

## **Minnesota Weatherization Assistance Program Solid Fuel Fired Appliance and Chimney Guidance**

**Visual Inspection:** During an energy audit, existing solid fuel fired appliances, venting, and chimneys shall receive a visual inspection for compliance with NFPA 211/manufacturer's installation instructions. The visual inspection shall be in accordance with the Minnesota Weatherization Field Guide sections 8.8 for wood stoves; 8.9 for solid fuel venting systems; and 8.10 for solid fuel chimney systems. The inspection shall assess the condition of the stove/firebox, venting connectors, and chimney including clearances, terminations, combustion air, and creosote build-up. Non-code compliant appliances, venting, and chimneys that can be corrected as part of the weatherization work must be corrected. In cases where appliances, venting, and chimneys do not meet code and a necessary corrective measure is not related to weatherization work, the solid fuel fired appliance must be made inoperable or the home must be deferred.

**CAZ Testing:** Auditors and inspectors shall conduct pre- and post- weatherization worst case CAZ depressurization testing in the Combustion Appliance Zone (CAZ) of any solid fuel fired appliances. The CAZ depressurization limit for solid fuel fired appliances is -5 PA.

**Client Education:** Clients shall be informed of any deficiencies in their solid fuel fired appliances, venting, and chimneys and if weatherization can remediate these issues. Those clients having fireplaces shall also be informed that near the end of a wood fire, glowing coals will remain, radiating heat, while the draft lowers and allows the top of the chimney to cool, further reducing draft. The reduced oxygen available to the glowing coals causes production of CO without the smoke that encourages space ventilation. This has the potential to cause CO poisoning from an unexpected source—a smoldering fire.

**Carbon Monoxide Alarms:** Carbon monoxide alarms must be installed within the combustion appliance zone of any solid fuel fired appliances.

**Fire Extinguisher Installation:** fire extinguishers may be installed in cases where solid fuel is burned as part of the primary heating system.