, work that is unable to be completed.
 13. All work orders with installers' notes/comments.
 14. Energy Auditor's Data Collection Forms. If a tablet is used for data entry, include the NEAT OR MHEA Audit Input Report.
 15. Service Provider Warranty information.
 16. Weatherization Assistant Software's Recommended Measures Report
 17. eHEAT Application Summary.
 18. Verification that the dwelling has not been previously weatherized
 19. Client Checklist Report from WA
 20. Lien waivers from all contractors and material suppliers

2. The following forms as indicated below are required and are needed when appropriate to the dwelling. (*Forms provided by Commerce)
 - * 1. Deferral Form
 - * 2. Client Refusal Form
 - * 3. Client Preparation Form

- * 4. Fuel Switch Request Form
 - * 5. Life Cycle Fuel Cost Calculations for Fuel Switching Form
 - * 6. Scope of Work Change Order Form
 - * 7. Lead Test Kit Documentation Form
 - * 8. Lead Safe Recordkeeping Form
 - 9. Foundation Wall Foam Authorization from Commerce
 - 10. Door Replacement Authorization from Commerce
 - 11. Photos and other documentation of Lead-Safe Work practices
 - 12. Client appeal or complaint must include:
 - a. Description of the issue(s) being contested and resolution, if any.
 - b. Documentation of the appeal to the local service provider and all related documentation and correspondence, including the service provider's decision.
 - c. Documentation and correspondence related to further levels of the appeal.
3. Photos must be used as needed to document:
- 1. Existing conditions in the dwelling
 - 2. Layout of the dwelling
 - 3. Reasons for planned work and potential problems
 - 4. Work completed
 - 5. Any other problems or issues
 - 6. Photos of Lead Safe Work Practices

NOTE: Photos should be labeled, dated, and reference the corresponding information and notes in WA. Photos must be stored on a server and must be included in the household file or made electronically available for all houses visited during monitoring visits.

4. Purchasing and procurement information is required when any work is completed by contractors. This requirement applies to all contractors.
- 1. Files for all households that require work by contractors must include the following:
 - a. Purchase authorization (purchase order, voucher, etc)
 - b. Work order for each contractor
 - c. Written notification to all bidders
 - d. Itemized invoices (labor and itemized materials split)
 - e. Contractor payment authorization with date
 - f. Payment date
 - 2. When any work is released for bid, the household file must contain:
 - a. A bid form that includes bid specifications for the project
 - b. A list of contractors invited to bid the project.
 - c. A copy of all bids received
 - d. Each bid should be itemized to include a labor and itemized

materials split.

5. Other information is required when applicable:

1. Rental Agreement
2. Building, Plumbing, Electrical, and other permits where required.
3. Wrightsoft Load Report
4. Contractors' Manual J calculation (see the Sizing Requirements for Heating Plants Replacements Policy).

PROCEDURE: Service Providers shall develop local procedures that enable them to ensure that household files contain all required documents.

STANDARD: Files contain all required forms and documentation.

EXCEPTIONS: None

CROSS REFERENCE TO WAP DOCUMENTS:

CROSS REFERENCE TO OTHER POLICY:

CITATION:

WAP Service Provider Contract, Item 2

INCOME DOCUMENTATION FOR PUBLIC HOUSING UNITS

POLICY: A Service Provider may use the public-housing documentation of income to determine if a Public Housing building to be weatherized is an eligible structure.

PROCEDURE:

1. For each unit in the building, the Housing Authority will furnish the unit number, names, birthdates, and the total household income of all household members.
2. The Housing Authority must indicate the time period covered and the basis for determining income.
3. Eligibility must be determined for each unit using the eHEAT software system **prior** to any other weatherization activities. Every unit including vacant and/or ineligible units must have its own eHEAT household file and corresponding WA event.
4. The Housing Authority or the Weatherization Service Provider will obtain a signed statement from each household granting the Weatherization Service Provider permission to audit, inspect, and install cost-effective conservation measures.
5. The Weatherization Service Provider will obtain a signed Landlord Agreement which will be placed in the master file.

STANDARD:

1. Income information corresponds to the time period for which the weatherization service is provided.
2. Income meets current eligibility guidelines.
3. 50% of the households in two or four unit buildings and 66% of the households in all other buildings are WAP-eligible, in order for the service provider to complete any weatherization measures in the commons space of the building.
4. Each building in a multi family complex of buildings meets the 50% or 66% rule in order for the service provider to complete any weatherization measures in the commons space of the building.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Eligibility for Multi-Family Rental Buildings

CITATION:

WAP Service Provider Contract, Item 2

WORK PLAN AND BUDGETS

POLICY: Each Service Provider receiving Weatherization Assistance Program funds from the Department of Commerce (DOC) must complete and submit work plans and/or budgets as follows:

1. USDOE fund: Work plan and budget.
2. LIHEAP Transfer funds: Budget for each fund.
3. Propane and Renewable funds: No budget or work plan required.

All budgets and work plans will be reviewed and approved by DOC staff.

PROCEDURE:

1. DOE Work Plan: Answer all questions included in the eHEAT work plan.
2. Budgets: Construct budgets that best delineate each Service Provider's plan for the use of contract funds during the program year. Use the Allowed Activity policy and accompanying chart as guides.
3. Submit both work plan and budgets using eHEAT to DOC for approval.
4. Submit revised budgets for approval if there are changes in funding levels.

STANDARD:

1. Work Plan: Answers to questions are clear and provide an accurate description of program operations for the contract.
2. Budgets: Budget amounts and the activities they fund conform to the Allowed Activity policy.
3. Budget amounts add correctly to the totals on the most recent Notice of Funds Available (NFA).

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Allowed Activities Budget and Expense Reporting
Activity/Budget/Expense Categories

CITATION:

WAP Service Provider Contract

SERVICE PROVIDER MONITORING

POLICY: The Department of Commerce (DOC) will conduct annually comprehensive monitoring of all Service Providers. The purpose of monitoring is to identify areas where improvement is needed and to offer training/technical assistance to aid in achieving performance improvements. Monitoring also serves to recognize program successes and best practices of Service Providers.

PROCEDURE: Monitoring activities include:

1. A review of the Service Provider's use of all federal and non-federal WAP funds.
2. At least one visit to each Service Provider during each contract period (program year).
3. Reviews of household files.
4. Inspections of completed weatherization work.
5. Examination of other Service Provider records and documents including fiscal audits.
6. Reviews of Service Provider data and reports submitted via eHEAT and Weatherization Assistant (WA).
7. Written reports that delineate monitoring results and required and/or recommended actions as needed, and program successes.
8. Additional follow-up monitoring as needed.
9. Unrestricted access to any books, documents, papers or other documents pertinent to the Service Provider's contract.
10. Reasonable access to Service Provider staff for interviews or questions relating to the Service Provider contract.

STANDARD:

1. All monitoring activities of Service Providers for each contract are completed.
2. All reports are provided to Service Providers in a timely manner.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Workplan and Budgets
Non-Compliance Sanctions

CITATION:

10 CFR 440.23

NON-COMPLIANCE SANCTIONS

POLICY: It is the responsibility of the Department of Commerce (DOC) to assure its funding sources that the legislative and regulatory requirements of weatherization are met and that grant funds are spent in accordance with all program and fiscal regulations and policies. Program monitoring and follow-up activities determine Service Providers' levels of compliance or non-compliance. While most compliance issues are resolved in response to monitoring reports, in cases of continued or severe non-compliance, DOC may take any or all of the steps below.

Serious non-compliance issues are addressed using any or all of the procedures below. These procedures may be applied if a Service Provider:

1. Has a documented history of poor performance.
2. Is not financially stable.
3. Lacks the organizational capability to carry out its responsibilities.
4. Materially fails to comply with the terms and conditions of its contract with DOC.

PROCEDURE 1: DOC may, at its discretion, impose additional requirements on a Service Provider in a written corrective action plan that includes:

1. Nature of the requirements and why they are being imposed.
2. Corrective actions that are needed.
3. Time allowed for completing corrective actions.

PROCEDURE 2: In addition to the corrective action plan, DOC may also take one or more of the following actions as appropriate:

1. Temporarily withhold cash payments to the Service Provider pending correction of deficiencies or until stated performance benchmarks are reached.
2. Disallow costs for non-compliant activities.
3. Wholly or partly suspend or terminate the current contract.
4. Withhold further contracts with the Service Provider.
5. Other actions as needed.

STANDARD: DOC actions meet the criteria above.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Monitoring

CITATION:

10 CFR 600.114

10 CFR 600.162

COMPLETED DWELLING UNIT AUDIT EVENT

Revised July 2014

POLICY: No dwelling unit may be reported as completed until the following conditions are met:

1. All weatherization, health and safety, mechanical systems and other materials are installed.
2. The Service Provider or its authorized representative:
 - a. Has performed a final inspection(s) of all work including any mechanical work performed, and
 - b. Certified that the work has been completed in a quality manner and in accordance with the priority determined by Weatherization Assistant (WA) software.
3. A cost effective measure is charged to DOE funds.
4. All audit events have estimated and actual Job SIRs of one (1.0) or greater.
5. All energy conservation measures within audit events have estimated and actual SIRs of one (1.0) or greater.
6. The following statuses are set in WA.
 - a. Site Visit Completed On.
 - b. Work Passed On
 - c. Work Completed On
 - d. Audit Complete and Locked On.
 - e. Invoice Received
 - f. Invoice Paid
7. The Weatherization Service Agreement is signed by both the client and the Service Provider representative.
8. The requirements of the Household Files Contents Policy are met.

PROCEDURE:

1. Complete the final inspection.
2. Review WA electronic and paper files to ensure that all the conditions specified in the above policy have been met.
3. Set the Complete and Locked status in the WA file after all completion criteria in the policies have been met.
4. Report the completion to DOC as specified in the Weatherization Completions and Production Reporting policy.

STANDARD: Dwelling units meet the criteria in this and the policies cross-referenced below.

EXCEPTIONS: Vacant/Ineligible rental units must have the owner or agent's signature in lieu of a client's signature for work completion when weatherized under the DOE 50% or 66% rule.

CROSS REFERENCE TO WAP DOCUMENTS:

Weatherization Best Practices: Fuel Switching for Heating Plants
Weatherization Best Practices: Doors and Windows
Weatherization Best Practices: Water Heaters
Weatherization Best Practices: Gas Ranges and Cook Stoves
Weatherization Best Practices: Smoke Alarms and Carbon Monoxide (CO) Alarms
Blower Door and House Pressures Form
Change Order Form
Clean and Tune/Replacement Form
Clean up/Deferral Form
Client Participation Form
Client Refusal Form
Fuel Switch Form
Lead Safe Recordkeeping Form
Lead Safe Renovate Right Form
Lead Test Kit Documentation Form
Life Cycle Fuel Cost Calculations for Fuel Switching Form
Notice of a Safety Problem Form
Mold and Moisture Assessment Form
State Historical Preservation Office Review Form
Weatherization Service Agreement Form
Worst Case Draft and Mechanical Inspections Form

CROSS REFERENCE TO OTHER POLICY:

EAP/WX Funds
Final Inspection Audit Event
General Multi-Family Rental Requirements and Eligibility
Health and Safety
Household File Contents,
Multi-Family Policy
Use of Program Funds for Callback Work on Completed Units
Weatherization Completions and Production Reporting
Weatherization Allowed Activities and Measure Type Chart
Worst Case Draft
Combustion Appliance Performance Indicators

CITATION:

10 CFR 440.16(g)

WEATHERIZATION COMPLETIONS AND PRODUCTION REPORTING

Updated July 2014

POLICY 1: Work activities and final inspections for all event types (Audit, Standalone, and Callback) must be completed within one program year (i.e., one contract year) and all measures must be attributed to a Cost Center/Fund. Weatherization Service Providers must submit reports as specified in *Procedure 1* below.

PROCEDURE 1: Service Providers must submit monthly Client Exports to the Department of Commerce (DOC) on the tenth of the month for the previous month's activity. Service Providers may submit Client Exports more frequently or as requested.

STANDARD 1: All WAP data and reports must be submitted in accordance with required timeframes and in the form and manner established by the Department of Commerce.

EXCEPTION 1: Dwellings for which site visits (energy audits) have been completed in the last quarter of the program year (April – June) may complete all measures and inspections for that event on or after July 1st (the start of the next program year). No longer than ninety (90) days should elapse from the date of the site visit (audit) was completed until the last work order is inspected. Final inspections, work orders and the measures within them must never be split between two program years.

POLICY 2: Audit events may be counted as completed units for one or more funds provided there is at least one cost-effective energy conservation measure costed to the fund to which the unit is to be counted. **Allowed** WA energy conservation measure types include: General Heat Waste/Air Infiltration, Baseload, Insulation, HVAC, Doors/Windows. **Disallowed** measure types for this purpose include Health/Safety and General Repairs. This policy applies to all funds administered by DOC.

PROCEDURE 2: Service Providers may combine funds when the energy conservation and/or energy-related health/safety needs of the dwelling and household exceed the amount available in one fund.

STANDARD 2: When funds are combined, Service Providers comply with rules and policies for any funds used. Per unit averages for all funds must be maintained.

CROSS REFERENCE TO OTHER POLICY:
Financial and Program Report Submissions

CITATION:
WAP Service Provider Contract, Item 1

FINANCIAL AND PROGRAM REPORT SUBMISSIONS

Revised July 2014

POLICY: All financial and program reports must be submitted to the Department of Commerce (DOC) in a timely and accurate manner according to the procedure below.

PROCEDURE:

1. Financial Status Reports (FSR):
 - a. Must be submitted in eHEAT.
 - b. Monthly: All expenses charged to a fund/cost center in a given month must be reported to DOC and submitted by the tenth day of the following month. Example: Expenses incurred in July must be reported by August 10.
 - c. Final Closeout: Total expenses for the contract year charged to a fund/cost center must be submitted to DOC thirty days after the end of the contract year.
2. Fiscal Audits must be submitted to DOC within nine months of the end of the audit period.
3. Program Activity Reports: The Weatherization Assistant (WA) Client Export Report must be submitted to DOC by the tenth day of the month following the month in which the WA activities were completed.

STANDARD: All financial and program reports meet the criteria in this policy.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Weatherization Completions and Production Reporting
Completed Dwelling Unit
Minnesota Weatherization Field Guide
Minnesota Mechanical Systems Field Guide

CITATION:

WAP Service Provider Contract, Item 9

FINANCIAL CLOSEOUT

POLICY: At the close of each program year (June 30th), all Service Providers must close out all Weatherization Assistance Program (WAP) contract funds and submit a Closeout Package for each fund. All Closeout Packages must:

1. Be submitted to the Department of Commerce (DOC) by July 30th.
2. Include all the components listed in the **PROCEDURE** below.

PROCEDURE: A final Closeout Package must include:

1. A final Financial Status Report (FSR) for each fund. The FSR must:
 - a. Be submitted in eHEAT.
 - b. Show cumulative expenditures for the program year.
 - c. Report only expenditures that equal the total on the last Notice of Funds Available (NFA) for the fund.
 - d. Not include expenditure of local funds, interest received, or program income.
 - e. Be submitted as a signed hard copy via mail to DOC. An authorized signature on a printed copy of the eHEAT FSR is acceptable.
 - f. Be marked **YES** under FINAL on the FSR.
2. A check for the balance of any funds that remain unspent and unobligated. Make the check payable to the Minnesota Department of Commerce. The check record must contain the Fund ID number and the program name.
3. A list of any continuing liabilities on the fund **or** a statement that there are no continuing liabilities. This note may be typed into the Service Provider Note Box on the eHEAT FSR.
4. An inventory of non-expendable personal property purchased during the program year or a statement pertaining to inventory. This note may be typed into the Service Provider Note Box on the eHEAT FSR.
5. Send Closeout Packages to:
Minnesota Department of Commerce
Fiscal Services
Attn: Weatherization Closeout Package
85 7th Place East, Suite 600
Saint Paul, MN 55101-2198

In addition, the Service Provider should be able to produce a reconciliation of cash draws and expenditures if requested by the State. The reconciliation must identify each cash payment received, the payment date, and the corresponding monthly total of FSR expenditures reported for the fund.

STANDARD: Closeout Packages are correct and complete in order.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION: None

GENERAL PROCUREMENT POLICY STATEMENT

January 2012

POLICY: Service Providers are required to comply with Federal standards in the purchase of supplies and other expendable property, equipment, and services. The purpose of the standards is to ensure that materials and services are obtained in an effective manner that is the most economical and practical procurement for the Federal Government. These procurement standards must be in compliance with Federal statutes and executive orders. All Service Providers must establish written procurement procedures to govern local procurement activities.

PROCEDURE: None

STANDARD: Procurement procedures/activities meet both Federal directives and DOC standards.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

2 CFR 215.44(a)
10 CFR 600.144(a)

COMPETITION

POLICY: All procurement transactions must be conducted in a manner to provide, to the maximum extent possible, free and open competition. Federal rules provide for the right of bidders to compete, but do not provide a right to be awarded a bid. Federal rules state that:

1. Awards shall be made to the bidder whose bid is most responsive to the solicitation and is most advantageous to the service provider. Price, quality, and other factors must be considered.
2. The Service Provider may accept or reject any or all bids when it is in its best interest to do so.

PROCEDURE:

Service Provider must:

1. Publicize its need to purchase goods, equipment or services as widely as possible.
2. Consider organizational conflicts of interests.
3. Consider noncompetitive practices among contractors that may restrict or eliminate competition or otherwise restrain trade.

STANDARD: Service Provider records are maintained so that they:

1. Document the method used to publicize its procurement action.
2. Show written documentation of contractors/suppliers who were solicited and contractors who responded to the solicitation.
3. Indicate the basis for selecting or rejecting a bidder.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

General Procurement Policy

CITATION:

2 CFR 215.43
10 CFR 600.43

CONTRACTOR PERFORMANCE

POLICY: Service Providers must maintain a contract administration system to insure that:

1. There is a written agreement with all contractors specifying the terms and conditions under which work will be performed.
2. Contractors conform to the terms, conditions, and specifications of the agreement.
3. Contractors complete work that is in accordance with the policies in the Policy Manual.
4. Contractor performance is evaluated fairly and objectively. Results are documented by the Service Provider.

PROCEDURE: Contract administration systems are developed at the Service Provider level. The local system:

1. Should be designed to meet local needs and conditions.
2. Need not be lengthy or complicated.

STANDARD: Service Provider systems meets the criteria in Federal and State policy. Service Provider activities meet standards in the local policy.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

General Procurement Policy

CITATION:

10 CFR 600.147

CONTRACTOR REQUIREMENTS

Revised July 2014

POLICY: All Weatherization Assistance Program activities provided by private contractors and their subcontractors must comply with the standards listed below. It is the responsibility of each Service Provider to ensure that their contractors and subcontractors:

1. Understand relevant energy program requirements.
2. Have the capacity to implement those requirements.
3. Treat clients with respect and dignity.

PROCEDURE: Service Providers are required to maintain clear, adequate and up-to-date documentation to ensure that their contractors and their subcontractors meet these standards.

STANDARD: All contractors and their subcontractors must:

1. Warranty all work and materials. The warranty must be in writing and must be signed by the contractor and by the client, building owner, or authorized agent.
2. Be licensed and/or bonded as required by pertinent laws, ordinances, regulations, or codes.
3. Obtain required permits from authorities with jurisdiction, as applicable.
4. Provide Lien Waivers to the Weatherization Service Provider for all work completed in accordance with Minnesota Statute 514.001
5. Meet the following minimum insurance coverage requirements:
 - a. Property damage, bodily injury, and liability as determined by the Service Provider.
 - b. Basic worker's compensation, where required by law or regulation.
6. Have access to tools and equipment to enable them to comply with all regulations and codes.
7. Complete all work in accordance with DOE and federal program policies, standards and requirements. **No contractor may be paid for work until the Service Provider completes a final inspection that verifies that the contractor's work has been satisfactorily completed.**
8. Pass a criminal background check. Service Providers must conduct background checks according to their own internal written policy on all crews and contractors, using the Minnesota Bureau of Criminal Apprehension's Computerized Criminal History system.
9. Not be excluded from receiving federal funds. Service Providers must document that contractor debarment status has been verified using the System for Award Management (SAM).
10. Follow EPA's Lead; Renovation, Repair and Painting Program (RRP) if performing projects that disturb lead based paint, which includes:
 - a. To be trained in Lead Safe Weatherization (LSW)
 - b. To be an EPA certified firm
 - c. To be accompanied by an EPA Certified Renovator

EXCEPTIONS: None

CROSS REFERENCE TO OTHER WAP DOCUMENTS

Final Inspection Form
Lead Safe Test Documentation Form
Lead Safe Recordkeeping Form

CROSS REFERENCE TO OTHER POLICY:

Contractor Performance

Household File Contents
Final Inspection
General Procurement Policy

CITATION:

2 CFR 215.44(d)
10 CFR 600.113
Minnesota Statutes 514
Weatherization Program Notice 11-6
EPA RRP Rule

CONTRACTOR SELECTION

POLICY: Service Providers shall make contracts only with responsible contractors who possess the potential ability to perform successfully under the terms and conditions of the proposed procurement. Consideration must be given to:

1. Contractor integrity.
2. Record of past performance.
3. Financial and technical resources or accessibility to other necessary resources.
4. Other contractor requirements contained in this manual.

