

Appendix L: Heating System Equipment Selection (11.22 Update)

Heating System Equipment Selection Policies

Oil/Kerosene-Fired Furnaces

Mobile Home Policies | Non-Heating Season

Whenever installing this type of furnace in mobile homes, during the non-heating season—May 1st - October 31st—VT WAP must install mobile-home-approved oil/kerosene-fired furnaces that have an AFUE rating of 85% (+) and that also offer warranty terms that meet or exceed the following:

If the heat exchanger becomes defective, manufacturer will provide either a replacement heat exchanger or the necessary repair parts on a no charge basis. Should a home sale occur, the furnace heat exchanger warranty will automatically transfer to the new owners. Any labor costs involved in the diagnosis, repair or the removal and replacement of the heat exchanger are the responsibility of the owner. Manufacturer shall also provide a 10-year parts warranty wherein the first five years parts warranty is to the current furnace/homeowner. After the first five years, the parts warranty is only to the verified original furnace/homeowner.

The only exception to this non-heating season equipment selection policy is reserved for cases when there is no product available within the needed installation timeframe that provides adequate btus/hr to heat the space. In these cases, the equipment selection policy shall revert to the heating season equipment selection policy written below.

Mobile Home Policies | Heating Season

Whenever installing this type of furnace in mobile homes, during the heating season—November 1st - April 30th—VT WAP must install the most efficient mobile-home-approved oil/kerosene-fired furnace available at the time the installation needs to happen.

If there are multiple products available in the timeframe the installation needs to happen that have comparable AFUE ratings (+/- 1.5 %), then, the product with the better manufacturer warranty shall be installed.

If no other products are available, the absolute minimum requirements during the heating season are 83% (+) AFUE mobile-home-approved, oil/kerosene-fired furnaces that meet or exceed the following warranty terms:

A one year limited parts warranty and 10 year heat exchanger warranty.

Site-Built Home Policies | All Year

In site-built, single-family/small multi-family homes (1-4 dwelling-units in size) VT WAP shall only install appropriately sized, oil-fired furnaces that have an 82% (+) AFUE rating. Installation of ENERGY STAR® certified, condensing oil/kerosene furnaces are allowed when they are likely to work well for the site-specific installation and are not likely to burden a financially vulnerable client with more frequent maintenance requirements than the installation of a non-condensing, oil-fired furnace installation would.



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Oil/Kerosene-Fired Boilers

Mobile Home Policies | All Year

Installation of new boilers inside of mobile homes is not allowable practice.

Site-Built Home Policies | All Year

In site-built, single-family/small multi-family homes (1-4 dwelling-units in size) VT WAP shall only install appropriately sized oil/kerosene boilers that have an 82% (+) AFUE rating.

Installation of ENERGY STAR® certified, condensing oil/kerosene boilers are allowed when they are likely to work well for the site-specific installation and are not likely to burden a financially vulnerable client with more frequent maintenance requirements than the installation of a non-condensing, oil-fired boiler installation would.

Oil/Kerosene-Fired Space Heaters

Mobile Home Policies | All Year

In mobile homes, VT WAP shall only install mobile-home-approved, oil/kerosene-fired space heaters that have an 80% (+) AFUE.

Site-Built Home Policies | All Year

In site-built, single-family/small multi-family homes (1-4 dwelling-units in size) VT WAP shall only install oil/ kerosene-fired space heaters that have an 80% (+) AFUE.

Fuel-Fired Central Heating Systems Vs. Fuel-Fired Space Heaters

The equipment selection policies above do allow for the installation of lower AFUE space heaters in comparison to the minimum required AFUE ratings for central heating systems. However, decommissioning a central heating system and replacing it with space heaters solely as a means to enable the installation of lower AFUE equipment is not allowable practice.

No replacement of a fuel-fired central heating system in favor of fuel-fired space heaters shall be initiated without prior, written OEO approval. This type of approval request shall only be initiated using the Atypical Project Approval form.

In homes where fuel-fired space heaters are being replaced for health and safety reasons and there is no central heating system then requesting prior approval from OEO to perform the installation is unnecessary.



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Gas-Fired Furnaces

Mobile Home Policies | Non-Heating Season

Whenever installing this type of furnace in mobile homes, during the non-heating season—May 1st - October 31st—VT WAP must install mobile-home-approved, gas-fired furnaces that have an AFUE rating of 95% (+) and that also offer warranty terms that meet or exceed the following:

If the heat exchanger fails within 10 years of the installation date, the manufacturer will provide a replacement furnace to the original homeowner.

Manufacturer will extend a five year parts warranty to any owner.

Manufacturer will extend a 10 year parts warranty to the original homeowner.

After the tenth year, the heat exchanger continues to be covered by the manufacturer with a transferable lifetime limited warranty to any owner.

The only exception to this non-heating season equipment selection policy is reserved for cases when there is no product available within the needed installation timeframe that provides adequate btus/hr to heat the space. In these cases, the equipment selection policy shall revert to the heating season equipment selection policy written below:

Mobile Home Policies | Heating Season

Whenever installing this type of furnace in mobile homes, during the heating season—November 1st - April 30th—VT WAP must install the most efficient mobile-home-approved, gas-fired furnace available at the time the installation needs to happen. If there are multiple products available in the timeframe the installation needs to happen that have comparable AFUE ratings (+/- 1.5 %), then, the product with the better manufacturer warranty shall be installed.

