

Nathan Deal Governor

### GEORGIA ENVIRONMENTAL FINANCE AUTHORITY

Kevin Clark Executive Director

### GEORGIA WEATHERIZATION PROGRAM NOTICE 15-01 EFFECTIVE DATE: Immediately Upon Receipt

**SUBJECT:** Heating Ventilating and Air Conditioning (HVAC) System Replacement or Repair or Clean and Tune Specifications. Water Heater Replacement or Repair or Clean and Tune Specifications.

**PURPOSE:** Determining a HVAC System Replacement or Repair or Clean and Tune as a Health and Safety Measure or an Energy Conservation Measure. Determining a Water Heater Replacement or Repair or Clean and Tune as a Health and Safety Measure or an Energy Conservation Measure.

**SCOPE:** The provisions of this guidance apply to all sub-grantees awarded a weatherization assistance grant by GEFA under the Department of Energy (DOE) Weatherization Assistance Program.

**PROCEDURES:** The DOE requires all grantees to comply with the 2014 Georgia Weatherization Assistance Program Health and Safety Plan. As such, sub-grantees are required to use the 2014 Georgia Weatherization Assistance Program Health and Safety Plan to evaluate all units for weatherization.

# What constitutes *HVAC System* Replacement or Repair or Clean and Tune as a <u>Health and Safety</u> Measure?

- Air Conditioning Systems may only be replaced if determined to be a Health & Safety measure
  requiring action. Otherwise, DOE WAP funds <u>may not</u> be used and agencies should work with the
  occupant where possible to direct them to alternative sources of funding or assistance.
- Air Conditioning Systems should be inspected to verify proper functionality. If found to be either non-operable or not operating properly, a Clean-and-Tune by a licensed HVAC professional should be performed.
- If the Air Conditioning System cannot be properly repaired or is non-operable, system should be replaced if the home qualifies as having an At-Risk Occupant.
- An At-Risk Occupant is defined as a person/household meeting one or more of the following conditions: an elderly person (65 years or older); a person with health condition(s) that would be exacerbated by exposure to high temperature conditions; a person who is pregnant; a household containing an infant(s) (2 years or less).
- Air conditioning systems being replaced should meet the following applicable efficiency levels:
  - o AC > 14.5 SEER / 12 EER
  - Heat Pump > 14.5 SEER / 12 EER air-source heat pump
  - If funds do not allow this, documentation must be provided showing why this is not feasible.
- If any Heating Systems are found to be failing the Spillage Test, appropriate action must be taken
  to alleviate the issue. Potential solutions include and are not limited to: eliminating pressure
  imbalances for excessive depressurization of the CAZ, isolating the appliance from the living space
  and ensuring sufficient combustion air, repairing or replacing the flue/chimney or replacing the
  system.

- Heating Systems experiencing CO levels higher than acceptable limits require a Clean and Tune by Licensed HVAC Professional which is to be followed-up by additional Combustion Safety Testing to verify CO has been brought within acceptable limits. If the appliance cannot be repaired to alleviate the CO problem, it should be replaced under Health & Safety.
- If a Heating System cannot be properly repaired or is non-operable, the system should be replaced if the home qualifies as having an At-Risk Occupant as defined above.
- Heating Systems requiring replacement should be replaced with sealed/high efficiency (Furnace ≥ 90+ AFUE / Heat Pump ≥ 8.5 HSPF) units. If funds do not allow this, documentation must be provided showing why this is not feasible and should be replaced with ≥ 80 AFUE or ≥ 8.2 HSPF systems.
- All System Replacements must be properly sized to the improved condition of the home in accordance with NEAT, ACCA Manual J, or other approved method.