PROCEDURE: None

STANDARD: Service Provider documentation demonstrates that the procurement action:

1. Considers all relevant factors.
2. Is conducted in a fair and equitable manner.
3. Results in the selection of qualified contractors determined by a documented process that evaluates skills, technical performance, training and customer service.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

General Procurement Policy
Contractor Performance
Contractor Requirements

CITATION:

3 CFR 215.44(d)

COST AND PRICE ANALYSIS

POLICY: Some form of cost and price analysis should be made and documented in connection with every procurement action. The exact form of the analysis varies with the nature of the purchase and the amount of funds to be spent.

PROCEDURE:

1. Analyze price by reviewing and evaluating each cost element to determine if it is reasonable, can be cost-allocated, and is allowable.
2. Analyze price by comparing price quotes, market prices, and similar indices.

STANDARD: Service Provider files provide adequate documentation that cost and price analysis have been completed.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

General Procurement Policy

CITATION:

2 CFR 215.45
10 CFR 600.145

PROCUREMENT: LARGE PURCHASES (\$5,000 OR HIGHER)

POLICY: All purchases of \$5,000 or more must be approved by Department of Commerce (DOC) **prior** to purchase. This includes vehicles, equipment, and other non-expendable personal property. Federal fund source approval is required for purchases greater than \$5,000 when using federal funds.

PROCEDURE:

1. Follow the Purchasing Procedures and the Procurement Policies in the WAP Manual to obtain bids.
2. Complete the DOC Purchase Request form (top section only) and the Purchase Checklist available in the Appendix of this Manual.
3. Submit the following documents/information:
 - a. DOC Purchase Request form.
 - b. DOC Purchase Checklist.
 - c. Copy of bid specifications and/or Request for Proposals (RFPs).
 - d. List of potential contractors/vendors receiving the solicitation.
 - e. Copies of any other solicitation documents such as newspaper ads, including the date and name of the publication.
 - f. Copy of bids submitted by contractors/vendors.
 - g. DOC Disposition/Transfer Request if:
 - i. The proposed item replaces an existing item, AND
 - ii. The existing item was purchased with WAP funds.
4. Submit the following information/documents to DOC after the item is received:
 - a. Copy of the completed/signed Purchase Request with the bottom section completed.
 - b. Copy of the delivery receipt (if applicable) and the invoice.

STANDARD: Service Provider meets all the criteria above in order for a purchase request to be considered for approval.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

General Procurement Policy

CITATION:

WAP Service Provider Contract, Item 2

SOLICITATIONS

POLICY: Solicitations for goods and services must provide the following:

1. A clear and accurate description of the requirements that the material/product/service must meet. The description must not unduly limit competition.
2. Requirements that all bidders must fulfill.
3. All factors to be used in evaluating bids.
4. Description of functions to be performed or performance required.
5. Range of acceptable characteristics or minimum acceptable standards.
6. Consideration of the following:
 - a. Preference given to products and services that:
 - i. Conserve natural resources.
 - ii. Protect the environment.
 - iii. Are energy efficient.
 - b. Positive efforts to use small businesses, minority-owned firms, and businesses owned by women.
7. Other factors relevant to the specific procurement action.

PROCEDURE: None

STANDARD: Service Provider maintains documentation verifying that procurement actions meet the criteria in the above policy. Service Provider procurement records include the following, at a minimum:

1. Basis for contractor/vendor selection.
2. Justification for lack of competition when competitive bids are not obtained (sole source).
3. Basis for award cost or price.

Specifications should:

1. Meet the Service Provider's business need.
2. Identify all requirements.
3. Be measurable and verifiable.
4. Provide for an equitable award.
5. Allow fair and open competition.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

General Procurement Policy

CITATION:

2 CFR 215.44(3)

DISPOSAL OF PROPERTY ACQUIRED WITH WAP FUNDS

December 2012

POLICY: All property acquired with WAP funds must be disposed according to Department of Energy (USDOE) and Department of Commerce (Commerce) rules and guidance. The term property includes vehicles, technical equipment, office equipment, supplies, and weatherization materials.

PROCEDURE: The following general procedures govern disposals.

Property with a fair market value of \$5,000 or more at the time of disposal requires:

1. Prior approval from both USDOE and Commerce.
2. Proceeds from the disposal to be returned to Commerce, who will return the proceeds to the US Treasury.

Property with a fair market value of less than \$5,000 at the time of disposal requires:

1. Prior approval from Commerce.
2. Proceeds from the disposal to be returned to the Program line item of the Service Provider's WAP budget, and used to provide further weatherization services in eligible dwellings.

USDOE retains a financial interest in all property purchased with USDOE funds until the fair market value of the property drops below \$5,000. A Service Provider may "buy-out" the USDOE share for any property with a fair market value of \$5,000 or more. To do this requires:

1. The percentage of USDOE participation in the original purchase of the property is established.
2. Prior approval from both USDOE and Commerce is received.
3. USDOE's share of the proceeds from the disposal is returned to Commerce, who will return the proceeds to the US Treasury.

A Service Provider may continue to use the property in the following ways:

1. Continue use of the property in the Service Provider's Weatherization Assistance Program. This is the preferred use. If this use is chosen:
 - a. No Disposition Request is needed.
 - b. The Service Provider must maintain the property on its inventory lists in accordance with USDOE and Commerce rules until the property is disposed.
2. Transfer the property to any other federally funded project or program within the Service Provider's organization. This is allowed only when the property is no longer needed by the Service Provider's Weatherization Assistance Program. If this disposal is chosen:
 - a. No Disposition Request is needed.
 - b. The Service Provider must notify Commerce of the transfer.
 - c. The Service Provider must maintain the property on its inventory lists in accordance with USDOE and Commerce rules until the property is disposed.

The following procedure applies when disposing of property or buying-out the USDOE share. The Service Provider must:

1. Establish the fair market value of the property. Fair market value is defined as the best estimate of the gross proceeds if the property were to be sold at a public sale.
2. Submit a disposition-request package to Commerce that includes the following:

- a. At least two credible estimates of fair market value.
- b. Adequate identification of the item for which disposal is requested. Include the make and/or model and serial or VIN number with the disposition request.
- c. The appropriate Federal Disposition Form. (Note: Commerce will advise Service Providers of the correct form as part of the disposition process.)

Commerce will:

1. Review the disposition documents and determine approval.
2. Send disposition requests to USDOE for their review to determine approval, if necessary.
3. Notify the Service Provider of approval or denial by email.
4. Service Provider may dispose of the property **only when notification of approval has been received by the Service Provider via email or mail.**

STANDARD: Service Provider complies with the disposal process as described in this policy.

EXCEPTIONS: Property that is traded-in as part of the purchase of newer property of the same type does not require a separate disposition request.

CROSS REFERENCE TO OTHER POLICY:

CITATION:

10 CFR 600.130–137
Weatherization Program Notice 13-04

ALLOWED ACTIVITIES: BUDGETING AND EXPENSE REPORTING

POLICY: The Minnesota Weatherization Assistance Program (WAP) uses two types of funds to serve eligible households.

1. **Accounting funds:** Include federal and non-federal funds that are received by Department of Commerce (DOC) and allocated to local Service Providers.
 - a. All Federal Funds used by Service Providers:
 - i. Require initial budgets in eHEAT at the beginning of each allocation and budget amendments to account for major changes in the way funds are to be spent or funding levels. Budgets and amendments must be approved by DOC.
 - ii. Must be reported to DOC in monthly/final eHEAT Financial Status Reports (FSRs) and Weatherization Assistant (WA). FSR and WA data must be accepted by DOC.
 - b. Non-federal funds require no eHEAT budgets, but expenses must be reported to DOC in monthly FSRs and WA Client Exports.
2. **Non-accounting funds:** Include federal and non-federal funds generated by individual Service Providers and used in conjunction with accounting funds to increase the scope of weatherization services to eligible households and/or serve additional households. Costs are reported in WA.

PROCEDURE: Use the Activity Budget/Expense Categories chart that follows to guide both budgeting and expense reporting. Note that the chart is based on both federal and state rules and policies.

STANDARD: All budgets and expenses must conform to pertinent federal and/or state rules and the specifications in the chart.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Activity/Budget/Expense Categories

CITATION:

Miscellaneous USDOE documents

ACTIVITY/BUDGET/EXPENSE CATEGORIES

ACCOUNTING FUNDS													NON ACCTNG FUNDS				
ACTIVITY/TASK	REPORT IN eHEAT/FSR												REPORT COSTS IN WA		REPORT COSTS IN WA		
	USDOE/ARRA					LIHEAP TRANSFER					LP		INCLUDE IN SIR	NOT IN SIR	INCLUDE IN SIR	NOT IN SIR	
	CATEGORY					CATEGORY					CATEGORY						
	AD	PS	DS	HS	TTA	AD	PS	DS	HS	SA	AD	PROG	SA				
Indirect costs (approved cost allocation plan only)	X					X					X						
Space cost(rent/utilities) for office/admin activities	X					X					X						
Office machines (purchase/maintenance)	X					X					X						
Computer hardware/software for admin activities	X					NOT ALLOWED					X						
General use phone/ fax line, internet costs	X					X					X						
Vehicle purchase/lease for admin activities	X					NOT ALLOWED					X						
Admin, clerical, fiscal salaries/wages, fringe benefits	X					X					X						
Travel costs for admin purposes	X					X					X						
Office supplies	X					X					X						
Job costing	X					X					X						

AD = ADMIN
PS = PROGRAM SUPPORT
DS = DIRECT SERVICE TO CLIENTS
HS = HEALTH AND SAFETY
TTA = TRAINING/TECHNICAL ASSISTANCE
SA = STANDALONE

ACCOUNTING FUNDS														NON ACCTNG FUNDS			
ACTIVITY/TASK	REPORT IN eHEAT/FSR													REPORT COSTS IN WA		REPORT COSTS IN WA	
	USDOE/ARRA					LIHEAP TRANSFER					LP			INCLUDE IN SIR	NOT IN SIR	INCLUDE IN SIR	NOT IN SIR
	CATEGORY					CATEGORY					CATEGORY						
	AD	PS	DS	HS	TTA	AD	PS	DS	HS	SA	AD	PROG	SA				
Preparation of program and fiscal reports	X				X					X							
Admin staff salaries during training	X			X	X					X							
Fiscal audit (weatherization share)		X			X					X							
Space cost for energy auditors, warehouse		X				X					X						
Computer hardware/software (only if used directly in weatherizing homes, such as data logger)						NOT ALLOWED											
Technical equipment (such as insulation blowers) ¹		X				NOT ALLOWED											
Phone for energy auditor, warehouse		X				X					X						
Vehicle purchase/lease when used directly in weatherizing homes		X				NOT ALLOWED					X						
Energy auditor/inspector salaries/wages, fringe benefits		X				X					X						
Liability insurance		X				X				X							
Transportation of weatherization materials, tools, equipment and crews to and from job sites		X				X					X						

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ACCOUNTING FUNDS													NON ACCTNG FUNDS				
ACTIVITY/TASK	REPORT IN eHEAT/FSR											REPORT COSTS IN WA		REPORT COSTS IN WA			
	USDOE/ARRA					LIHEAP TRANSFER					LP	INCLUDE IN SIR	NOT IN SIR	INCLUDE IN SIR	NOT IN SIR		
	CATEGORY					CATEGORY					CATEGORY						
	A D	P S	D S	H S	TT A	A D	P S	D S	H S	S A	A D	PROG	S A				
Cost of warehouse and inventory management		X					X					X					
Vehicle maintenance/operations/insurance for vehicles used to transport weatherization materials		X					X					X					
Travel costs for energy auditors to/from job sites		X					X					X					
Non-accounting operational support		X					X					X					
Non-admin staff wages during training																	
Cost of on-site supervision including salary/wages, fringe benefits			X					X				X		X		X	
Crew wages, fringe benefits			X					X				X		X		X	
Weatherization materials			X					X				X		X		X	
Shop supplies			X					X				X			X		
Payments to contractors/vendors for bldg shell work			X					X				X		X		X	

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ACCOUNTING FUNDS														NON ACCTNG FUNDS			
ACTIVITY/TASK	REPORT IN eHEAT/FSR												REPORT COSTS IN WA		REPORT COSTS IN WA		
	USDOE/ARRA					LIHEAP TRANSFER					LP		INCLUDE IN SIR	NOT IN SIR	INCL UDE IN SIR	NOT IN SIR	
	CATEGORY					CATEGORY					CATEGORY						
	AD	PS	DS	HS	TTA	AD	PS	DS	HS	SA	AD	PROG	SA				
Cost-effective mechanical repairs/replacements (Audit events)			X				X				X			X		X	
General repair measures to allow weatherization activities or to protect installed weatherization materials			X				X				X				X		
Health/Safety repairs/replacements (Audit events)				X				X			X				X		X
Health/Safety Repairs/replacements (audit events)				X				X									
House diagnostics by auditors/installers				X				X			X				X		X
Tests for hazards such as lead or asbestos				X				X			X				X		X
Room pressure balancing/duct sealing				X				X			X				X		X
Installation of smoke/carbon monoxide detectors				X				X			X				X		X
Stand alone event mechanical repairs/replacements	NOT ALLOWED									X		X			X		X

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SA = STANDALONE

ACCOUNTING FUNDS													NON ACCTNG FUNDS				
ACTIVITY/TASK	REPORT IN eHEAT/FSR											REPORT COSTS IN WA		REPORT COSTS IN WA			
	USDOE/ARRA					LIHEAP TRANSFER					LP			INCLUDE IN SIR	NOT IN SIR	INCLUDE IN SIR	NOT IN SIR
	CATEGORY					CATEGORY					CATEGORY						
	AD	PS	DS	HS	TTA	AD	PS	DS	HS	SA	AD	PROG	SA				
Worker safety items such as masks/respirators				X					X			X					
Cost of diagnostic equipment such as furnace test kits				X		X					X						
Reasonable contractor stipends for training					X	NOT ALLOWED					X						
Travel/meals/hotels connected to training/conferences					X	NOT ALLOWED					X						
Training materials/supplies, books, periodicals					X	NOT ALLOWED					X						
Trainers' fees					X	NOT ALLOWED					X						

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SA = STANDALONE

CROSS REFERENCE TO OTHER POLICY:

Allowed Activities budget and Expense Reporting

CITATION:

Miscellaneous USDOE documents

CASH REQUESTS

Revised July 2014

POLICY: All cash requests must be completed electronically in the eHEAT software system using the **PROCEDURE** specified below.

PROCEDURE:

1. Cash requests:
 - a. Must be completed using the eHEAT **Cash Request Form** for Weatherization. Instructions are available in eHEAT by choosing the Manuals Tab and following the links to the eHEAT Users Manual.
 - b. Must be submitted by a person with an eHEAT ID who is authorized to request cash.
 - c. May be submitted as often as needed for the Service Provider to effectively manage cash.
 - d. That include the last month of the contract (i.e., June) must only include expenses incurred no later than June 30th in order to be consistent with the contract and State Fiscal Year end dates.
 - e. For the month of June and final cash requests for the Weatherization contract must be submitted no later than July 30th.
2. The Department of Commerce (DOC) processes Cash Requests as follows:
 - a. Cash Requests
 - i. Will be reviewed for reasonableness.
 - ii. Have no due date or time.
 - iii. Will be processed on a first-in, first-out basis along with other processing demands on DOC fiscal staff. DOC will make every effort to process requests as quickly as possible and no later than 30 days after received.
 - b. DOC reserves the right to offset overpayments and disallowances by reducing cash payments on any grants with the Service Provider.

STANDARD: Cash requests meet the criteria spelled out above.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

WAP Service Provider Contract, Item 2

CODE OF CONDUCT

POLICY: All Service Providers must maintain written standards of conduct that at minimum:

1. Prohibit:
 - a. Real or apparent conflicts of interest in the selection, award, and administration of grants supported by federal funds.
 - b. The solicitation or acceptance of gratuities or anything else of value from contractors or parties to sub-agreements.
2. Include employees, officers, agents of the Service Provider, their families, partners or related organizations that:
 - a. Employ or are about to employ any of the parties indicated.
 - b. Have a financial or other interest in the organization selected for the award. This includes immediate family members, partners or organizations that employ or are about to employ any of the affected parties.
3. Provide disciplinary actions to be applied if such conflicts or gratuities do occur.

The Code of Conduct should also cover these topics: nepotism, political participation, and bribery.

PROCEDURE: None

STANDARD: Service Provider policy meets the standards in the policy and relevant federal rules.

EXCEPTIONS: Service Provider Code of Conduct may set standards of acceptable conduct for situations in which the financial interest is not substantial, or the gift is an unsolicited item of nominal value.

CROSS REFERENCE TO OTHER POLICY: None

CITATION:
2 CFR 215.42

SERVICE PROVIDER LIABILITY INSURANCE

POLICY: All Service Providers are required to obtain sufficient liability insurance for all WAP work. Liability insurance costs can be charged to the liability line item in the DOE budget and Financial Status Reports (FSRs). Local agencies that employ private contractor labor to perform Weatherization services must ensure that each private contractor is adequately insured as well.

Pollution Occurrence Insurance (POI) is no longer required. However, if the Service Provider does not have POI coverage and weatherization activities disturb environmental pollutants (such as lead), the cost of remediation, clean up, relocation, medical expenses or any other resulting costs may not be charged to WAP funds and must be covered by another funding mechanism.

PROCEDURE: None

STANDARD: Proof of Service Provider liability insurance coverage is available for Department of Commerce review. Service Provider's contractor files contain proof of insurance.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

USDOE Grant Guidance 09-1

PROPERTY STANDARDS: EQUIPMENT

POLICY: All Service Providers must comply with the following standards for the management of equipment (including vehicles) purchased with WAP funds:

1. Provide adequate insurance coverage.
2. Maintain a control system that insures adequate safeguard to prevent loss, damage or theft.
3. Implement adequate maintenance procedures to keep the equipment in good and safe operating condition.
4. Inventory the equipment at least once every two years to verify the existence, current use and continued need.
5. Keep accurate equipment records that include at least the following:
 - a. Description of the equipment.
 - b. Manufacturer's serial number, modal number or other identification.
 - c. Source of the equipment, including the award number.
 - d. Acquisition date and cost.
 - e. Location and condition of the equipment.
 - f. Disposition data to include the date of disposal and the sale or trade-in price.

PROCEDURE: None

STANDARD: Service Provider policies and practices meet the criteria listed above.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

2 CFR 215, Subpart C

RECORD RETENTION

Revised July 2014

POLICY: Financial records, supporting documents, statistical records, and all program or other records pertaining to the contract must be retained for a period of six years from the date of submission of the final expenditure report. If any litigation, claim or audit is started before the expiration of the six year period, the records must be maintained until all litigation, claims or audit findings involving the records have been resolved and final action taken.

Records for equipment and vehicles acquired with WAP funds must be maintained for six years after final disposition of the equipment or vehicle.