If no other products are available, the absolute minimum requirements during the heating season are 80% (+) AFUE mobile-home-approved, gas-fired furnaces that meet or exceed the following warranty terms:

A one year limited parts warranty and 10 year heat exchanger warranty.

Site-Built Home Policies | All Year

In site-built, single-family/small multi-family homes (1-4 dwelling-units in size) VT WAP shall only install ENERGY STAR® certified or equivalent gas-fired furnaces.

Installation of gas-fired furnaces that are not ENERGY STAR® certified or equivalent is not allowed by WAP in site-built, single family/small multi-family homes (1-4 dwelling-units in size).



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Fuel Switching Policies | Entire home/dwelling-unit fuel switches

These policies apply to entire home/dwelling-unit fuel switches.

These policies do not apply to partial fuel switches that are only intended to supplement a home's/dwelling-unit's overall heating needs.

All Homes/Dwelling Units | All Year

DOE Funding

No projects of any kind that involve a heating system(s) fuel switch from one fuel source to another can be funded with DOE formula or DOE stimulus WAP grant funds. This is not an individual measure restriction. This is an entire job restriction. This “entire-job-cannot-be-DOE-funded restriction” applies no matter who/which program/which funding source pays for a heating system fuel switch.

Non-DOE, OEO-Administered WAP Funding

No fuel switches that would use any amount of OEO-administered, non-DOE WAP grant funding to perform the fuel switching measure(s) themselves shall be initiated without prior, written OEO approval.

The prior approval request shall be initiated using the Atypical Project Approval form.

Along with completion of the Atypical Project Approval form, an analysis must be performed using an OEO-approved calculator that provides a comparison of the likely annual fuel bills the client will experience with and without the fuel switch occurring.

The fuel bill comparison needs to be approved by OEO (approval to be documented on the Atypical Project approval form). The fuel bill comparison also needs to be reviewed and accepted by the client prior to performing the fuel switch. Client acceptance of the fuel switch must be documented in the project file.

The client must also be informed that their decision to accept/decline a fuel switch has no bearing on their eligibility to receive other OEO-administered WAP services.

At the time of this writing, this pre-approval-required policy applies to these non-DOE WAP grants:

- (1) HWAP
- (2) ARPA-SFR

Any future, non-DOE WAP grants that resemble the HWAP and ARPA-SFR WAP grants shall also follow this policy unless explicit instruction to operate differently is included in a respective non-DOE grant that would supersede this rule.



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Fuel Switching Policies | Entire home/dwelling-unit fuel switches

These policies apply to entire home/dwelling-unit fuel switches.

These policies do not apply to partial fuel switches that are only intended to supplement a home's/dwelling-unit's overall heating needs.

All Homes/Dwelling Units | All Year

Non-OEO-Administered Funding

If a fuel switch will be performed during a project using the WAPs infrastructure, but 100% of the fuel switching work will be accomplished using non-OEO-Administered funding, then there is no requirement to involve OEO in the fuel switching decision-making-process whenever both of these conditions are satisfied:

- (1) The client must be informed that their decision to accept/decline a fuel switch has no bearing on their eligibility to receive OEO-administered WAP services.
- (2) An analysis that provides a comparison of the likely annual fuel bills the client will experience with and without the fuel switch occurring has been provided to and accepted by the client.

If the two conditions above are not met, OEO does not approve of using the WAP infrastructure to perform a fuel switch.



Appendix L: Heating System Equipment Selection (11.22 Update)

Heating System Equipment Selection Policies

Fuel Switching Policies | Partial home/dwelling-unit switches

These policies apply to partial home/dwelling-unit fuel switches that are only intended to supplement a home's/dwelling-unit's overall heating needs.

These policies do not apply to entire home/ dwelling-unit fuel switches.

All Homes/Dwelling Units | All Year

DOE Funding

No projects of any kind that involve a heating system(s) fuel switch from one fuel source to another can be funded with DOE formula or DOE stimulus WAP grant funds. This is not an individual measure restriction. This is an entire job restriction. This “entire-job-cannot-be-DOE-funded restriction” applies no matter who/which program/which funding source pays for a heating system fuel switch.

Non-DOE, OEO-Administered WAP Funding

Partial fuel switches shall not use OEO-administered WAP grant funding whenever there are supplemental programs/funding sources available through OEO or other non-OEO Program Partners.

For example, no partial fuel switches shall be performed using the HWAP or ARPA-SFR WAP grant funding if there is funding available through the supplemental VHR-Plus grant or comparable programs.

If there are no supplemental programs available to fund a partial fuel switch and the partial fuel switch is being considered as a solution to a health and safety issue, requests to use HWAP or ARPA-SFR grant funds can be submitted to OEO for consideration on a case-by-case basis. Written approval from OEO is required prior to performing the partial fuel switch in these cases.