## What constitutes *HVAC System* Replacement or Repair or Clean and Tune as an <u>Energy</u> Conservation Measure?

- HVAC Systems may only be replaced as an Energy Conservation Measure if it is shown to have a SIR ≥ 1 as confirmed by a NEAT/MHEA audit. Latest version of Weatherization Assistant (currently 8.9.0.5) must be used. This can be downloaded at <a href="http://waptac.org/Weatherization-Assistant-8002E9.aspx">http://waptac.org/Weatherization-Assistant-8002E9.aspx</a>. Otherwise, DOE WAP funds may not be used and agencies should work with the occupant where possible to direct them to alternative sources of funding or assistance.
- HVAC System Clean and Tune can only be performed as an Energy Conservation Measure if it is shown to have a SIR ≥ 1 as confirmed by a NEAT/MHEA audit.
- Replacement system must be properly sized to the improved condition of the home in accordance with NEAT, ACCA Manual J, or other approved method.

## What constitutes *Water Heater* Replacement or Repair or Clean and Tune as a <u>Health and Safety</u> Measure?

- Water Heaters may only be repaired or replaced if determined to be a Health & Safety measure
  requiring action. Otherwise, DOE WAP funds <u>may not</u> be used and agencies should work with the
  occupant where possible to direct them to alternative sources of funding or assistance.
- If any Water Heater is found to be failing the Spillage Test, appropriate action must be taken to
  alleviate the issue. Potential solutions include but are not limited to: eliminating pressure
  imbalances causing the excessive depressurization of the CAZ, isolating the appliance from the
  living space, repairing or replacing the flue/chimney or replacing the system.
- Water Heaters experiencing CO levels higher than acceptable limits require a Clean-and-Tune by licensed HVAC professional, followed by additional CAZ testing to verify CO has been brought within acceptable limits. If water heater cannot be repaired to alleviate the CO problem, it should be replaced under Health & Safety.
- Water Heaters cannot be replaced if rusted out and/or leaking at time of assessment with weatherization funds. If non-weatherization funds are not available, then the home will need to be deferred.
- If an existing Water Heater happens to leak during the weatherization process or leaks as a result of the weatherization work, then the sub-grantee will assume responsibility.

#### What constitutes Water Heater Replacement as an Energy Conservation Measure?

- Water Heaters cannot be replaced simply because they are old.
- Water Heaters may be replaced as an Energy Conservation Measure if it is <u>shown to have a SIR ≥ 1 as confirmed by a NEAT/MHEA audit</u>.
- If a water heater is replaced, a sealed combustion appliance is recommended. It should meet the following efficiency requirements:
  - Gas: 30 Gal = 0.63 EF, 40 Gal = 0.61 EF, 50 Gal = 0.59 EF, 60 Gal = 0.57 EF, 70 Gal = 0.55 EF, 80 Gal = 0.53 EF
  - Electric: 30 Gal = 0.94 EF, 40 Gal = 0.93 EF, 50 Gal = 0.92 EF, 60 Gal = 0.91 EF, 70 Gal = 0.90 EF, 80 Gal = 0.89 EF

#### What constitutes a Clean and Tune?

The following items are to be inspected when applicable and appropriate action should be taken when necessary (this is not an all-inclusive list):

- Thermostat Operation
- Air Filter
- Condenser/Evaporator Coils
- Condenser/Evaporator Fan/Motor
- Refrigerant Charge Level
- Condensate Pan/Drainage
- Condensate Pump
- Burners/Flame
- Gas/Air Mixture
- Combustion Air
- Measured Gas Input/Orifice
- Heat Exchanger
- Static Pressure/Temperature Rise
- Vent Connectors/Chimney
- Electric Baseboard
- Oil Fired Appliances (Reference the Georgia Weatherization Single Family/Manufactured Homes Field Guide)
- Combustion Safety Testing

#### When will the aforementioned be enforced?

Immediately upon receipt.

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### Sign for acknowledgement of receipt & understanding

(Weatherization Sub-grantee Name), cere contained in this notice. Signatures indicate receipt of the attached guidance.	•
 Executive Director	Date

Return to Debbie Smiley by April 17, 2015