PROCEDURE: None

STANDARD: Records are maintained in accordance with the policy statement above.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

2 CFR 215.53

Statute 16C.05 Contract Management

WEATHERIZATION ALLOWED ACTIVITIES AND MEASURE TYPES

January 2012

POLICY: All weatherization activities must be assigned to one of the following measure types in the Weatherization Assistant software:

1. Baseload*
2. Building Insulation*
3. Doors and Windows*
4. General Heat Waste and Air Infiltration*
5. General Repair
6. Health and Safety
7. HVAC Systems*

* Denotes a Conservation Measure where the Estimated and Actual SIR must be one (1.0) or greater

Use the Allowed Activities and Measure Types Chart to determine the correct measure type for a given activity. No activities may be assigned to “Client Education” or “Other” measure types.

Some activities have only one allowed measure type, some have two allowed types, and a few have three allowed types. Use the procedure below to determine which measure type to use.

PROCEDURE:

1. Use the *Preferred Choice* for all measures whenever possible.
2. Use the *Acceptable Choice* only where necessary work cannot be included in the Preferred Choice due to SIR considerations or other cost factors.
3. Use the *Least Desirable Choice* only when necessary work cannot be included in either the Preferred or Acceptable categories due to SIR or other cost factors.
4. If an activity does not appear on the Chart, the following process applies:
 - a. Prior to the completion of the activity the Service Provider must send an email to their assigned Field Monitor describing the proposed activity. Include a justification for the requested measure type.
 - b. DOC will determine if the requested measure is allowable based on the information provided. If the requested measure is allowed, DOC will assign an appropriate measure type.

STANDARD: All activities are allowed and are assigned to the correct measure type. Activities assigned to an Acceptable or Least Desirable Choice measure type have documented the following:

1. Why the activity is not attributed to the Preferred Choice, and
2. Why the activity fits the definition of the chosen measure type.

EXCEPTIONS: None

CROSS REFERENCE to WAP DOCUMENTS:

Allowed Activities and Measure Type Chart

Weatherization Best Practices: Fuel Switching
Weatherization Best Practices: Water Heaters
Weatherization Best Practices: Gas Ranges and Cook Stoves
Weatherization Best Practices: Smoke Alarms and Carbon Monoxide (CO)
Alarms
WAP Glossary
Minnesota Weatherization Field Guide
Minnesota Mechanical Systems Field Guide
EAP Policy Manual, Energy Related Repair

CROSS REFERENCE to OTHER POLICY:

Audit Event
Clean and Tune -- Work Order and Procedures Forms
Combustion Appliance Safety
Combustion Appliance Performance Indicators
Cost Effectiveness of Weatherization Jobs and Installed Materials
Duct Sealing/Pressure Balancing
Energy Audit
General Repair
Health and Safety
Heating Plant Replacement
Sizing Requirements for Heating Plant Replacements
Health and Safety
Knob and Tube Wiring and Recessed Lighting
Mechanical Systems: Dependability, Repairs and Replacements
Standalone Event
Use of Program Funds for Callback Work on Completed Units
Worst Case Draft Test

CITATION:

WAP Service Provider Contract
10 CFR 440.18(c)(15)
WPN 11-1 Program Year 2011 Weatherization Grant Guidance
WPN 11-6 Weatherization Health and Safety Guidance

EAP/WX Funds

October 2011

The Low Income Home Energy Assistance Program (LIHEAP) block grant from the US Department of Health and Human Services (HHS) allows states the option to transfer up to 15% of EAP funding to the weatherization program. Historically the Minnesota Weatherization Assistance Program has received five percent of the State's EAP funds. This transfer is referred to as EAP/WX funding. The objective of the use of the EAP/WX funding is to provide low-cost residential weatherization and other cost-effective energy-related home repair to reduce energy costs for low-income households.

EAP/WX funding allows flexibility to Service Providers in packaging energy conservation resources from both the Department of Energy (DOE) Weatherization Assistance Program and the utility Conservation Improvement Program (CIP) for low income households.

This policy guidance describes eligibility information and program options for use of the EAP/WX funds. The funding may be combined with existing weatherization jobs using DOE, CIP, Liquid Propane (LP), or other funds. Service Providers may also use EAP/WX funds when no DOE funds are used in a specific job. In these cases EAP/WX funds allow completion of weatherization jobs without DOE funds.

EAP/WX funds may serve homes that require specific Callback work in limited circumstances. This is applicable only when a dwelling has been previously weatherized with DOE funds but requires subsequent corrections on Energy Conservation, Health and Safety, or Incidental (General) Repair measures. Affected conservation measures must be previously determined by the Weatherization Assistant (WA) audit software and have a Savings-to-Investment Ratio (SIR) of one or greater. Refer to WAP Policy Manual, USE OF PROGRAM FUNDS for CALLBACK WORK on COMPLETED UNITS, July 1, 2011, for specific direction and procedures.

ELIGIBILITY, EXPENDITURES and REQUIREMENTS: Federal acceptance of the State EAP plan specifies the following regarding the EAP/WX funds.

- The 2011-2012 Federal Fiscal Year (FFY) EAP/WX expenditure is limited to an average of \$3,500 per audit event. Standalones are excluded in this calculation.
- Dwellings with rental occupants are limited to \$2,000 for mechanical measures addressing repairs or documented health and safety issues.
 - Note: Landlords are required by State law to provide safe and functioning heating and hot water systems in all rental housing. If an energy audit conducted on an eligible rental property specifies a mechanical system replacement as a conservation measure with an SIR of one or greater, that replacement may exceed the \$2,000 limit.
- EAP/WX funds may only be expended on EAP income eligible households at 50% of the State Median Income (SMI) guideline. A household with a combined income over the 50% SMI guideline but qualifying for weatherization under 200% of the Federal Poverty Income may not receive EAP/WX funding.
- Funds must be expended within 18 months of the date of the transfer letter from EAP to Weatherization. Unexpended EAP/WX funds from one year may be carried forward to the next contract year, or as directed by the State LIHEAP and/or WAP manager.
- Program support costs may be charged to EAP/WX funds.
- EAP/WX funds may not be used for repairs or replacements of gas ranges or cook stoves.

- EAP/WX funds may not be used for replacing refrigerators.
- A signed Coordination Agreement between the EAP and WX programs at the Service Provider level is required.
- Service Providers must inspect all EAP/WX standalone event activities greater than \$500 per job.
- State WX monitoring staff will conduct on-site monitoring visits of five percent (5%) of all EAP/WX completions, including building shell, energy conservation measures, mechanical work and assessment of client satisfaction.
- State WX monitoring includes fiscal controls, administrative monitoring including paper file reviews, desk monitoring, FSR expenditures, cost limits and SIR calculations, safety tests, and completed WA electronic client records.
- All EAP/WX audit event activities must be inspected by the local Service Provider final inspector.

DEFINITIONS of EVENT TYPES and ACTIVITIES: A goal of the EAP/WX funds is to provide Service Providers flexibility to meet the energy conservation and safety needs of eligible households. Each option requires the creation of a separate WAP event in eHEAT. EAP/WX funding may be provided to an eligible household in the following situations and must be charged to WAP program expenditure line-items:

- **Standalone** event situations do not require an energy audit. There is no expenditure restriction except the \$2,000 limit for renters. (See Section 8, Standalone Event, in the Weatherization Manual.) Standalones are designed to serve mechanical needs for a household when no energy conservation measures are completed. It is used only for heating and domestic hot water equipment and installation. Service Providers must have in place HVAC procurement processes that ensure fair contractor competition while allowing for prompt services if a household is in imminent danger or facing no-heat or safety situations. HVAC contractors are responsible for a Manual J calculation when doing emergency furnace replacements. When a Standalone is downloaded from eHEAT into WA, only a work order is attached to the client; no audit is associated with this new event.
- **Mechanical Health and Safety** is completed as part of an audit event. Although \$3,500 is the maximum average expenditure for most EAP/WX activities there is no limit for a Health and Safety Hazard expenditure on a job. Cook stove repairs or replacements may not be charged to EAP/WX funds. [Refer to Weatherization Best Practices on Gas Ranges and Cook Stoves.] The Health and Safety component of DOE funding may be combined with the Mechanical Health and Safety funding of EAP/WX on a specific job.

NOTE: The ‘Cumulative Job SIR’ report in WA does not include Health and Safety detail costs from either EAP/WX or DOE funds on a specific job. This report should be reviewed by Service Providers to determine if each weatherization **total job cost** meets both SIR and program guidelines. Both estimated and actual SIR cumulative calculations must be one or greater for all audit events.

- **Incidental (General) Repair** using EAP/WX funds has a \$1,000 limit and allowed activities must be included in an audit event. The activity measure must be related to the protection of weatherization materials or allow for their installation. It may be combined with the DOE Incidental (General) Repair for a total amount of up to \$2,000 per weatherization job.

[See Section 10-5 of the Weatherization Manual.] Incidental (General) Repair costs are factored in WA for a ‘Cumulative Job SIR’ calculation on each dwelling. The cumulative SIR must be one or greater. An energy conservation measure or measures must be completed in conjunction with the use of Incidental (General) Repairs.

- **Conservation** measures may use EAP/WX funds but must be generated by the WA energy audit event and must have an SIR of one or greater. Any heating-ventilation-air-conditioning (HVAC) costs calculated as a Conservation measure must have an SIR of one or greater. There are no expenditure limits for conservation activities. Both renters and home-owners are eligible. Each EAPWX Conservation measure must have an SIR of one or greater.
- **Callbacks** are completed as a separate WA event. Non-DOE resources, including private contractor insurance, should be considered first to address callback situations. DOE funds are not allowed to pay for callback work. Before EAP/WX funds may be used for a callback, prior approval from DOC must be obtained. All callbacks will be monitored by the State. When a callback is downloaded from eHEAT into WA only a work order is attached to the client; no audit is associated with this new event. Callback measures must pass a final inspection. Refer to the July 1, 2011 Policy, Use of Program Funds for Callback Work on Completed Units.

CROSS REFERENCE to WAP DOCUMENTS:

Life-Cycle Fuel Cost Calculations Chart
Allowed Activities and Measure Type Chart
Notice of a Safety Hazard
Weatherization Service Agreement

CROSS REFERENCE to OTHER POLICIES:

Clean and Tune - Work Order and Procedures Forms
Combustion Appliance Safety
Combustion Appliance Performance Indicators
Final Inspection
Incidental (General) Repair
Health and Safety

Heating Plant Replacement
Heating Plant Replacement Sizing Policy
Household File Contents
Mechanical Systems: Dependability, Repairs and Replacements
Multi-Family Policy
Required Weatherization Tests
Standalone Event
Use of Program Funds for Callback Work on Completed Units
Worst Case Draft Test

Minnesota Weatherization Field Guide
Minnesota Mechanical Systems Field Guide

EAP Policy Manual, Energy Related Repair

CITATION:

WAP Service Provider Contract
10 CFR 440.18(c)(15)

WEATHERIZATION ASSISTANT AUDIT EVENT

Revised March 2013

POLICY: An Audit Event must be created for every eligible dwelling where the Service Provider intends to complete energy conservation activities using Commerce-administered WAP funds.

PROCEDURE:

1. Create an Audit Event in eHEAT and download it into the Weatherization Assistant (WA) software.
2. Use the downloaded audit event to document all elements of the weatherization job.
3. Report the completed audit event to Commerce via the regular monthly export or a special export.

STANDARD: All weatherization jobs meet the criteria in the policy and procedure above.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

WAP Service Provider Contract, Item 2

USE OF PROGRAM FUNDS FOR CALLBACK WORK ON COMPLETED UNITS

July 1, 2011

A Callback is defined as weatherization work that must be installed after a final inspection of a dwelling has been completed and the unit has been reported to DOE as a completed dwelling unit.

POLICY:

This policy defines situations where Service Providers may use DOE funds or EAPWX funds for callback work once a final inspection is completed and the dwelling unit has been reported to DOE as complete.

DOE GUIDELINES FOR CALLBACKS:

Under a recent interpretation of WAP regulations by the DOE Office of General Counsel, paying for additional work on homes that have already been reported to DOE is not a permissible use of DOE WAP funds. See WPN 11-03 for full guidance. The only method to address call-backs where DOE funds may be used to pay for the additional work is to have these previously completed units taken out of the DOE reporting system and subtract the associated costs from the DOE funds category.

DOE CALLBACK PROCEDURE:

1. The Project Officer must be notified in writing of the number of units, total costs, and reporting period (monthly and/or quarterly) for any units that are to be backed out of the DOE reporting system.
2. The Project Officer will then reject the report so that the revised reporting adjustments can be made.
3. DOC must coordinate with its financial office to ensure the appropriate accounting methods follow Federal cash management procedures.
4. After making any necessary repairs or other callback measures, the Service Provider must re-inspect the unit and report the completion to DOC.
5. DOC will then report the unit to DOE, including all final costs for the unit, in the month the completed work takes place.

EAPWX GUIDELINES FOR CALLBACKS:

EAPWX funds may be used to pay for the correction of measure(s) incorrectly completed during the original event or to complete a conservation measure that was inadvertently missed by an auditor or inspector. Work that was incorrectly completed or missed by a contractor during Weatherization work may not be compensated with EAPWX funds. Callbacks are generally determined by state/federal inspections or by household complaint. Callback work using EAPWX funds for measures must be done according to the *PROCEDURE* described below.

EAPWX funds used must follow LIHEAP rules in Section 2605 (k)(1)(B) limiting the use of funds to low-cost weatherization and or other energy-related home repair for households with highest consumption and for currently EAP-eligible households in an eligible dwelling unit, excluding unoccupied units.

If EAPWX funds that are used for Callbacks exceed 20% of EAPWX funds on an annual basis, DOC reserves the right to discontinue permission for the use of EAPWX for financing Callbacks.

EAPWX CALLBACK PROCEDURE:

Service Providers must:

1. Create a Callback Event in eHEAT and download client data into a Weatherization Assistant (WA) software file.
2. Submit a request for approval of the Callback to DOC prior to the start of any work by uploading the Callback event to DOC's FTP site. This must include an explanation of the need for the Callback activity.
3. After uploading the Callback event to the FTP site, an email must be sent to the assigned state field monitor notifying them of the upload. This email should include document details of the Callback including all cost estimates, non-DOE resources to be used, photographs, warranty or insurance information, and client notes.
4. Complete the approved specified measures as allowed by DOC.
5. Complete an inspection of the approved Callback work .
6. Notify DOC of the completion and accompany a state field monitor for an inspection by DOC. [Note. Numbers 5 and 6 may be completed simultaneously.]
7. Report the Callback to DOC using the standard electronic file export process used to report all other job events.

STANDARD: DOE and EAPWX funds used for Callbacks on dwellings that have been closed and reported to DOE as complete have met the requirements of this policy. All installed measures comply with the Minnesota Weatherization Policy Manual, the Minnesota Weatherization and Mechanical Field Guides, Weatherization Best Practices, and all relevant codes and standards.

EXCEPTIONS: None

CROSS REFERENCE to WAP DOCUMENTS:

Allowed Activities and Measure Type Chart, July 1, 2011
Notice of a Safety Hazard, February 2011
Weatherization Service Agreement, February 2011

CROSS REFERENCE to WEATHERIZATION POLICY:

Clean and Tune -- Work Order and Procedures Forms
Combustion Appliance Safety, May 2010
Combustion Appliance Performance Indicators
Final Inspection, November 2010
General Repair May 2010
Health and Safety, January 2011

Heating Plant Replacement, May 2010
Heating Plant Replacement Sizing Policy, November 2010

Mechanical Systems: Dependability, Repairs and Replacements, February 2011
Required Weatherization Tests, September 2010
Standalone Event
Weatherization Allowed Activities and Measure Type, July 1, 2011
Worst Case Draft Test

Weatherization Best Practices: Fuel Switching, January 2011
Weatherization Best Practices: Water Heaters
Weatherization Best Practices: Gas Ranges and Cook Stoves

WAP Glossary
Minnesota Weatherization Field Guide
Minnesota Mechanical Systems Field Guide
EAP Policy Manual, Energy Related Repair

CITATION:

WAP Service Provider Contract
Weatherization Program Notice 11-03
LIHEAP Section 2605 (k)(1)(B)

STANDALONE EVENT

JULY 2012

POLICY: Service Providers may perform standalone work only in dwellings occupied by eligible households in accordance with the following criteria.

1. Standalone work is limited to mechanical systems repairs/replacements where no building shell measures are to be completed (i.e., there is no Weatherization Assistant Audit Event).
2. Eligible Standalone activities include heating system and water heater repair/replacement measures. No other activities are allowed.
3. In emergency no heat or life threatening situations, Service Providers must have in place a mechanical procurement process that ensures fair contractor competition while allowing for prompt services when a household is in imminent danger or is facing a no-heat or safety situation. HVAC contractors are responsible for a Manual J calculation when completing emergency furnace replacements.
 - a. A Service Provider must take immediate action to restore households in no heat/life threatening conditions to safe situations within 18 hours.
 - i. This may include supplying adequate and safe temporary heat if the work is going to take longer than 18 hours.
 - ii. A health and safety hazard or unsafe condition directly related to the mechanical system must be addressed immediately and service providers must arrange a corrective action resolving the hazard or unsafe condition within 48 hours.
4. Where there is energy conservation work to be completed (i.e., there is an existing or planned Audit Event), the mechanical systems measures must be completed as part of the Audit Event. (See exception below.)
5. Rental households are eligible only if there is written documentation in the household file that the landlord/owner is unable to make needed repairs/replacements. Assistance to rental households is limited to \$2,000.
6. Vacant or ineligible rental units are ineligible for standalone work.
7. Assistance to owner households has no specific cost limit.
8. Allowed Fund/Cost Centers: Propane Fund or any LIHEAP transfer fund (such as EAP/WX).
9. Not allowed Fund/Cost Centers: any U.S. DOE Weatherization, PVE.

PROCEDURE:

1. All standalone events must be created in eHEAT and downloaded into Weatherization Assistant.
2. *Note: Do not change an Audit Event work order name and/or measure type to create a Standalone Event work order.*
3. Use the default work order name: "Standalone."
4. Emergency Repair or Replacement is the only allowed work order type.
5. Health and Safety is the only allowed measure type.
6. All installed Standalone Events costing more than \$500.00 must pass a final inspection. It is recommended that Standalone Events with lesser costs be inspected whenever possible.
7. If arrangements cannot be made with the client to access the building for a final inspection, the agency will document their unsuccessful attempts in the electronic client file.

STANDARD: All installed Standalone measures comply with the Minnesota WAP Policy Manual, the Minnesota Weatherization Field Guide and the Mechanical Field Guide, Standalone Guidance, and all relevant codes and standards.

EXCEPTIONS: In an end-of-the-year Audit Event where both the building shell and mechanical work cannot be completed/inspected by June 30th, a Standalone Event may be created, provided that the mechanical systems measures can be completed and inspected (where required) prior to the end of the year (June 30th).

CROSS REFERENCE TO WAP DOCUMENTS

- Allowed Activities and Measures Chart
- Clean and Tune/Replacement Form
- Minnesota Mechanical Systems Field Guide
- Minnesota Weatherization Field Guide
- Weatherization Glossary
- Worst Case Draft and Mechanical Testing Form

CROSS REFERENCE TO OTHER POLICY:

- Clean and Tune
- Combustion Appliance Performance Indicators
- Combustion Appliance Safety
- Final Inspection
- Health and Safety
- Heating Plant Replacement
- Required Weatherization Tests
- Sizing Requirements for Heating Plant Replacements
- Standalone Guidance
- Weatherization Allowed Activities and Measure Types

CITATION:

- WAP Service Provider Contract, Item 2

STANDALONE EVENT GUIDANCE

HOUSEHOLD ELIGIBILITY:

Allowed: Client occupied households that meet program income eligibility requirements.

DWELLING ELIGIBILITY:

1. Allowed: Owner-occupied dwellings.
2. Allowed for limited: Renter-occupied dwellings only when paper file documents that owner/landlord is financially unable to make necessary repairs/replacements.
3. Not allowed: Vacant or ineligible units in rental properties.

ACTIVITIES:

1. Allowed: Mechanical systems repairs and replacements. The mechanical system includes:
 - a. Heating: Primary heating furnace/boiler, its distribution, wiring and venting, controls.
 - b. Water heater: Tank, controls, venting, wiring.
2. Not allowed: Any other activity. Disallowed activities include, but are not limited to: plumbing, roof repairs, dryer vents, kitchen/bath exhaust fans, duct cleaning, window repair, belly repair, air conditioning repairs/replacements, sump pump installation/repair. (*Note: Although these activities are not allowed in Standalone Events, some or all of them may be allowed in Audit Events.*)

CREATING STANDALONE EVENTS:

1. Create a standalone event when there is:
 - a. No WA Audit Event planned or in-progress, and where emergency or non-emergency mechanical systems work is needed.
 - b. Any WA Audit Event created near the end of the program year where there is building shell work that cannot be completed/inspected prior to the end of a contract year. In this case a Standalone Event may be created to complete and inspect mechanical systems work prior to the end of a contract year.
2. Do not create a standalone event when:
 - a. When the mechanical systems work can be completed as part of an Audit Event.
 - b. There is no allowed activity that can be completed.
 - c. Needed work pertains to previous work that is part of another completed event. (*Note: Create a Callback Event to complete needed mechanical systems or other work.*)

WORK ORDER NAME:

Use the default work order name that is downloaded from eHEAT: "Standalone."

WORK ORDER TYPE:

1. Allowed: Emergency Repair or Replacement.

MEASURE TYPE:

1. Allowed: Health and Safety.
2. Not allowed: Baseload, Building Insulation, Client Education, Doors/Windows, General Heat Waste/Infiltration, General Repair, HVAC, Other.

CROSS REFERENCE TO OTHER POLICY:

Standalone Event
Minnesota Weatherization Field Guide
Minnesota Mechanical Systems Field Guide

CITATION:

WAP Service Provider Contract, Item 2

Revised May 2010

COST EFFECTIVENESS OF WEATHERIZATION JOBS AND CONSERVATION MEASURES

Revised March 2013

POLICY: All weatherization audit events and all energy conservation measures within audit events must be cost effective. Any audit event and any energy conservation measure with a savings-to-investment ratio (SIR) of one (1.0) or greater as determined by the Weatherization Assistant (WA) Software and the Client Measure and Job SIRs report provided by Commerce is considered to be cost-effective. The installation of weatherization materials must be prioritized in descending order based on the results of the audit run.

Any change in the cost of a conservation measure, general repair, or a change in the scope of work must be reflected in the audit and work orders in WA. When a change in cost occurs or a client refuses a measure the entire audit must be rerun to assure cost effectiveness. If the audit rerun and the Client Measure and Job SIR report with the new data indicates that measure or the job is no longer cost effective DOE or EAP/WX funds may not be used for these measures.

PROCEDURE: Use priorities as calculated by the (WA) audit and the Client Measure and Job SIR Report to determine measure and job SIRs.

STANDARD:

- All installed weatherization measures have an estimated and actual SIR of one (1.0) or greater for each conservation measure before and after installation.
- All Weatherization jobs, including any general repair costs, have an estimated and actual Job SIR of one (1.0) or greater.
- The actual cost of weatherization work is documented in the Weatherization Assistant (WA) software.
- The order in which work is completed on a dwelling matches the measure priority list in WA.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER WAP DOCUMENTS:

Client Refusal Form
Scope of Work Change Order Form
Weatherization Service Agreement Form

CROSS REFERENCE TO OTHER POLICY:

Weatherization Activities and Measure Types

CITATION:

10 CFR 440.21(c-d)

WEATHERIZATION ASSISTANT DOCUMENTATION

Revised March 2013

POLICY: All Weatherization Assistant (WA) event files must contain clear descriptions of pre-existing conditions, proposed work, and installed measures. Documentation is required to provide clear documentation for monitoring and fiscal audits, and to enable the best service be provided. Adequate and appropriate documentation minimizes potential legal liability.

PROCEDURE: Record and describe in WA:

1. Preexisting building shell, health and safety, and/or mechanical system conditions that justify the work to be performed.
2. Dwelling deficiencies that are beyond the scope of weatherization activities.
3. Pre and post test results and measurements.
4. Proposed work, based on WA recommended measures.
5. Clear and detailed instructions that enables installers to install energy conservation and/or other measures. This could include photos, drawings, and diagrams.
6. Documentation of installed materials, their costs, and cost centers.
7. At least the following status dates:
 - a. Site Visit Complete (Audit Event only).
 - b. Work start and end dates for all work orders.
 - c. Final inspections for all work orders (including re-works) as required.
 - d. Invoice Received
 - e. Invoice Paid
 - f. Complete and Lock (Audit Event only).
8. Other pertinent information as needed.

STANDARD: Weatherization Assistant (WA) events contain all required information described in the preceding sections.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Household Files

CITATION:

WAP Service Provider Contract, Item 2

CLIENT EDUCATION

POLICY: Service Providers must provide information about both energy conservation and energy-related health/safety topics to all households. The purpose of client education is both to inform household members about these topics and to encourage households to take an active role in regards to energy conservation and energy-related health/safety matters in their homes.

PROCEDURE: Service Providers will work directly with households in the energy education process, which should include the at least the following:

1. Explain the weatherization process to the client including:
 - a. A description/explanation of the steps in the weatherization process.
 - b. Explanation of program requirements.
 - c. How the audit results are used to determine what work will be completed on the dwelling.
 - d. Reason some measures are allowed and others are not allowed.
2. Explain the client's role in the following areas:
 - a. How the actions of household members directly affect energy usage and potential energy savings.
 - b. Use and care of installed weatherization and health/safety materials, equipment and/or other items.
3. Develop a Client Plan of Action with each household that includes steps that household members can take to conserve energy, increase comfort, and preserve health/safety.
4. Provide and review pamphlets, booklets or other written materials that address such issues as:
 - a. Lead safety.
 - b. Carbon monoxide.
 - c. Indoor air quality.
 - d. Energy conservation.

STANDARD: The household file contains a signed copy of the Client Plan of Action. A copy of the plan has been given to the household.

EXCEPTIONS: Vacant rental units weatherized. Note: Client education materials should be provided to all occupied units in a multi-family project regardless of the eligibility of the household.

CROSS REFERENCE TO OTHER POLICY:

Energy Audit

CITATION:

USDOE Grant Guidance09-1, Sec. 3.2

ENERGY AUDIT

POLICY: Each eligible dwelling unit scheduled for weatherization must have an energy audit. The audit must take place AFTER household eligibility is established and PRIOR to the start of any weatherization work.

PROCEDURE: Follow the steps in Chapter 2 of the Minnesota Weatherization Field Guide, summarized below.

1. Information Collection: Assess the existing conditions of the dwelling including its mechanical systems. Record the information in the Weatherization Assistant Software.
2. Dwelling Evaluation: Evaluate the existing conditions for energy conservation opportunities and energy related health and safety problems that could be affected by weatherization activities.
3. Dwelling Strategy: Develop a plan for improving energy efficiency and for correcting energy related health and safety problems, including:
 - a. Prioritizing energy conservation measures to be completed in descending order of their SIRs (i.e., the measure with the highest SIR is completed first).
 - b. Determining which health and safety measures will be completed and if they should be completed before or after the energy conservation measures.
 - c. Create WA work orders that reflect the strategy chosen.

STANDARD: Service Provider documentation shows that energy audits meet the criteria in the procedure above.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Cost-Effectiveness of Jobs and Installed Materials
General Health and Safety Policy

CITATION:

10 CFR 440.21(c-d)

FINAL INSPECTION AUDIT EVENT

January 2012

POLICY: A final inspection indicates that a weatherization job has been properly audited, that all measures are correctly completed, and the client is satisfied with the work. Inspections are also a diagnostic quality-control check on the thoroughness of each energy audit completed on a dwelling. All installed Conservation, Health and Safety, General Repair, and Mechanical measures must pass a final inspection before the unit may be reported as completed and before contractors are paid.

Final inspections must be conducted by a qualified staff person or auditor who has passed the Residential Energy Auditor exam from Dunwoody Technical College and must not be conducted by the person who conducted the original energy audit on the dwelling. All final inspection activities and dates must be recorded in the Weatherization Assistant (WA) software.

When a final inspection is complete and signed by the inspector, no additional DOE funds may be spent on the dwelling. Subsequent work must be completed as a Callback and must be paid for with non-DOE resources or follow the DOE approved Callback process outlined in the Minnesota WAP Policy Manual Callback Event and the DOE Weatherization Program Notice 11-03.

PROCEDURE:

The final inspector must:

1. Perform or be present at:
 - a. All tests as required by the Minnesota Weatherization Policy Manual. See Required Weatherization Tests, Revised September 2010.
2. Verify that:
 - a. Installed materials meet federal and state standards.
 - b. Proposed work and any changes to proposed work are complete and documented by the installer.
3. Record in WA all specified Required Weatherization Tests and inspection results with applicable notes.
4. Order a re-work if necessary to correct any work missed or not satisfactorily completed by crews or contractors. If re-work is necessary, the inspector should not sign the final inspection form.
5. Re-inspect any corrected work.
6. Sign the Completion Certificate and obtain the required client signature on the certificate. (See Exceptions for signatures required for rental property.)

STANDARD: Audit dates and documents are complete and properly recorded in WA. Inspection procedure and weatherization work meet program standards and guidelines.

EXCEPTIONS:

1. Vacant/Ineligible rental units must be inspected. The Completion Certificate must be signed by the building owner or the owner's legal representative. A tenant signature is not acceptable on the Completion Certificate.

CROSS REFERENCE TO OTHER POLICY:

Callback Event
Reweathering
Clean and Tune
Combustion Appliance Performance Indicators
Combustion Appliance Safety
Completed Dwelling Unit
Energy Audit
General Repair
Health and Safety
Required Weatherization Tests
Work/Material Standards
Minnesota Weatherization Field Guide
Minnesota Mechanical Systems Field Guide

CITATION:

10 CFR 440.16(g)

WORK AND MATERIAL STANDARDS

Revised July 2014

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

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

STANDARD:

1. The installed material is appropriate for the application.
2. The installation of the material is in accordance with any or all of the following:
 - a. Applicable local or State Building Codes.
 - i. Weatherization work must follow the adopted MN Building Code even if the local jurisdiction has not adopted the code.
 - b. Manufacturer's specifications or instructions.
 - c. Is properly sealed or protected from the elements (exterior only).
 - d. Does not detract from the appearance, structural soundness, safety or durability of the dwelling.

EXCEPTIONS: Incidental repair materials may not be found in 10 CFR 440, Appendix A, but must conform to both items in the Work/Material STANDARD.

CROSS REFERENCE TO OTHER POLICY: None

CITATION:

10 CFR 440.16(g)
10 CFR 440, Appendix A

REQUIRED WEATHERIZATION TESTS

Revised July 2014

POLICY: Complete the required tests listed below, along with visual inspections, as part of every weatherization audit event. When in doubt, test.

Tests To Be Completed at Audit

General tests

- Blower Door @ 50 Pa
- Attic and Crawl Space Zonal Pressures
- House-to-garage wall assembly leakage tests on attached garages (garage door open and closed)
- Test Existing Smoke & CO Detectors
- Baseline Blower Door Test of Air Handler(s)
- Pressure Pan Test (ducts outside thermal envelope)
- Gas Range CO Tests (burners and oven)
- Exhaust Fan Flow Test (CFM)

Water Heater

- Hot Water Temperature
- Water Heater Combustion Analysis/CO in Flue
- Combustion Spillage Test
- Worst Case Draft Test

Heating Plant

- Heating Plant Combustion Analysis/CO in Flue
- Combustion Spillage Test
- Clocking the Gas Meter (Natural Gas)
- Test for Fuel Leaks
- Heat Rise Test on Furnace
- Ambient CO Test in Mechanical Room and Living Space
- Test Furnace Shutoff Switch
- Chemical Leak Test/other Heat Exchanger Integrity Test (beyond visual)
- Worst Case Draft Test
- Space Heater (includes gas fireplaces) Combustion Analysis/CO in Flue
- Space Heater (includes gas fireplaces) Combustion Spillage Test
- Space Heater (includes gas fireplaces) Natural Draft Test
- Space Heater (includes gas fireplaces) Worst Case Draft Test

Mobile Home Tests (all applicable tests listed previously, plus the following)

- Pressure Pan Test
- Zonal Pressure tests on Water Heater Room and Attic

Tests To Be Completed During WX Work

Tests to be completed by the Shell Contractor or Crew (A Pre and Post Test are required)

- Blower Door @ 50 Pa
- Attic and Crawl Space Zonal Pressures

- House-to-garage wall assembly leakage tests on attached garages (garage door open and closed)
- Worst Case Draft Test (This is required before the work begins, daily when completing work and after the work ends.)
- Combustion Spillage Test
- Room-to-Room Pressure Balance (on forced air heating plant)

Tests to be completed by the mechanical contractor

- Gas Pressure Test (done by HVAC contractor on replacement, tune or repair)
- Combustion Analysis/CO in Flue (done by HVAC or plumbing contractor on replacement, tune or repair)
- Worst Case Draft (This is required before the work begins, daily when completing work and after the work ends.)
- Combustion Spillage Test
- Duct Static Pressure Test (done by HVAC contractor on replacement, tune or repair)

Tests To Be Completed at Final Inspection

General Tests

- Blower Door @ 50 Pa
- Attic and Crawl Space Zonal Pressures
- House-to-garage wall assembly leakage tests on attached garages (garage door open and closed)
- Test Smoke & CO Detectors
- Pressure Pan Test (if work was done on ducts outside the thermal envelope)
- Exhaust Fan Flow Test (CFM) (on units that have been repaired or replaced)

Water Heater

- Worst Case Draft Test
- Combustion Analysis/CO in Flue
- Combustion Spillage Test

Heating Plant

- Combustion Analysis/CO in Flue
- Combustion Spillage Test
- Clocking the Gas Meter (Natural Gas) (on clean and tune or replacement)
- Test for Fuel Leaks
- Heat Rise Test on Furnace (on units that have been repaired or replaced or if ducts have been sealed or filters have been added)
- Ambient CO Test in Mechanical Room and Living Space
- Smoke Test on Oil Furnace/Oil Water Heater (on units that have been repaired or replaced)
- Worst Case Draft Test
- Test Furnace Shutoff Switch
- Recheck Room Balancing (on forced air heating plant)
- Space Heater (includes gas fireplaces) Combustion Analysis/CO in Flue
- Space Heater (includes gas fireplaces) Combustion Spillage Test
- Space Heater (includes gas fireplaces) Natural Draft Test
- Space Heater (includes gas fireplaces) Worst Case Draft Test

Mobile Home Tests (all applicable tests listed above plus the following)

- Pressure Pan Test
- Zonal Pressure tests on Water Heater Room and Attic

PROCEDURE: Test/inspect in accordance with established protocols as indicated by the Minnesota Weatherization Field Guide and the Minnesota Mechanical Systems Field Guide. Enter test/inspection results or justification for not completing tests/inspections in the appropriate tabs in the Weatherization Assistant (WA) software.

STANDARD: WA file indicates that all tests/inspections have been performed and recorded.

EXCEPTIONS: There may be some instances where a particular test/inspection cannot be completed. The lack of a test/inspection may be allowed provided that there is adequate justification in the WA software.

CROSS REFERENCE TO OTHER POLICY: All policies in Sections 9, 10, 11 of the WAP Policy Manual.

CITATION: 10 CFR 440.18(c)(15)

FUEL SWITCHING

Revised December 2013

POLICY: Fuel switching will not be allowed using WAP or LIHEAP funds without prior written approval from the Department of Commerce.

The Weatherization Assistance Program has a history of ensuring that public funds do not affect private sector and market forces regarding primary fuel for space heating and/or domestic hot water (DWH) equipment selection by homeowners. Both the Low Income Energy Assistance Program (LIHEAP) and the Weatherization Assistance Program (WAP) have implemented consistent policies regarding fuel type changes (commonly referred to as “fuel switching”) in households served by these programs.

Fuel switching will not be considered appropriate based solely on a customer’s request. WAP funds may be considered by the Department of Commerce when fuel switching is deemed appropriate and necessary using the following procedure:

PROCEDURE:

1. A Fuel Switch Request form must be completed and sent to the Department of Commerce for review and approval. The form includes detailed information regarding the request including an explanation for the request.
2. A Life-Cycle Fuel Cost Calculations form must be completed and sent to the Department of Commerce for review and approval. This form compares the life-cycle energy costs of a replacement heating plant using the new fuel type with the life-cycle energy costs of a replacement heating plant using the existing fuel.
3. A minimum of two proposals for each fuel-type installation must be obtained except in cases where an RFP process has resulted in an agreed upon price including removal of any fuel tanks.
4. Federal, State, and Service Provider procurement policies must be followed in all cases.
5. WAP and EAP/WX funds may not be used to supply a new fuel to the dwelling.
6. The Department of Commerce will review all requests and approve or deny the fuel switch. Work must not begin until written approval has been granted by the Department of Commerce.
7. Any Fuel Switch completed without prior written approval from the Department of Commerce may result in a disallowed cost of the equipment and labor for the Fuel Switch.
8. A Fuel Switch will not be considered unless the new appliance has a minimum of 20% cost savings for fuel over the life span of the appliance.

STANDARD:

The household file contains a copy of the approved Fuel Switch Request form and a copy of the Life Cycle Fuel Cost Calculations form

Energy Related Repair (ERR) Fuel Switches. Fuel switch requests for ERR situations will be considered on a case by case basis following the above procedure.

EXCEPTIONS: NONE

CROSS REFERENCE to WAP DOCUMENTS:

Fuel Switch Request Form

Life-Cycle Fuel Cost Calculations Form
Notice of a Safety Problem Form
Weatherization Service Agreement Form
WAP Glossary

CROSS REFERENCE to OTHER POLICY:

Activities and Measures Types
Combustion Appliance Safety
Combustion Appliance Performance Indicators
Final Inspection Audit Event
General Repair
Health and Safety
Heating Plant Replacement
Household File Content
Required Weatherization Tests
Secondary Heat
Sizing Requirements for Heating Plant Replacements
Standalone Event
Worst Case Draft Test

CROSS REFERENCE to OTHER DOCUMENTS

EAP Policy Manual, Energy Related Repair

CITATION:

WAP Service Provider Contract
10 CFR 440.18(c)(15)

BLOWER DOOR TESTING

Revised July 2014

POLICY: Blower door testing must be completed on every dwelling to be weatherized to identify cost effective Conservation Measures and air leakage in accordance with the Required Weatherization Tests Policy.

All blower door readings must be recorded in the Weatherization Assistant (WA) software and in the Blower Door and House Pressures Form.

STANDARD: The WA file documents that blower door readings were taken at the times specified in the Required Weatherization Tests Policy and that the results are recorded in the WA software and the Blower Door and House Pressures Form.

EXCEPTIONS:

Multifamily buildings that have more than five units do not require a blower door test. The EA-Quip multifamily audit does not require a blower door test.

CROSS REFERENCE TO WAP DOCUMENTS:

- Blower Door and House Pressures Form
- Garage Zonal Pressure Form

CROSS REFERENCE TO OTHER POLICY:

- Air Sealing and ASHRAE 62.2
- Blower Door
- Household File Contents
- Required Weatherization Tests

PRESSURE DIAGNOSTICS

Revised July 2014

POLICY: Pressure diagnostics (attic zonal pressure, garage zonal pressure, and pressure pan) must be completed on every dwelling in accordance with the Required Weatherization Tests Policy.

Pressure diagnostics aid in any or all of the following:

1. Identifying which of the dwelling's components are conduits for air leakage.
2. Establishing the thermal boundary of the dwelling.

PROCEDURE:

1. Complete pressure diagnostic activities at the required times.
2. Record all pressure diagnostic readings in the Weatherization Assistant (WA) Software file and in the Blower Door and House Pressures Form.

STANDARD:

Pressure diagnostic testing is completed and the results are recorded in the WA Software and in the Blower Door and House Pressures Form.

EXCEPTIONS:

1. Multifamily buildings with more than five units do not require a blower door test. The EA-Quip multi-family audit does not require a blower door test.

CROSS REFERENCE TO WAP DOCUMENTS:

Blower Door and House Pressures Form
Garage Zonal Pressure Form

CROSS REFERENCE TO OTHER POLICY:

Blower Door
Household File Contents
Required Weatherization Tests

CITATION:

WAP Service Provider Contract

PRESSURE PAN READINGS

POLICY: Pressure pan readings are required as a part of all mobile home weatherization and may be required in some site built homes, depending on the circumstances of the individual dwelling. Pressure pan readings are used to identify duct leakage to the outside or to unconditioned space. Readings are required during the energy audit, at intermediate points during work on the dwelling, and at final inspection.

PROCEDURE:

1. Complete pressure pan testing at required times.
2. Use the process in the Minnesota Weatherization Field Guide to identify and seal air leaks.
3. Record all pressure pan readings in the Weatherization Assistant (WA) software file.

STANDARD:

1. Duct leakage readings at final inspection measure 1 Pascal or less.
2. WA file documentation is complete and accurate.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Building Tightness Limits and Air Sealing
Blower Door
Energy Audit

CITATION:

WAP Service Provider Contract, Item 2
MN Weatherization and Mechanical Field Guides

GENERAL REPAIR

Revised July 2014

POLICY: General repairs are repairs that are allowed when the repair is deemed necessary to ensure the effectiveness of an installed weatherization conservation measure

General Repairs must be justified in the Household File and the Weatherization Assistant Software with an explanation of their need and relationship to a specific conservation measure or a group of conservation measures.

General repairs are limited for each Weatherization job. Refer to the DOE Annual State Plan for the DOE limit and to the EAPWX Annual Plan for the EAPWX limit.

General repair costs must be included in the overall SIR calculation for the total job expenditure. The resulting cumulative SIR calculation for the total job cost must be equal to or greater than one.

STANDARD: WA documentation indicates that repair activity either protects a weatherization material or allows a weatherization material to be installed and describes the relationship to a specific conservation measure or a group of conservation measures. The cumulative SIR of a dwelling, including all general repairs, is not less than one.

EXCEPTIONS: None.

CROSS REFERENCE TO WAP DOCUMENTS:

- Final inspection Form
- Minnesota Weatherization Field Guide
- Minnesota Mechanical Systems Field Guide
- Weatherization Service Agreement

CROSS REFERENCE TO OTHER POLICY:

- Activities and Measure Types Chart
- Cost Effectiveness of Weatherization Jobs and Conservation Measures
- Energy Audit
- Weatherization Allowed Activities and Measure Types

CITATION:

- 10 CFR 440.18(c)(9)
- WPN 12 – 09
- WAP DOE Annual State Plan
- EAPWX Annual State Plan

MOBILE HOME CODE REQUIREMENTS

POLICY: Minnesota mobile home weatherization activities are governed by the code in effect when the mobile home was manufactured. Identifying the manufacture date of the mobile home is a **required** part of every mobile home audit. The manufactured date establishes the code requirements to be met, as indicated below:

1. Pre-code: Prior to July 1, 1972 (note that there could be local ordinances that apply).
2. Minnesota code: Between July 1, 1972 and June 14, 1976.
3. HUD code: After June 14, 1976.

PROCEDURE: Identify the manufacture date of the mobile home and record in the comments box of the MHEA Audit Information Tab. Depending on when the mobile home was manufactured, the manufacture date is located on one of the following:

1. Minnesota Code: label or seal.
2. HUD code: Data plate or compliance certificate provided by the seller when the mobile home was purchased.

STANDARD: Weatherization Assistant file documents date of manufacture.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Mobile Home: Alterations

CITATION:

MN Rules, Chapter 1350
24 CFR 3280, Chapter XX

MOBILE HOMES: ALTERATIONS

POLICY: No alterations are permitted to mobile homes covered by either the Minnesota or HUD mobile home codes. Alteration means the replacement, addition, and modification, or removal of any equipment or installation after sale by a manufacturer to a dealer or distributor but prior to sale by a dealer to a purchaser which may affect the construction, fire safety, occupancy, plumbing, heat-producing or electrical systems. It includes any modification made in the manufactured home which may affect the compliance of the home with the code standards.

PROCEDURE:

1. For all mobile homes: As a part of **all** mobile home energy audits, identify any pre-existing alterations to the mobile home and document in the Weatherization Assistant (WA) software.
2. For mobile homes covered by HUD or Minnesota code: Complete weatherization activities as indicated by the MHEA audit to the extent they return the mobile home to the manufacturer's specifications.
3. For pre-code homes: Complete weatherization activities as indicated by the MHEA audit, taking care that activities do not to damage any of the mobile home's systems as indicated by the *POLICY* above.

STANDARD: Weatherization activities meet the criteria in the policy and procedure above and are adequately documented in the WA software.

EXCEPTIONS: Alterations to Minnesota and HUD code mobile homes may be permitted provided that the Service Provider obtains written permission from the:

1. Mobile Home manufacturer, OR
2. Minnesota Division of Codes and Standards (part of the Minnesota Department of Labor and Industry).

CROSS REFERENCE TO OTHER POLICY:

Mobile Home Code Requirements

CITATION:

24 CFR 3282.7

HEALTH AND SAFETY

Revised July 2014

POLICY: Service providers may use WAP funds to mitigate or eliminate energy related Health and Safety hazards in client dwellings as specified below. Clients must be provided with a written notice of identified health and safety risk, including those that will be addressed by WAP activities. Also provide a written notice of health/safety issues that are beyond the scope of WAP, such as open electric junction boxes, unsafe wiring, mold and moisture problems, unbonded flexible gas lines, etc.

1. Audit Events: Allowed measures are limited to those that are affected by or caused by the installation of energy conservation measures. Health and Safety measure costs must average no more than the annual limit as set forth in the DOE Annual State Plan. **Funds used for Health and Safety activities in audit events are not included in the DOE average cost per completed unit.** Health and Safety measure costs may be factored in the WA software overall cumulative SIR calculations. Measures may include but are not limited to:
 - a. Repair and replacement of heating systems and water heaters.
 - b. Repairs to cook stoves and ovens. Cook stove and oven replacements are not allowed using any WAP program funds. If replacement is necessary, utility funds, appliance rebates and other local resources may be considered.
 - c. Repair, replacement or installation of bath and kitchen fans.
2. Standalone Events: Measures are limited to repairs and replacements of heating systems and water heaters. While there is no specific mechanical cost limit for owner-occupied dwellings, renter-occupied dwellings are limited to \$2,000. Measures may be cost allocated to any of several WAP funding sources except DOE and ARRA.

PROCEDURE:

1. For Audit Events:
 - a. Identify existing and potential Health and Safety hazards that could be affected by weatherization activities. Document these hazards in the Weatherization Assistant software.
 - b. For each identified existing and potential hazard, determine if it is an allowed WAP activity within the resource limitations of the program.
 - c. Identify if the hazard should be mitigated before, during or after weatherization activities.
 - d. Identify the responsible party for addressing each Health and Safety hazard (i.e., Service Provider, the dwelling owner or client).
 - e. Determine whether to proceed with weatherization, defer weatherization until the hazard is mitigated, or to walk away entirely.
 - f. Provide written notification of the Health and Safety hazards to the owner/landlord in rental dwellings and to the client in both rental and owner-occupied dwellings. Include all information relevant to the hazard.
 - g. Document results of all hazard mitigation activities in the WA software.
2. For Standalone Events: See Standalone Event policy and guidance in this manual.

STANDARD: Service Provider Health and Safety activities meet the criteria in this policy and are adequately documented in WA and the household files.

EXCEPTIONS: None

CROSS REFERENCE TO OTHER POLICY:

Standalone Event, Section 8-Pages 3 and 4
Minnesota Weatherization Field Guide
Minnesota Mechanical Systems Field Guide

CITATION: 10 CFR 440.18(c)(15)
WAP DOE Annual State Plan

KNOB-AND-TUBE WIRING AND RECESSED LIGHTING

Revised July 2014

POLICY: Service Providers may install conservation measures in homes with live knob-and-tube wiring and recessed lighting fixtures provided that the criteria in the *PROCEDURE* below are met.

PROCEDURE:

1. Knob and tube wiring:

- a. Service Providers must verify if the knob-and-tube system is in service before proceeding with any additional measures.
 - b. Service Providers must inspect the wiring that is to be covered to determine the type(s) of wiring present, the circuit protection, wiring condition, and to identify any other hazards.
 - c. Service Providers must obtain permission from the homeowner or authorized agent to install proper overcurrent protection. If permission is not given, insulation cannot be installed.
 - d. Install insulation only as follows:
 - i. In those areas where knob-and-tube wiring is active, circuits must be protected by properly sized overcurrent protection;
 - ii. Insulation is to be placed up to a depth of two inches from the underside of the knob-and-tube wiring provided that an open air space is permanently maintained above such wires; **OR**
 - iii. Barriers must be installed in such a manner around knob-and-tube wiring to ensure that the insulation shall not directly cover the wiring and that an adequate air space of at least one inch on all sides is maintained.
 - e. Document if sidewall cavities are insulated. **DO NOT INSULATE SIDEWALLS** containing live knob-and-tube wiring.
- 2. Recessed lights** - Follow manufacturer's instructions concerning clearance to combustibles. If there are no instructions, ensure that the recessed lights are

STANDARD:

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

- within properly sized junction boxes with approved covers.
3. Bare wires and other hazards are corrected.
 4. All Wiring junction boxes (including light boxes) to be covered with insulation are flagged for location.
 5. All conditions and corrections are documented in the appropriate comment section of the Weatherization Assistant audit tool.

EXCEPTIONS: Exposed knob-and-tube wiring in an accessible attic space can be replaced using weatherization funds if the following conditions exist:

1. The knob-and-tube wiring branch circuit has proper overcurrent protection.
2. The replacement cost can be divided between the attic measure cost and general repair costs without lowering the attic insulation measure SIR below one.
3. The general repair cost remains within fund source limits.
4. **ALL WIRING AND REPAIRS MUST BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR AND INSPECTED (VERIFICATION REQUIRED) PRIOR TO AGENCY APPROVAL.**

CROSS REFERENCE TO OTHER WAP DOCUMENTS:

Final Inspection Form
Notice of a Safety Problem Form
Weatherization Service Agreement
Weatherization Field Guide

CROSS REFERENCE TO OTHER POLICIES:

Contractor Requirements
Health and Safety Policy

CITATION:

2011 National Electrical Code
International Residential Code 2003
National fire Protection Association
MN Energy Code Rule 1322
USDOE email dated 9/4/07

CLEAN AND TUNE

July 2012

POLICY: A clean and tune is required when one or more of the following conditions are present:

1. The heating plant did not achieve an SIR of 1.0 or greater when it was evaluated for replacement as outlined in the Heating Plant Replacement Policy.
2. Carbon monoxide levels in the flue exceed the standards indicated in the Combustion Appliance Performance Indicators Policy.
3. Visual indicators of soot and/or flame rollout.
4. Burners and/or fan are visibly dirty.
5. Measured draft is inadequate.
6. Clocked input on a natural gas fired unit varies by more than 10% from rated input.
7. Heating plant has not been serviced for two or more years. In addition, a heating plant clean and tune may be performed as part of a package with other heating or efficiency modifications.
8. If it is discovered that the heating plant is non operational or has a cracked heat exchanger during the clean and tune you must follow the procedure in the Heating Plant Replacement Policy. This includes a competitive process for awarding the replacement. The contractor that performed the clean and tune must not be awarded the replacement unless they have gone through a competitive process for being awarded the work.

PROCEDURE:

1. For the purposes of weatherization programs, a clean and tune must include all the activities/steps found on the appropriate clean and tune worksheet. These may be found on the Commerce website.
2. Write specifications and obtain multiple bids for the clean and tune or have a procurement process in place for clean and tunes. In an emergency service providers must follow the emergency procedures outlined in the Standalone Event Policy.
3. Use the table below to determine which efficiency rating to enter in the WA software for the SIR calculation. Only the numbers from the table below may be entered in WA for the SIR calculation. Auditors must not use the tested Steady State Efficiency of the existing heating plant for the SIR calculation.

If AFUE of existing heating plant is	Use this efficiency number in SIR calculation
55%	55%
60%	60%
65%	65%
70%	70%
75%	75%
80%	80%
85%	85%
90%	90%
95%	95%

STANDARD: The Weatherization Assistant software (WA) and the household file adequately document:

1. All activities on the appropriate Clean and Tune/Replacement form have been completed.
2. The cost of the Clean and Tune is paid for as one measure.
3. The mechanical equipment has been tested by the technician after the clean and tune was completed.
4. The Service Provider has retested the heating plant at the final inspection indicating the unit meets the manufacturer's specifications for the appliance's operation or the specifications contained in the Combustion Appliance Performance Indicators Policy in this manual.
5. All invoices are itemized into material and labor.

EXCEPTIONS: A clean and tune is generally not required on:

1. Mechanical equipment that is less than one year old.

CROSS REFERENCE to WAP DOCUMENTS:

Allowed Activities and Measure Type Chart
Clean and Tune/Replacement Fforms
Minnesota Mechanical Systems Field Guide
Minnesota Weatherization Field Guide
Weatherization Glossary
Worst Case Draft and Mechanical Testing Fform

CROSS REFERENCE TO OTHER POLICY:

Combustion Appliance Performance Indicators
Combustion Appliance Safety
Final Inspection Audit Event
Health and Safety Policy
Heating Plant Replacements
Household File Content
Required Weatherization Tests
Weatherization Allowed Activities and Measure Types

CITATION:

WAP Service Provider Contract, Item 2

COMBUSTION APPLIANCE SAFETY

POLICY: All combustion appliances must be operating safely prior to beginning weatherization work **and** at the time of the final inspection. Combustion appliances primarily include heating plants and water heaters, but may also include gas or oil fired space heaters, gas fired ranges, or wood stoves. In general, safe operation means that:

1. All appliances with flues draft properly and combustion gas spillage does not exceed the limits indicated in the **Combustion Appliance Performance Indicators** policy.
2. Heat exchangers do not leak.
3. There are no fuel or gas leaks.
4. Appliances do not exceed the parts per million (ppm) of carbon monoxide in the flue indicated in the **Combustion Appliance Performance Indicators** policy.
5. Indoor ambient carbon monoxide levels do not exceed the level indicated in the **Combustion Appliance Performance Indicators** policy.

PROCEDURE:

1. Complete a mechanical systems audit and test **all** combustion appliances following the guidelines in Chapter 2 of the Minnesota Mechanical Systems Field Guide. Document the results in the “Operational Tests” section of the “Heating” tab in the Weatherization Assistant (WA) audit event file.
2. Make safety repairs/replacements as needed prior to beginning building shell work.
3. Complete the required testing protocol outlined in the **Required Weatherization Tests** policy. Document results in the WA audit event file.

STANDARD: Combustion appliances meet the test standards indicated in the **Combustion Appliance Performance Indicators** policy of the Weatherization Assistance Policy Manual or the manufacturer’s standards provided with the appliance.

EXCEPTIONS: None.

CROSS REFERENCE TO OTHER POLICY:

Health and Safety
Clean and Tune
Mechanical Systems: Dependability
Combustion Appliance Performance Indicators
Required Weatherization Tests
Heating Plant Replacement
Worst Case Draft

CITATION:

WAP Service Provider Contract, Item 2
MN Weatherization Field Guide
MN Mechanical Systems Field Guide

COMBUSTION APPLIANCE PERFORMANCE INDICATORS

Revised July 2014

POLICY: Test combustion appliances using the procedures spelled out in the Minnesota Weatherization Field Guide. Use the **Manufacturer's Specifications** if they are available. If the Manufacturers Specifications are not available then use the standards in the table below as a guide and not as criteria to pass or fail a heating plant.

GAS FIRED HEATING EQUIPMENT			
PERFORMANCE INDICATOR	SSE 70+	SSE 80+	SSE 90+
Carbon monoxide in furnace flue	≤ 100 ppm	≤ 100 ppm	≤ 100 ppm
Carbon monoxide in boiler flue	≤ 100 ppm	≤ 100 ppm	≤ 100 ppm
Carbon monoxide (air free)	< 400 ppm	< 400 ppm	< 400 ppm
Oxygen	6 – 9%	6 – 9%	6 – 9%
Gross Stack Temperature (degrees) Furnace	325 - 500	325 – 500	≤ 140
Gross Stack Temperature (degrees) Boiler	275 -500	275 - 500	N/A
Heat Rise (degrees)	40 - 70	40 - 70	20 - 70
Steady State Efficiency (SSE)	72 -78%	78 – 82%	92 – 97%
Spillage	60 Seconds	60 Seconds	60 Seconds
Propane manifold fuel pressure	10.5 WC	10.5 WC	10.5 WC
Natural gas manifold fuel pressure	3.5 WC	3.5 WC	3.5 WC

OIL FIRED HEATING EQUIPMENT	
PERFORMANCE INDICATOR	Flame Retention
Carbon monoxide in the flue	≤ 100 ppm
Carbon monoxide (air free)	< 400 ppm
Oxygen	4 - 7%
Smoke (1 - 9)	≤ 1 or PMI
Gross Stack Temperature (degrees)	325 - 500
Heat Rise (degrees)	40 - 70
Steady State Efficiency (SSE)	≥ 80%
Draft (regular)	- 5 Pa or -.02 IWC
Spillage	60 Seconds
Fuel pressure	100 psi or PMI

GAS/OIL FIRED WATER HEATER	
PERFORMANCE INDICATOR	STANDARD
Carbon monoxide	≤ 100 ppm
Carbon monoxide (air free)	< 400 ppm
Draft (regular)	- 5 Pa or -.02 IWC
Draft (worst case)	any negative draft
Spillage	60 Seconds

GAS RANGE		
PERFORMANCE INDICATOR	STANDARD	TEST LOCATION/ACTION NEEDED
Burner carbon monoxide	< 50 ppm	Location: Hold probe 8 inches above the flame. Action: Service appliance if CO level is higher than the 50 ppm standard. Test burners before turning on and testing the oven.
Oven carbon monoxide	Level I Standard 100 – 300 ppm after 10 minutes Level II Standard ≥ 300 ppm	Location: Insert probe in the vent sleeve before dilution air. Action: If CO is between 100 and 300 ppm install a carbon monoxide detector and call for servicing of the unit. Level II Action - The unit must be serviced prior to weatherization work. If CO is greater than 300 ppm after servicing, exhaust ventilation must be provided with a capacity of 25 CFM continuous or 100 CFM intermittent
Oven carbon monoxide (free air)	<800 ppm	ANSI Standard

Combustion Zone Depressurization	
Venting Condition	Limit (Pa)
Orphan natural draft water heater (including outside chimneys)	-2
Natural draft boiler or furnace commonly vented with water heater	-3
Natural draft boiler or furnace with vent damper commonly vented with water heater	-5
Individual natural draft boiler or furnace	-5
Mechanically assisted draft boiler or furnace commonly vented with water heater	-5
Mechanically assisted draft boiler or furnace alone, or fan assisted DHW	-15

alone	
Exhaust chimney-top draft inducer (fan at chimney top); High static pressure flame retention head oil burner; Sealed combustion appliances;	-50

PMI – Per Manufacturer’s Instructions

CROSS REFERENCE:

- Health and Safety Policy
- Combustion Appliance Safety
- Worst Case Draft
- Required Weatherization Tests

CITATION:

- WAP Service Provider Contract, Item 2
- Rasmussen, Erik. Combustion Analysis & Fuel Efficiency 2007
- Dwyer, Bob, et al. Carbon Monoxide A Clear and Present Danger 2003
- BPI Heating Professional Standards
- BPI Building Analyst Professionals

DUCT SEALING AND PRESSURE BALANCING

Revised July 2014

POLICY: Duct sealing and room to room pressure balancing are required activities in all dwellings with forced air heating systems.

PROCEDURE:

1. In single family and multi-family site-built dwellings the installers must:
 - a. Seal all exposed return ductwork to help prevent negative pressures in the basement and avoid placing the house under a positive pressure.
 - b. Seal all exposed supply ductwork to prevent the house from operating under a negative pressure and to improve the static pressure across the heating plant.
 - c. Pressure balance rooms within the conditioned space of the dwelling unit according to the Standard below.
 - d. Perform the room to room pressure balancing test in accordance with the Required Weatherization Tests Policy.
 - e. Record the results from the room to room pressure balancing test in the Weatherization Assistant (WA) software and in the Blower Door and House Pressures Form.
2. In manufactured dwellings installers must:
 - a. Take pressure pan readings at all boots and registers in accordance with the Required Weatherization Tests Policy.
 - b. Seal all ductwork at the boots and registers.
 - c. Seal all ductwork that is exposed or accessed in the belly of the mobile home during the weatherization work.
 - d. Record both before and after pressure pan readings in WA and in the Blower Door and House Pressures Form.

STANDARD:

1. Ductwork is sealed with fiberglass tape and mastic or spray polyurethane foam. Spray polyurethane foam must be installed in compliance with the MN Building Code.
2. In single family and multi-family site-built dwellings the following pressure measurements are met with the furnace fan running:
 - a. **Basement** – No greater than a negative 2 Pascals in relation to the rest of the dwelling unit.
 - b. **Dwelling as a whole** – No greater than a positive or negative 2 Pascals in relation to the outside.
 - c. **Bathroom** – No greater than a positive 5 Pascals in relation to the dwelling unit.
 - d. **Other rooms with interior doors** – No greater than a positive or negative 2 Pascals.
3. In mobile homes all ductwork has a pressure pan reading of less than one (1).

EXCEPTIONS: None

CROSS REFERENCE TO WAP DOCUMENTS:

Blower Door and House Pressures Form

CROSS REFERENCE TO OTHER POLICY:

Blower Door

Health and Safety

Pressure Diagnostics

Required Weatherization Tests

Minnesota Mechanical Code 2012

CITATION:

WAP Service Provider Contract, Item 2

WORST CASE DRAFT TEST

Revised May 2010

POLICY: All atmospheric combustion appliances used to heat the dwelling, (boilers, furnaces and space heaters) or to produce domestic hot water, must pass a worst case draft test for the dwelling to be considered complete. Worst case draft testing must be performed using the procedure specified below and as indicated in the **Required Weatherization Tests** policy.

PROCEDURE: The following procedure is required:

1. Close all windows and exterior doors. Remove the blower door or cover the blower door fan.
2. Turn on all equipment that exhausts air to the outside, including but not limited to: range hoods; bathroom, kitchen or any other exhaust fans; range ventilators; and gas or electric clothes dryers.
3. Shut off air conditioners and warm weather whole-house fans.
4. Wood burning furnaces, stoves or fireplaces must NOT be in operation.
5. Turn on all combustion appliances such as furnaces, boilers, space heaters, and water heaters.
6. Allow these appliances to operate for five minutes, then take their draft readings. In dwellings with forced-air systems, make sure the furnace fan is on and running. NOTE: Two-pipe sealed-combustion furnaces are excluded from the test itself, but must still be operating when the other appliances are being tested.
7. If any appliance does not pass the test, complete the following procedure:
 - a. Open a nearby window or door to the exterior. Retest the appliance(s) and complete either b. or c. below.
 - b. If the appliance(s) now meet the pressure measurements in the **Combustion Appliance Performance Indicators**, then consider installing combustion air.
 - c. If the appliance(s) still does not meet performance indicators, look for and correct other problems, such as chimney or venting blockages.
8. Retest the appliance(s) after corrective measures have been completed.

STANDARD:

1. Worst case draft test is performed by installers when they have completed their work. (Note that the Mechanical Test Standards policy recommends that installers perform a worst case draft at the end of each day's activities).
2. Worst case draft is performed as a part of all final inspections.
3. All appliances meet the draft standards listed in the **Combustion Appliance Performance Indicators** policy.
4. All draft test results (both tests and retests) are recorded in the Weatherization Assistant (WA) software.

EXCEPTION: The installers' required worst case draft may be omitted if the Service Provider completes a final inspection, including a worst case draft test, while the installer is still on the job site. This must be documented in WA.

CROSS REFERENCE:

Health and Safety Policy
Combustion Appliance Safety
Mechanical Systems: Dependability
Combustion Appliance Performance Indicators
Required Weatherization Tests
Minnesota Weatherization Field Guide
Minnesota Mechanical Systems Field Guide

CITATION:

WAP Service Provider Contract, Item 2

HEATING PLANT REPLACEMENT

Revised July 2014

POLICY: Heating plant replacements are allowed for either efficiency or Health/Safety. All replacements must:

1. Have the highest efficiency possible.
2. Be sealed combustion (two-pipe system) unless physical conditions in the dwelling prevent it. Conditions that prevent a two-pipe system must be clearly documented in WA.
3. Furnaces must install an Electronically Commutated Motor (ECM).

PROCEDURE:

1. All heating plants should be evaluated for replacement. All heating plants older than seven (7) years must be evaluated for replacement based upon the heating plant's efficiency. If the SIR is one (1.0) or greater the heating plant must be replaced.
2. For all replacements:
 - a. The Service Provider must:
 - i. Adhere to all requirements outlined in the Sizing Requirements for Heating Plant Replacements Policy.
 - ii. Estimate the total cost of the replacement including distribution modifications and other necessary costs. Separate the costs into materials and labor and enter them into Weatherization Assistant.
 - iii. Write specifications and obtain multiple bids or follow the Service Provider's procurement policy. In an emergency, Service Providers must follow the emergency procedures outlined in the Standalone Event Policy.
 - (1) If it is discovered that the heating plant is non operational or has a cracked heat exchanger during a clean and tune you must follow a competitive process for awarding the replacement. The contractor that performed the clean and tune must not be awarded the replacement unless they have gone through a competitive process for being awarded the work.
 - iv. Inspect the installation, including distribution and any other modifications. Document that the work meets the Standard below.
 - v. Re-test to verify the contractor's test results.
 - vi. Document inspection, test results, and actual costs in WA.
 - b. The contractor must:
 - i. Replace the heating plant in accordance with the specifications provided by the Service Provider and all applicable codes.
 - ii. Pull a permit and have the work inspected where applicable.
 - iii. Test the new heating plant upon completion of the installation following the Required Weatherization Tests Policy to confirm that it complies with the manufacturer's specifications.
 - iv. Submit an itemized invoice that separates material and labor costs.
3. For Health/Safety replacements, the Service Provider must:

- a. Use the Health/Safety measure type in WA.
 - b. Identify and document the reason(s) for replacing the heating unit in WA.
4. For efficiency replacements:
- a. Use the HVAC measure type in WA. Efficiency replacements must have an SIR of one or greater.
 - b. Calculate the SIR based on the estimated cost of replacing the heating plant including the cost of minor distribution modifications.
 - c. Major distribution modifications may be completed according to the Measures and Measure Types Chart.
 - d. If the heating plant is less than seven years old enter the AFUE on the data plate in WA to calculate a the SIR for replacement.
 - e. Use the table below to determine which efficiency rating to enter in the WA software for the SIR calculation. Only the numbers from the table below may be entered in WA for the SIR calculation. Auditors must not use the tested Steady State Efficiency of the existing heating plant for the SIR calculation.
 - i. Use the table below for heating plants that are seven years old or older, units that have a cracked heat exchanger, or units that are non-operational at the time of the audit.

If AFUE of existing heating plant is	Use this efficiency number in SIR calculation
55%	49%
60%	54%
65%	59%
70%	63%
75%	67%
80%	82%
85%	76%
90%	81%
95%	85%
96%	86%
98%	88%

STANDARD:

1. The installed heating plant and distribution are appropriate for the dwelling type and the situation according to the bid specifications created by the Service Provider.
2. The installation is in accordance with any or all of the following:
 - a. Applicable local or State Building Codes.
 - b. Manufacturer’s specifications or instructions.
 - c. Equipment is properly sealed and protected from the elements (exterior only).
 - d. Equipment does not detract from the appearance, structural soundness, safety, or

durability of the dwelling.

EXCEPTIONS: One-pipe (not sealed) heating plants may be allowed where conditions in the dwelling or the type of heating plant make a two-pipe sealed combustion installation impossible. The WA file must adequately document the reasons why a sealed combustion heating plant was not installed.

CROSS REFERENCE TO WAP DOCUMENTS

Allowed Activities and Measures Chart
Clean and Tune/Replacement Form
Mechanical Testing Form

CROSS REFERENCE TO OTHER POLICY:

Clean and Tune
General Repair
Health and Safety
Required Weatherization Tests
Sizing Requirements for Heating Plant Replacements Policy
Standalone Event
Weatherization Allowed Activities and Measure Types

CITATION:

10 CFR 440.18(c)(15)
NAHB/Bank of America Home Equity Study of Life Expectancy of Home Components

SIZING REQUIREMENTS FOR HEATING PLANT REPLACEMENTS

Revised February 2013

POLICY: Service Providers must calculate new heating plant sizes using the Wrightsoft Right Suite Universal software distributed by the Department of Commerce. Sizing requirements from the Wrightsoft software must be provided to competing contractors for bidding purposes.

Contractors are required to complete their own ACCA approved heat loss calculations and provide a record to the service provider when they have been awarded the work and prior to the installation of the heating plant.

PROCEDURE:

1. Service providers must use an indoor design temperature of 70 degrees Fahrenheit.
2. When selecting a location service providers must choose the nearest city from the list below. Service Providers must use the most recent data from the ASHRAE standard when selecting a location.
 - a. MPLS/St. Paul International Airport
 - b. International Falls
 - c. Duluth
 - d. Rochester
 - e. St. Cloud
 - f. Fargo
 - g. Sioux Falls
3. Each dwelling must be entered in the Wrightsoft software as it will appear after the weatherization work has been completed. The following items must be entered into Wrightsoft to assure that the heat loss calculations are accurate.
 - a. Above Grade Framed Walls and Masonry Walls
 - i. Total R-Value of the post retrofit insulation of each wall as determined by running the audit in the WA software
 - ii. Include a separate wall for the Rim Joist if the R – Value differs from the framed wall

Note: All of the walls may be entered as one wall facing North.
 - b. Doors
 - i. Type of door
 - ii. Total square footage of the door slabs

Note: All of the doors may be entered as one wall facing North if that is the method chosen to model the walls.
 - c. Windows
 - i. Type of window
 - ii. Type of glazing
 - iii. Material of the window frame
 - iv. Total square footage of all windows in the dwelling
 1. Windows must be entered on the wall on which they are located
 2. Windows in foundation walls must be included
 3. Skylight windows must be modeled in the attic.

Note: All of the windows may be entered as one wall facing North if that is the method chosen to model the walls.

- d. Roofs and Ceilings
 - i. Total square footage of each attic/ceiling modeled individually (i.e. collar beam, knee wall, side attic, slants, floored attic, and bay or bow windows)
 - ii. Total R-Value of the post retrofit insulation of each attic as determined by running the audit in the WA software
 - e. Vented Crawl Space or Exposed Floor (includes bay or bow windows)
 - i. Total square footage
 - f. Concrete Slab
 - i. Total square footage
 - ii. Total existing R Value
 - g. Foundation Walls
 - i. Total square footage
 - ii. Post retrofit R-Value as determined by running the audit in the WA software
 - h. Infiltration
 - i. Service Providers must use the Blower Door Method Infiltration for the entire house
 - ii. The target blower door number must be entered in the Test Point data entry field
 - i. Ductwork
 - i. Type of duct system
 - ii. Post retrofit R – Value on the ductwork on ductwork outside the thermal boundary as determined by running the audit in the WA software
 - iii. Tightness of the ductwork
4. Determine the sensible heat loss of the dwelling by printing the Loads Report in the Wrightsoft Report Builder Section.

STANDARD: The dwelling is modeled in accordance with the procedure listed above. Potential bidders have been provided with sizing requirements for bid specifications.

Contractors have submitted bids for replacement heating plants in accordance with the sizing requirements listed on the Service Provider Bid Specifications. Contractors have supplied a copy of their heat loss calculations to the Service Provider for review prior to the installation of the heating plant.

A copy of the Load Reports from the Wrightsoft Software is filed in the household file.

EXCEPTIONS:

1. In rare occasions the information provided by Wrightsoft for heating plant sizing will not be sufficient for the dwelling. In these cases the service provider must:
 - a. Obtain in writing from the mechanical contractor a justification why the heating plant sizing provided by the Service Provider is incorrect. The letter must contain a breakdown of the itemized components at the home to justify why the recommended heating plant sizing is different from that produced by Wrightsoft.
 - b. In cases where a particular brand of heating plant does not have the size specified by the Service Provider in the bid specs, the mechanical contractor must provide that information on their bid along with their heat loss calculations.
 - c. For all of these situations, contact your monitor for written approval.
2. For mobile homes, use the furnace sizing requirements from the data plate.
3. Service Providers are exempt from completing their own heat loss calculations for Standalone Events. For Standalone events, the contractor must provide an ACCA approved heat loss calculation and sizing with their invoice.

CROSS REFERENCE TO WAP DOCUMENTS:

Fuel Switch Request Form
Life-Cycle Fuel Cost Calculations Chart
Notice of a Safety Problem Form
Weatherization Service Agreement
WAP Glossary
Minnesota Weatherization Field Guide
Minnesota Mechanical Systems Field Guide
EAP Policy Manual, Energy Related Repair

CROSS REFERENCE TO OTHER POLICY:

Clean and Tune
Combustion Appliance Safety
Combustion Appliance Performance Indicators
Final Inspection Audit Event
General Repair
Health and Safety
Heating Plant Replacement
Required Weatherization Tests
Standalone Event
Standalone Event Guidance
Worst Case Draft Test

CITATION:

WAP Service Provider Contract
10 CFR 440.18(c)(15)

AIR SEALING and ASHRAE 62.2

Revised July 2014

POLICY: Air sealing activities improve a dwelling's thermal boundary and minimize the uncontrolled leakage of conditioned air and moisture into unconditioned spaces. DOE requires states to comply with the 2013 ASHRAE 62.2 as a Health and Safety measure. Use the procedure below to assist in air sealing and to establish a ventilation rate in accordance with the 2013 ASHRAE 62.2 standard.

This standard applies to spaces intended for human occupancy within single-family houses and multi-family structures of three stories or fewer above grade, including manufactured and modular houses.

- All continuously running exhaust fans must have a sone rating no greater than 1.0.
- Exhaust fans that are to be used as continuously running fans must be rated for continuous running.
- All ductwork must be rigid and installed per the manufacturer's instructions and in accordance with applicable codes.
- All exhaust fans must be installed in accordance with the National Electrical Code and wired by a licensed electrician.
- All exhaust fans must be inspected by the local building official or the State of Minnesota.
- All installed exhaust fans set for continuous ventilation must have a separate power switch that is labeled and readily accessible as described in the 2013 ASHRAE 62.2 Standard.

PROCEDURE:

1. Complete air-sealing at a dwelling as much as possible within the SIR requirements to achieve the lowest air leakage with a pressure differential at 50 Pa.
2. Determine the whole house ventilation needs of the home using the 2013 ASHRAE 62.2 Standard. Collect the following data and enter it into the Residential Energy Dynamics 2013 ASHRAE 62.2 worksheet or use an alternative calculation spreadsheet approved by Commerce.
 - a. Number of occupants or number of bedrooms plus 1 (whichever is greater).
 - b. Square footage of conditioned floor space (include the basement square footage).
3. Test the existing exhaust fans in the kitchen and the bathrooms and enter the tested CFM in the Residential Energy Dynamics 2013 ASHRAE 62.2 worksheet or use an alternative calculation spreadsheet approved by Commerce.
4. Enter the CFM reduction number if there are operable windows in the kitchen and bathrooms.
5. Install an exhaust fan to meet the continuous whole house ventilation needs as specified

by the Residential Energy Dynamics 2013 ASHRAE 62.2 worksheet or use an alternative calculation spreadsheet approved by Commerce.

6. All exhaust fans must be tested as specified in the Required Weatherization Tests Policy with results recorded in the appropriate form and in the Weatherization Assistant Software.
7. The house must be in compliance with the 2013 ASHRAE 62.2 standard at the time of the Final Inspection using the following results from the Final Inspection:
 - a. Final Blower Door Reading
 - b. Tested CFM of all exhaust fans present

NOTE: Heat Recovery Ventilators (HRV) and Energy Recovery Ventilators (ERV) may only be installed or repaired with **prior approval** from Commerce.

CROSS REFERENCE TO WAP DOCUMENTS:

Residential Energy Dynamics 2013 ASHRAE 62.2 worksheet
Blower Door and House Pressures Form
Garage Zonal Pressures Form

CROSS REFERENCE TO OTHER POLICY:

Blower Door
Final Inspection Audit Event
Pressure Diagnostics
Required Weatherization Tests

CITATION:

2013 ASHRAE 62.2 Standard

GAS BOILER CLEAN AND TUNE/REPLACEMENT INSTRUCTIONS

I. HEAT EXCHANGER

1. Visually check the heat exchanger for any cracks
2. Perform a chemical leak test or another heat exchanger integrity test beyond a visual inspection.
3. If the heat exchanger is cracked **stop all work and immediately contact the weatherization provider.**

II. CLEAN

A. Combustion Area

1. Brush down the heat exchanger sections to remove all dirt, soot, and rust.
2. Brush down and vacuum all flue passage ways within the boiler.
3. Remove ribbon burners or burner tubes and brush down to remove dirt, soot and loose rust. Clean all flame ports. Inspect tubes for cracks.
4. Clean gas orifices and ensure proper size.
5. Brush down and vacuum remainder of combustion chamber so that it is free of dirt, soot, and loose rust.
6. Clean pilot orifices and test thermocouple.

B. Flue

1. Inspect flue pipe from furnace to chimney for rust, weak spots, and leaks. Repair flue as needed.
2. Clean and vacuum flue pipe and reinstall in a secure manner.

C. Distribution

1. Check pump. If possible lubricate the bearings.
2. Check zone valves.
3. Purge expansion tank, if water is rusty or has sludge, drain flush and refill the system.
4. Check fill and safety valves.
5. Purge air valves and bleed radiators. Check and add water to the correct PSI specifications for the boiler.
6. Check each radiator for output.

III. TUNE

A. Combustion

1. Test for fuel leaks and fix any leaks that are present.
2. Adjust gas input to 3.5" W.C. on natural gas or 10.5" W.C. on LP gas in the manifold. Clock the meter (if possible) to ensure the input is within 2 percent of rated input. **NOTE:** If gas pressure is correct, and clocked input is more than 2 percent lower than rated input, check orifices for proper size. If furnace is overfiring and gas pressure is correct, then change to lower orifice size.
3. Adjust primary air shutter to obtain highest CO₂ or lower O₂ in the flue (before diverter) without making CO and still maintaining a steady blue flame with slightly yellow tips. There must not be any lifting, floating, or jumping flames.
4. Adjust pilot flame just high enough to activate the thermo couple and ignite burner without delay.
5. Boilers with electronic pilots should ignite without delay.
6. Test ignitor to ensure that it will lock out after first or second attempt to ignite pilot. (LP only)
7. Measure amperage of the gas valve, and any other low voltage equipment on the control circuit, and set thermostat heat anticipator to match.
8. Calibrate thermostat and thermostat thermometer to within one degree at 72 degree setting.

IV. CLEAN AND TUNE/REPLACEMENT

A. Distribution

1. Check zone valves.
2. Purge expansion tank, if water is rusty or has sludge, drain flush and refill the system.
3. Purge air valves and bleed radiators. Check and add water to the correct PSI specifications for the boiler.

4. Check fill and safety valves.
5. Check distribution system for leaks

B. Boiler Installation

1. Set the gas pressures according to the manufacturer's specifications.
2. Seal around any new penetrations to the exterior of the dwelling.
3. Calibrate thermostat and thermostat thermometer to within one degree at 72 degree setting.

C. Miscellaneous

1. Verify that the condensation is adequately disposed of. Install a condensate pump if disposal would result in a tripping hazard or a floor drain is not readily accessible.
2. If condensation disposal pipe on the floor secure the pipe to the floor drain.
3. Test for fuel leaks and fix any leaks that are present.
4. Inspect the emergency shut off switch to make sure it is working and safe.
5. Terminate any combustion air duct in a j-trap or in a fixed receptacle.

GAS FURNACE CLEAN AND TUNE/REPLACEMENT INSTRUCTIONS

I. HEAT EXCHANGER

1. Visually check the heat exchanger for any cracks
2. Perform a chemical leak test or another heat exchanger integrity test beyond a visual inspection.
3. If the heat exchanger is cracked **stop all work and immediately contact the weatherization provider.**

II. CLEAN

A. Combustion Area

1. Brush down all dirt, soot, and rust from heat exchanger sections.
2. Brush down and vacuum all flue passage ways within the furnace.
3. Remove ribbon burners or burner tubes and brush down to remove dirt, soot, and loose rust. Clean all flame ports. Inspect tubes for cracks.
4. Clean gas orifices and ensure proper size.
5. Brush down and vacuum remainder of combustion chamber so that it is free of dirt, soot, and loose rust.
6. Clean pilot orifices and test thermocouple.

B. Flue

1. Inspect flue pipe from furnace to chimney for rust, weak spots, and leaks. Replace bad pipes as needed.
2. Clean and vacuum the flue pipe reinstall in a secure manner.

C. Air Handling

1. Clean and vacuum heat exchanger, if accessible.
2. Clean and vacuum blower, filter rack and the return cabinet so that they are free of dirt, grease foreign objects..
3. Clean and vacuum all supply and return registers and immediate duct openings.
4. Verify that the return openings for a Manufactured Home are the correct size.
5. Clean the fresh air filter for Manufactured Home furnaces.
6. Terminate any combustion air duct in a j-trap or in a fixed receptacle.
7. Inspect filter. If permanent type, clean as per manufacturer's recommendations. If disposable type, replace with new filter. Mark air flow and filter size on ductwork.

III. TUNE

A. Combustion

1. Test for fuel leaks and fix any leaks that are present.
2. Adjust gas input to 3.5" W.C. for natural gas or 10.5" W.C. for L.P gas in the manifold. Clock the meter (if possible) to ensure the input is within 2 percent of rated input. **NOTE:** If gas pressure is correct, and clocked input is more than 2 percent lower than rated input, check orifices for proper size. If furnace is overfiring and gas pressure is correct than change orifice to a smaller size.
3. Adjust primary air shutter to obtain highest CO₂ or lower O₂ in the flue (before diverter) without making CO and still maintaining a steady blue flame with slightly yellow tips. There must not be any lifting, floating, or jumping flames.
4. Adjust pilot flame just high enough to activate the thermo couple and ignite the burner without delay.
5. Furnaces with electronic pilots should ignite without delay.
6. Test the ignitor to ensure that it will lock out after first or second attempt to ignite pilot. (LP only)
7. Measure amperage of the gas valve and any other low voltage equipment on the control circuit and set thermostat heat anticipator to match.
8. Calibrate thermostat and thermostat thermometer to within one degree at 72 degree setting.

B. Air Handling

1. Check blower and motor bearings. Lubricate as needed.
2. Check belt condition (replace if worn or cracked) and adjust for proper tension.
3. If stack temperature is above 450 degrees net, increase blower speed to deliver more heat and lower stack temperature. Note: Stack temperature should not be lower than 350 degrees net. If it is, decrease blower

speed slightly (Note: This may not work on all furnaces) or adjust blower to obtain greatest temperature rise at the supply plenum.

4. Set fan switch (if possible) so blower comes on at 110 degrees and goes off at 100 degrees.
5. Test fan and limit control for proper operation.
6. Adjust supply register on plenum, (if so equipped) to supply between 100 and 125 CFM.
7. Balance supply distribution for individual homeowner's comfort.

IV. CLEAN AND TUNE AND REPLACEMENT

A. *Air Handling*

1. Verify that the return openings for a Manufactured Home are the correct size.
2. Clean the fresh air filter for Manufactured Home furnaces.
3. Seal connections on ductwork altered by the installation of the new furnace or the combustion air pipe.
4. Terminate any combustion air duct in a j-trap or in a fixed receptacle.
5. Mark air flow and filter size on ductwork.

B. *Furnace Installation*

1. Set the gas pressures according to the manufacturer's specifications. For multi stage furnaces verify the gas pressures on all firing stages. (low, med, and high)
2. Verify that the heat rise and the duct static pressures are within the manufacturers specifications.
3. Seal around any new penetrations to the exterior of the dwelling.

C. *Miscellaneous*

1. Verify that the condensation is adequately disposed of. Install a condensate pump if disposal would result in a tripping hazard or a floor drain is not readily accessible.
2. If condensation disposal pipe on the floor secure the pipe to the floor drain.
3. Condensation lines in mobile homes must terminate in the sanitary plumbing system with approved fittings.
Note: Condensation lines cannot terminate underneath the home or directly onto the ground.
4. Test for fuel leaks and fix any leaks that are present.
5. Inspect the emergency shut off switch to make sure it is working and safe.

OIL BOILER CLEAN AND TUNE/REPLACEMENT INSTRUCTIONS

I. HEAT EXCHANGER

1. Visually check the heat exchanger for any cracks
2. Perform a chemical leak test or another heat exchanger integrity test beyond a visual inspection.
3. If the heat exchanger is cracked **stop all work and immediately contact the weatherization provider.**

II. CLEAN

A. *Combustion Area*

1. Brush down all dirt, soot, and rust from heat exchanger sections.
2. Brush down and vacuum all flue passage ways within the boiler.
3. Clean blast tube and flame head.
4. Replace nozzle with same size or lower size, if de-rating is possible or desirable.
5. Replace oil line filter element.
6. Brush down and vacuum remainder of combustion chamber so that it is free of dirt, soot, and loose rust.

B. *Flue*

1. Inspect flue pipe from furnace to chimney for rust, weak spots, and leaks. Replace as needed
2. Clean and vacuum flue pipe and reinstall in a secure manner.
3. Clean and check barometric damper for proper operation.

C. *Air Sealing*

1. Seal all joints and seams that would allow air from the room or surrounding area to enter any part of the combustion side of the heating unit.
2. Seal any and all doors or access covers between the combustion areas and the outside of the heating unit.

D. *Distribution*

1. Check pump, lubricate bearings, if possible.
2. Check zone valves.
3. Purge expansion tank, if water is rusty or has sludge, drain flush and refill the system.
4. Check fill and safety valves
5. Purge air valves and bleed radiators. Check and add water to the correct PSI specifications for the boiler.
6. Check each radiator for output.

III. TUNE

A. *Combustion*

1. Inspect the fuel line for leaks any leaks that are present
2. Adjust primary air shutter to obtain the highest CO₂ or lowest O₂ in the flue, without making the smoke test higher than number 2 and the draft, at breech, no higher than .06 inches w/c.
3. Adjust the burner so there is no flame impingement.
4. Measure amperage of burner control, combined with any other load that may be on the low voltage control circuit, and set thermostat heat anticipator to match.
5. Calibrate thermostat and thermostat thermometer to within one degree at 72 degree setting.

IV. CLEAN AND TUNE AND REPLACEMENT

A. *Distribution*

1. Check zone valves.
2. Purge expansion tank, if water is rusty or has sludge, drain flush and refill the system.

3. Purge air valves and bleed radiators. Check and add water to the correct PSI specifications for the boiler.
4. Check fill and safety valves.
5. Check distribution system for leaks.

B. Boiler Installation

1. Set the fuel pressures according to the manufacturer's specifications.
2. Calibrate thermostat and thermostat thermometer to within one degree at 72 degree setting.

C. Miscellaneous

1. Inspect for fuel leaks and fix any leaks that are present.
2. Inspect the emergency shut off switch to make sure it is working and safe.
3. Terminate any combustion air duct in a j-trap or in a fixed receptacle.

OIL FURNACE CLEAN AND TUNE/REPLACEMENT INSTRUCTIONS

I. HEAT EXCHANGER

1. Visually check the heat exchanger for any cracks
2. Perform a chemical leak test or another heat exchanger integrity test beyond a visual inspection.
3. If the heat exchanger is cracked **stop all work and immediately contact the weatherization provider.**

II. CLEAN

A. *Combustion Area*

1. Brush down all dirt, soot, and rust from heat exchanger sections.
2. Brush down and vacuum all flue passage ways within the boiler.
3. Remove draw assembly. Clean and align ignition electrodes.
4. Clean blast tube and flame head.
5. Replace nozzle with same size or lower size, if de-rating is possible or desirable.
6. Brush down and vacuum remainder of combustion chamber so that it is free of dirt, soot and loose rust.
7. Replace oil line filter cartridge.

B. *Flue*

1. Inspect flue pipe from furnace to chimney for rust, weak spots, and leaks. Replace pipe as needed.
2. Clean and vacuum flue pipe and reinstall in a secure manner.
3. Clean and check barometric damper for proper operation.

C. *Air Handling*

1. Clean and vacuum heat exchanger, if accessible.
2. Clean and vacuum blower, return cabinet, and filter rack so that they are free of dirt, grease and any foreign matter.
3. Clean and vacuum all supply and return registers and immediate duct openings.
4. Terminate any combustion air duct in a j-trap or in a fixed receptacle.
5. Inspect filter. If permanent type, clean as per manufacturer's recommendations. If disposable type, replace with new filter.
6. Mark air flow and filter size on ductwork.

III. TUNE

A. *Combustion*

1. Inspect the fuel line for leaks any leaks that are present
2. Seal all joints, cracks, and openings that would allow air to infiltrate into the combustion area of the furnace.
3. Adjust barometric damper to obtain a reading of .02 - .09" W.C at the breech.
4. Adjust primary air shutter to obtain highest CO₂ in the flue (before barometric damper) with a smoke test of 0 to 2 while still maintaining a steady flame. (O-1 on flame retention burners)
5. Adjust the burner so there is no flame impingement.
6. Measure amperage of primary control and set thermostat heat anticipator to match.
7. Calibrate thermostat and thermostat thermometer to within one degree at 72 degree setting.

B. *Air Handling*

1. Check blower and motor bearings. Lubricate as needed.
2. Check belt condition (replace if worn or cracked) and adjust for proper tension.
3. If stack temperature is above 550 degrees, increase the blower speed to deliver more heat and lower the stack temperature. NOTE: This may not work on all furnaces.
4. Set fan switch (if possible) so that blower comes on at 120 degrees and goes off at 100 degrees. Set limit at no higher than 240 degrees, if limit is adjustable.
5. Test fan and limit control for proper operation.

6. Adjust supply register on plenum, (if so equipped) to supply between 100 and 125 CFM.
7. Balance supply distribution for individual homeowner's comfort.

IV. CLEAN AND TUNE AND REPLACEMENT

A. *Air Handling*

1. Seal connections on ductwork altered by the installation of the new furnace or the combustion air pipe.
2. Terminate any combustion air duct in a j-trap or in a fixed receptacle.
3. Mark air flow and filter size on ductwork.

B. *Furnace installation*

1. Set the oil pressures according to the manufacturer's specifications. For multi stage furnaces verify the oil pressures on all firing stages. (low, med, and high)
2. Verify that the heat rise and the duct static pressures are within the manufacturers specifications.

C. *Miscellaneous*

1. Verify that the condensation is adequately disposed of. Install a condensate pump if disposal would result in a tripping hazard or a floor drain is not readily accessible.
2. If condensation disposal pipe on the floor secure the pipe to the floor drain.
3. Test for fuel leaks and fix any leaks that are present.
4. Inspect the emergency shut off switch to make sure it is working and safe.

ALLOWED ACTIVITIES AND MEASURE TYPE CHART

Revised July 2014

A	B	C	D	E	F
1	Section 1 ATTIC				
2	MEASURE TYPE CHOICES				
3	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
4	1 Insulate all types of attics.	Insulation	None	None	
5	2 Insulate mobile home ceiling.	Insulation	None	None	Cellulose is not an allowed material for this Measure.
6	3 Insulate/weather-strip hatch.	Insulation	None	None	
7	4 Construct/repair attic hatch.	Insulation	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
8	5 Insulate/weather-strip kneewall door.	Insulation	None	None	
9	6 Insulate/weather-strip/sweep walk-up door.	Insulation	None	None	
10	7 Cut access to knee wall or peak attic.	Insulation	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
11	8 Weather-strip and/or sweep attic access (all types).	Air sealing	None	None	Use this option ONLY where access is already insulated or where cost of activity cannot be included in attic insulation Measure.
12	9 Install/replace vent chutes.	Insulation	Health/Safety	Repair	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
13	10 Dam around hatch.	Insulation	Repair	None	Fiberglass insulation is not allowed for this activity EXCEPT when the pitch or the proximity of the roof deck is such that the insulated attic hatch will not be able to be moved once it is in place. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure
14	11 Dam around chimney or flue.	Insulation	Health/Safety	None	
15	12 Dam around floored attic storage area.	Insulation	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
16	13 Seal bypasses (includes minor sheet rocking).	Air sealing	Insulation	None	Include the cost of the blower door and pressure diagnostic tests in the Air sealing measure cost.
17	14 Seal bypasses in tight house (includes minor sheet rocking).	Air sealing	Health/Safety	None	Include the cost of the blower door and pressure diagnostic tests in the Air sealing measure cost.
18	15 Repair/replace knob-and-tube wiring in attic.	Insulation	Repair	Health/Safety	Include as much of the cost in the attic insulation Measure as possible. Cost the remainder, if any, to Repair. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure Cost to Health/Safety measure type ONLY if no money is available in Insulation and Repair Measure Types.
19	16 Vent soil stack to exterior.	Health/Safety	None	None	
20	17 Vent/revent exhaust fans to exterior.	Health/Safety	None	None	
21	18 Install house wrap over kneewall insulation.	Insulation	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
22	19 Patch holes in slants/ceiling (includes minor sheet rocking).	Insulation	Repair	None	Allowed ONLY where holes create gaps in thermal boundary. Include as much of the cost as possible in insulation measure. Cost the remainder, if any, to the Repair Measure Type. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
23	20 Box in recessed lights in order to insulate in the attic.	Insulation	Air sealing	Repair	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
24					

	A	B	C	D	E	F
25		Section 2 ROOF				
26		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
27			PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
28	1	Repair minor roof leak.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
29	2	Repair/replace flashing.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
30	3	Repair/replace soffit/fascia.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
31	4	Coat or seam seal mobile home roof.	Repair	None	None	Roof Coating is only an allowed measure on a mobile home when the attic is being insulated. If the roof leaks and the attic is not being insulated then the home must be deferred until the leak is fixed by the client or another funding source.
32	5	Remove/replace vents for access to attic.	Insulation	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
33	6	Add roof vents for moisture control.	Insulation	Health/Safety	None	
34	7	Remove turbine vents.	Repair	Health/Safety	None	Replace ONLY with R-61s or similar vents. Repair may only be used If the measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure
35	8	Patching a mobile home roof after insulation is installed.	Insulation	Repair	None	Include as much of the cost as possible in the insulation measure. Only use General Repair as a second choice when the cost of patching drops the SIR of insulating the roof below one (1.0). Replace ONLY with R-61s or similar vents. Repair may only be used If the measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure
36	11	Repair/replace/install gutters/downspouts.	Health/Safety	None	None	Allowed only with prior approval from Commerce.
37	9	Install/repair turbine vents.	NOT ALLOWED			
38	10	Install/replace deicer cables.	NOT ALLOWED			
39						

ALLOWED ACTIVITIES AND MEASURE TYPE CHART

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	A	B	C	D	E	F
40		Section 3 WALLS				
41		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
42			PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
43	1	Insulate from exterior.	Insulation	None	None	
44	2	Insulate mobile home walls.	Insulation	None	None	Allowed ONLY in stick built addition to mobile home.
45	3	Remove/replace/repair cladding.	Insulation	None	None	Allowed ONLY to install insulation.
46	4	Install/repair/replace damaged cladding.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. If the cladding is damaged during the installation of the insulation, the Installer is responsible for the cost of repairing the cladding.
47	5	Patch stucco.	Insulation	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
48	6	Use lead safe and asbestos safe work practices during exterior insulation installation.	Insulation	Health/Safety	None	Include as much of the cost in wall insulation Measure as possible. Cost the remainder, if any, to Health/Safety Measure type.
49	7	Seal/insulate a cantilever or bay window.	Insulation	None	None	
50	8	Insulate from the interior.	Insulation	None	None	
51	9	Use lead safe work practices during interior insulation installation.	Insulation	Health/Safety	None	Include as much of the cost in wall insulation as possible. Cost the remainder, if any, to Health/Safety measure type.
52	10	Patch/sand holes from interior blow.	Insulation	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
53	11	Patch test holes	Insulation	Air sealing	None	
54	12	Patch interior holes in walls (includes minor sheet rocking).	Insulation	Air sealing	Repair	This measure is only allowed if there are gaps in the thermal or pressure boundary of the dwelling. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
55	13	Repair/replace knob-and-tube wiring.	Insulation	Repair	Health/Safety	Include as much of the cost in the wall insulation measure as possible. Cost the remainder, if any, to Repair. Repair may only be used If the measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. Cost to the Health/Safety Measure Type ONLY if no money is available in Insulation and Repair Measure Types.
56	14	Seal air leaks between attached garage and house.	Air sealing	Health/Safety	None	
57	15	Build wall to create/move thermal boundary.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
58	16	Seal top of interior open partition walls.	Air sealing	Insulation	None	
59						

	A	B	C	D	E	F
60		Section 4 BASEMENT				
61		MEASURE TYPE CHOICES				
62			PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
63	1	Seal air leakage.	Air sealing	None	None	
64	2	Insulate rim joists.	Insulation	Air sealing	None	
65	3	Remove Fiberglass insulation at the rim joist	Insulation	Air sealing	Health/Safety	This is only allowed if there is mold behind the existing fiberglass insulation. The cost should first be put in the Insulation Measure for insulating the rim, then with the Air Sealing Measure for foaming the rim, then Health/Safety
66	4	Insulate walls and ceiling of a well room.	Insulation	None	None	Must have prior approval from Commerce for any insulation type.
67	5	Insulate foundation walls	Insulation	None	None	Must have prior approval from Commerce for any insulation type.
68	6	Seal/repair ductwork (inside thermal boundary).	Health/Safety	None	None	
69	7	Repair/air seal in-use wood chute.	Air sealing	None	None	
70	8	Close off unused wood chute.	Air sealing	None	None	
71	9	Air seal/repair cellar doors to the exterior.	Air sealing	None	None	
72	10	Weather-strip/sweep doors to exterior.	Air sealing	None	None	
73	11	Install/replace/upgrade electric service panel.	Repair	Health/Safety	None	Allowed ONLY with prior approval from Commerce. Repair may only be used if the measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
74	12	Install/replace cover on a sump pump.	Health/Safety	None	None	
75	13	Insulate walls with wet spray cellulose.	NOT ALLOWED			
76	14	Install/repair/replace sump pump.	NOT ALLOWED			
77						
78		Section 5 CRAWLSPACE (INTERIOR)				
79		MEASURE TYPE CHOICES				
80		ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
81	1	Insulate walls from the interior.	Insulation	None	None	Must have prior approval from Commerce for any insulation type.
82	2	Install vapor barrier.	Health/Safety	None	None	The vapor barrier must be continuously run up the foundation walls the crawlspace and sealed to the bottom plate of the rim.
83	3	Seal air leakage.	Air sealing	Insulation	None	All foam products must comply with the adopted MN Building Codes and the MN WAP Policy Manual.
84	4	Insulate walls with wet spray cellulose.	NOT ALLOWED			
85		Install or replace heat tape.	NOT ALLOWED			

ALLOWED ACTIVITIES AND MEASURE TYPE CHART

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	A	B	C	D	E	F
86						
87		Section 6 FOUNDATION (EXTERIOR)				
88			MEASURE TYPE CHOICES			
89	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
90	2	Insulate from exterior	Insulation	None	None	Must have prior approval from Commerce for any insulation type.
91	3	Seal air leakage.	Air sealing	None	None	
92	4	Raise/change exterior grade.	Health/Safety	None	None	Must have prior approval from Commerce.
93		Structural repair.	NOT ALLOWED			
94						
95		Section 7 FLOORS				
96			MEASURE TYPE CHOICES			
97	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
98	2	Insulate tuck-under garage ceiling.	Insulation	None	None	
99	3	Seal bypasses in tuck-under garage ceiling.	Insulation	Health/Safety	None	Include as much of the cost as possible in ceiling insulation measure. Cost the remainder, if any, to Health/Safety measure type.
100		Insulate porch floors and cantilevers.	Insulation	None	None	Allowed ONLY where floors form part of thermal boundary.

	A	B	C	D	E	F
101						
102		Section 8 DOORS				
103		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
104	1		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
105	2	Replace primary door in single family dwelling.	General Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. A door replacement must have prior approval from Commerce.
106	3	Replace primary door in mobile home.	Doors/ Windows	General Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. A door replacement must have prior approval from Commerce.
107	4	Replace broken glass, in single family or mobile home primary door.	Air Sealing	None	None	The glass must have a hole in it. Cracked glass may not be replaced.
108	5	Repair/adjust primary door/strike plate on primary door.	Air Sealing	None	None	This is only allowed when necessary to enable door to completely close and create air tight seal.
109	6	Repair/adjust/replace threshold/ jamb/ sill/other component on primary door.	Air Sealing	None	None	This is only allowed when necessary to enable door to completely close and create air tight seal.
110	7	Install/repair knobs/locksets on primary door.	Air Sealing	None	None	This is only allowed when necessary to enable door to completely close and create air tight seal.
111	8	Weather-strip/sweep primary door	Air Sealing	None	None	
112	9	Replace cracked glass, in single family or mobile home.	NOT ALLOWED			
113	10	Repair/replace screen or glass (storm door).	NOT ALLOWED			
114	11	Repair/replace/install storm door.	NOT ALLOWED			
115	12	Install/repair/replace interior door.	NOT ALLOWED			
116	13	Repair/replace/ install hardware for interior door.	NOT ALLOWED			

ALLOWED ACTIVITIES AND MEASURE TYPE CHART

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	A	B	C	D	E	F
117						
118		Section 9 WINDOWS				
119			MEASURE TYPE CHOICES			
120	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
121	2	Install/replace mobile home interior storm panel.	Doors/ Windows	None	None	
122	3	Install/replace single family or mobile home primary window.	Doors/ Windows	None	None	
123	4	Repair/replace sash.	Doors/ Windows	Air Sealing	None	
124	5	Replace broken glass on primary window.	Air Sealing	None	None	
125	6	Repair/adjust primary window so it closes.	Air Sealing	None	None	
126	7	Install weather-strip/sash lock/crank on primary window.	Air Sealing	None	None	
127	8	Repair exterior window trim to stop an existing leak.	Repair	None	None	Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. This measure must have prior approval from Commerce.
128	9	Replace cracked glass on any window.	NOT ALLOWED			
129	10	Repair/replace screen on any window.	NOT ALLOWED			
130	11	Install/repair/replace window shading.	NOT ALLOWED			
131	12	Install/repair/replace louvered/unlouvered window sunscreens.	NOT ALLOWED			
132	13	Install/repair/replace window film.	NOT ALLOWED			Window film is not allowed because it is a temporary measure.
133		Install/repair/replace awnings.	NOT ALLOWED			

	A	B	C	D	E	F
134						
135		Section 10 FURNACE OR BOILER REPLACEMENT (RELATED ACTIVITIES)				
136			MEASURE TYPE CHOICES			
137	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
138	2	Abate/remove asbestos.	Health/Safety	None	None	Includes asbestos on the heating plant, and abatement on the distribution system and/or flue that is needed during the replacement of the heating plant. Abatement on the distribution system or flue is typically allowed within the immediate vicinity of the heating plant. Also includes the cost of asbestos safe work practices. All asbestos abatement must be completed by a licensed AHERA contractor.
139	3	Install condensate pump.	HVAC	Repair	Health/Safety	Include the cost in the heating plant replacement if possible. Cost the remainder, if any, to the Repair Measure type. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure
140	4	Install/repair/ replace programmable thermostat.	HVAC	None	None	Install the Thermostat as a separate Conservation Measure. If the separate Measure does not achieve the SIR then include the cost of the Thermostat in the cost of the heating plant replacement.
141		Install/repair/relocate/replace non-programmable thermostat.	HVAC	Health/Safety	None	Include the thermostat cost in the heating plant replacement measure. If the Measure does not achieve the SIR when included in the replacement then it may be installed as a separate Health and Safety Measure. A Non-programmable thermostat is only allowed when the client refuses programmable thermostat.
142						
143		Section 11 FURNACE REPLACEMENT				
144			MEASURE TYPE CHOICES			
145	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
146	2	Replace furnace.	HVAC	Health/Safety	None	Health and Safety may only be used if there is a Health and Safety risk to the client and the SIR of the Conservation Measure is less than 1.0.
147	3	Upgrade motor to ECM (Electronically Commutated Motor).	HVAC	None.	None	Service Providers may only use the energy savings in the User Defined Measure on the Commerce website to determine cost effectiveness of this measure.
148	4	Add/replace/repair/seal ductwork, supply and return plenums.	HVAC	Repair	Health/Safety	Include as much of the cost as possible in the furnace replacement HVAC Measure. Cost the remainder, if any, to the Repair Measure type. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. Use the Health/Safety Measure type only if the HVAC and Repair Measure types do not achieve the Measure or the Job SIR.
149	5	Construct/replace/resize filter rack.	HVAC	Repair	None	Include as much of the cost as possible in the furnace replacement HVAC Measure. Cost the remainder, if any, to the Repair Measure type. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
150	6	Balance distribution (room-to-room pressure balancing).	HVAC	Repair	None	Include as much of the cost as possible in the furnace replacement HVAC Measure. Cost the remainder, if any, to the Repair Measure type. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
151	7	Clean A-coil.	HVAC	Repair	None	Include as much of the cost as possible in the furnace replacement HVAC Measure. Cost the remainder, if any, to the Repair Measure type. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.

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	A	B	C	D	E	F
152		Repair/replace leaking A-coil or AC pan.	HVAC	Repair	None	Include as much of the cost as possible in the furnace replacement HVAC Measure. Cost the remainder, if any, to the Repair Measure type. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.

	A	B	C	D	E	F
153						
154		Section 12 BOILER REPLACEMENT/REPAIR				
155		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
156	1		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
157	2	Replace boiler.	HVAC	Health/Safety	None	Health and Safety may only be used if there is a Health and Safety risk to the client and the SIR of the Conservation Measure is less than 1.0.
158	3	Repair/replace expansion tank with a boiler replacement.	HVAC	Health/Safety	Repair	Include as much of the cost of the tank in the boiler replacement cost as possible. Cost the remainder to Health/Safety measure type. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
159	4	Add/replace/repair boiler distribution system components with boiler replacement.	HVAC	Repair	Health/Safety	Include as much of the cost of distribution improvements in the boiler replacement cost as possible. Cost the remainder to General Repair. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. Cost to Health and Safety Measure type ONLY if HVAC and General Repair Measure types have no money available.
160	5	Repair/replace temperature or pressure gauges.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
161	6	Replace water inlet valve.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
162	7	Replace backflow prevention valve.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
163	8	Repair/replace recirculating pump.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
164	9	Repair/replace expansion tank without boiler replacement.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
165	10	Add/replace/repair boiler distribution system components without boiler replacement.	Repair	Health/Safety	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
166	11	Install/replace expansion tank shut-off.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
167	12	Replace expansion tank drain valve.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
168	13	Bleed radiators.	HVAC	Repair	Health/Safety	Include as much of the cost of distribution improvements in the boiler replacement cost as possible. Cost the remainder to General Repair. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. Cost to Health and Safety Measure type ONLY if HVAC and General Repair Measure types have no money available.
169	14	Replace bleeder valves.	HVAC	Repair	Health/Safety	Include as much of the cost of distribution improvements in the boiler replacement cost as possible. Cost the remainder to General Repair. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. Cost to Health and Safety Measure type ONLY if HVAC and General Repair Measure types have no money available.
170	15	Repair/replace zone valves.	HVAC	Repair	Health/Safety	Include as much of the cost of distribution improvements in the boiler replacement cost as possible. Cost the remainder to General Repair. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. Cost to Health and Safety Measure type ONLY if HVAC and General Repair Measure types have no money available.
171	16	Drain and re-fill system.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
172	17	Add/replace anti-freeze.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.

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	A	B	C	D	E	F
173	18	Install a low water cut off valve	Health/Safety	None	None	
174		Repair/replace baseboard convector covers.	HVAC	Repair	None	Include as much of the cost of distribution improvements in the boiler replacement cost as possible. Cost the remainder to General Repair. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.

	A	B	C	D	E	F
175						
176		Section 13 FURNACE REPAIR				
177		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
178	1		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
179	2	Add/replace/repair/seal ductwork, supply and return plenums inside thermal boundary.	Health/Safety	None	None	All exposed ductwork must be sealed during the weatherization work.
180	3	Seal/repair/insulate ductwork outside thermal boundary.	Air Sealing	None	None	
181	4	Balance distribution (room-to room pressure balancing).	HVAC	Health/Safety	Repair	Include the cost of this in the HVAC Measure. If the measure does not achieve an SIR then the cost may go to Repair. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure. Health and Safety may be used to ensure that the room is properly heated.
182	5	Construct/replace/resize filter rack without furnace replacement.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
183	6	Install ECM (Electronically Commutated Motor) retrofit.	HVAC	None	None	
184	7	Repair/replace blower motor/fan/assembly.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
185	8	Repair/replace inducer fan/motor/assembly.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
186	9	Replace circuit/control boards.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
187	10	Remove humidifier from furnace supply.	Health/Safety	None	None	
188		Add fresh air (PVC) to one pipe system.	Health/Safety	None	None	
189						
190		Section 14 FURNACE OR BOILER REPAIR				
191		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
192	1		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
193	2	Install/repair/ replace condensate pump.	Repair	Health/Safety	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
194	3	Replace condensate line on furnace/boiler.	Repair	Health/Safety	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
195	4	Install/repair/ replace combustion air.	Health/Safety	None	None	
196	5	Clean and tune heating plant.	HVAC	Health/Safety	None	Use Health/Safety measure type only if clean and tune has an SIR of less than one using the HVAC Measure type.
197	6	Repair fuel leak.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
198	7	Repair/replace fuel pump (oil).	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
199	8	Install/replace gas supply drip leg.	Health/Safety	Repair	None	The heating plant must have a conservation measure completed in order to use General Repair Dollars.
200	9	Repair/relocate/replace any type of thermostat.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
201	10	Repair/replace gas valve.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
202	11	Remove unused fuel tank.	NOT ALLOWED			
203		Install flame retention oil burner.	NOT ALLOWED			

ALLOWED ACTIVITIES AND MEASURE TYPE CHART

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	A	B	C	D	E	F
204						
205		Section 15 CHIMNEYS AND FLUES				
206		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
207	1		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
208	2	Clean out chimney/flue.	Health/Safety	Repair	None	This is only allowed to remove blockages and/or improve draft. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
209	3	Install/replace chimney cap.	Repair	Health/Safety	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
210	4	Install/replace chimney liner.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
211	5	Line or re-line chimney.	Health/Safety	Repair	None	This is only allowed to remove blockages and/or improve draft. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
212	6	Repair chimney (exterior).	Health/Safety	Repair	None	This is only allowed to remove blockages and/or improve draft. Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
213	7	Seal unused vent connector holes in chimney (interior) with heating plant replacement.	HVAC	Air Sealing	None	Include as much of the cost as possible in furnace replacement HVAC Measure. Cost the remainder, if any, to the Air Sealing measure type.
214	8	Seal unused chimney cleanout door (interior) with heating plant replacement.	HVAC	Air Sealing	None	Include as much of the cost as possible in furnace replacement HVAC Measure. Cost the remainder, if any, to the Air Sealing measure type.
215	9	Seal unused vent connector holes in chimney (interior) without heating plant replacement.	Air Sealing	Repair	None	
216	10	Seal unused chimney cleanout door (interior) without heating plant replacement.	Air Sealing	None	None	
217	11	Remove thermal or electric vent dampers.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
218	12	Install/repair/replace any type of electric vent dampers.	Health/Safety	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
219	13	Install/repair/replace any type of thermal vent dampers.	NOT ALLOWED			
220		Remove chimney to roof line.	NOT ALLOWED			
221						
222		Section 16 SOLID FUEL HEATING EQUIPMENT				
223		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
224	1		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
225	2	Replace indoor unit.	Health/Safety	None	None	The heating plant must be the primary heating plant and this may only be done with prior approval from Commerce.
226	3	Repair indoor unit.	Health/Safety	None	None	The heating plant must be the primary heating plant and this may only be done with prior approval from Commerce.
227		Replace/repair outdoor unit.	NOT ALLOWED			

	A	B	C	D	E	F
228						
229		Section 17 SPACE HEATER				
230			MEASURE TYPE CHOICES			
231	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
232	2	Repair/replace vented space heater.	Health/Safety	None	None	The space heater must be the primary heating plant and this may only be done with prior approval from Commerce.
233	3	Remove unvented space heater.	Health/Safety	None	None	Removal of units not meeting ANZI 21.11.2 is required prior to beginning weatherization activities.
234	4	Remove unused space heater.	NOT ALLOWED			
235		Replace/repair/install free-standing electric space heater.	NOT ALLOWED			
236						
237		Section 18 ELECTRIC BASEBOARD HEAT				
238			MEASURE TYPE CHOICES			
239	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
240	2	Install free-standing electric baseboard heat to unheated room.	Health/Safety	None	None	This may only be done with prior approval from Commerce.
241	3	Install or replace a thermostat	Health/Safety	None	None	
242	4	Repair/replace baseboard convactor covers.	Health/Safety	None	None	
243						
244		Section 19 AIR CONDITIONING				
245			MEASURE TYPE CHOICES			
246	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
247	2	Clean A-coil on central air conditioning system.	Repair	None	None	This is only allowed when it is necessary to improve the airflow through the distribution system. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
248	3	Repair/replace leaking A-coil on central air conditioning system.	Repair	None	None	Replacement is only allowed for non-repairable leaks. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
249	4	Repair/replace condensate pan and/or hose on central air conditioning system.	Repair	None	None	This is only allowed when it is needed to protect heat exchanger or other furnace components from water damage. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
250		Other repair/maintenance services to window air conditioners or central air conditioning systems.	Health/Safety	None	None	This is only allowed when air conditioning is medically necessary and when client can document the need for air conditioning with a doctor's letter.

ALLOWED ACTIVITIES AND MEASURE TYPE CHART

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251						
252	Section 20 WATER HEATER					
253		MEASURE TYPE CHOICES				
	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
254						
255	2	Replace any water heater for energy conservation reasons	Baseload	None	None	
256	3	Replace any water heater having a non-repairable tank leak.	Health/Safety	None	None	
257	4	Replace a poorly drafting oil or gas water heater or a water heater that fails the worst case draft test.	Health/Safety	None	None	A poorly drafting water heater may be replaced if the draft cannot be improved by other less costly measures. This includes the minor electrical work needed to operate new DHW.
258	14	Install pipe wrap on hot/cold pipes.	Baseload	None	None	
259	15	Insulate tank.	Baseload	None	None	
260	5	Repair/replace water heater venting.	Health/Safety	None	None	
261	6	Install chimney liner to improve draft.	Health/Safety	None	None	
262	7	Repair oil or gas water heater.	Health/Safety	None	None	
263	8	Clean/tune oil or gas water heater.	Health/Safety	None	None	
264	9	Repair fuel leak.	Health/Safety	None	None	
265	10	Install/replace gas shut off valve.	Health/Safety	None	None	
266	11	Repair/replace/install TPR and/or drip leg.	Health/Safety	None	None	
267	12	Repair/replace mobile home access door.	Repair	None	None	Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
268	13	Repair/replace mobile home compartment floor.	Repair	None	None	Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
269	16	Replace element in electric water.	NOT ALLOWED			
270		Repair electric water heater.	NOT ALLOWED			
271						
272	Section 21 EXHAUST FANS					
273		MEASURE TYPE CHOICES				
	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
274						
275	2	Install/repair/clean/replace.	Health/Safety	None	None	
276	3	Insulate exhaust vent in attic or other unheated space.	Health/Safety	None	None	
277		Replace flexible exhaust venting with smooth metal ductwork.	Health/Safety	None	None	
278		Vent an existing fan to exterior.	Health/Safety	None	None	

	A	B	C	D	E	F
279						
280		Section 22 PLUMBING				
281		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
282	1		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
283	2	Repair minor plumbing leaks.	Repair	None	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
284	4	Install faucet aerators.	Baseload	None	None	
285	5	Install low-flow shower heads.	Baseload	None	None	
286	3	Insulate exposed pipes in mobile home belly or unheated crawl space.	NOT ALLOWED			The pipes must be brought inside the thermal boundary in a crawlspace and in a mobile home the belly must be properly insulated to avoid the pipes freezing.
287	6	Repair all other plumbing problems.	NOT ALLOWED			
288	7	Repair or cover septic tanks.	NOT ALLOWED			
289						
290		Section 23 REFRIGERATOR REPLACEMENT				
291		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
292	1		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
293	2	Replace the existing refrigerator.	Baseload	None	None	Includes the disposal cost of the old refrigerator and its refrigerant.
294		Dispose of refrigerant as part of refrigerator replacement.	Health/Safety	None	None	Include- the disposal cost in the refrigerator replacement Measure cost where possible. An additional Health/Safety Measure must be created if there is no available money in the refrigerator replacement (Baseload) Measure.
295						
296		Section 24 MOBILE HOME MISCELLANEOUS				
297		ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
298	1		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
299	2	Repair mobile home belly.	Insulation	Repair	None	Repair may only be used If the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
300	3	Insulate mobile home belly.	Insulation	None	None	Cellulose is not an allowed material for this application.
301	4	Insulate floor of stick built mobile home addition.	Insulation	None	None	
302	5	Raise/level mobile home.	NOT ALLOWED			
303	6	Install poly underneath a mobile home.	NOT ALLOWED			
304		Install/repair skirting on mobile home or addition to mobile home.	NOT ALLOWED			

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305						
306	Section 25 STAIRS/RAILINGS					
307		MEASURE TYPE CHOICES				
308	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
309	2	Make minor repairs to stairs.	Repair	Health/Safety	None	Minor repairs are only allowed to so weatherization installers can access the area needed to safely complete authorized weatherization Measures. Photo and other documentation of the existing condition of the stairs are required to justify the repair. Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
310		Stairs, all other repairs/replacements to treads, risers, stringers, railings.	NOT ALLOWED			
311						
312	Section 26 MISCELLANEOUS ACTIVITIES					
313			MEASURE TYPE CHOICES			
314	1	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
315	2	Install/repair/replace/insulate dryer vent.	Health/Safety	None	None	
316	3	Clean/tune/repair gas range.	Health/Safety	None	None	Allowed ONLY to reduce CO to acceptable levels
317	4	Install/repair Heat Recovery Ventilator or Energy Recovery Ventilators.	Health/Safety	None	None	Install or repair ONLY with prior approval from Commerce.
318	5	Installing CFL bulbs	Baseload	None	None	Bulbs must be installed at the dwelling. They may not be given to the client to install.
319	6	Install lighting retrofit fixtures	Baseload	None	None	For Multi Family Buildings
320	7	Installing LED bulbs or LED retrofit recessed cans	Baseload	None	None	Bulbs must be installed at the dwelling. They may not be given to the client to install.
321	8	Install smoke and CO alarms	Health/Safety	None	None	Repairing existing hard wired smoke and CO alarms is allowed. Installing hard wired smoke and CO alarms where they did not previously exist is not allowed. Battery operated units are acceptable.
322	9	Repair minor structural defects.	Repair	None	None	Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
323	10	Make minor electrical repairs.	Repair	Health/Safety	None	Repair may only be used if the Measure protects an installed Conservation Measure or assures the effectiveness of an installed Conservation Measure.
324	11	Minor exterior grading	Health/Safety	None	None	Allowed with prior approval from Commerce.
325	13	Abate mold in dwelling.	NOT ALLOWED			
326	14	Repairs needed to correct damages caused by installers OR Service Provider staff during weatherization activity.	NOT ALLOWED			If damage is caused by contractor, it is contractor's responsibility to make repairs/replacements. If damage is caused by Service Provider installer or other staff, it is SP's responsibility to make repairs/replacements paid by non-WAP funds or insurance.
327	15	Install/repair/replace evaporative coolers.	NOT ALLOWED			
328	16	Install/repair/replace heat pump.	NOT ALLOWED			
329	17	Leave materials for client to install.	NOT ALLOWED			
330	18	Test for or mitigate radon.	NOT ALLOWED			
331	19	Installing materials that a client has purchased.	NOT ALLOWED			
332	20	Paying incentives for any weatherization work	NOT ALLOWED			