

Residential Fuel Combustion

Residential Coal Combustion (SCC 2104001000)

Ohio's household consumption of coal is apportioned per county based on county population. NO_x and VOC emissions are calculated using EF of 9.1 and 10 lb/ton of coal respectively.

Residential Distillate Oil Combustion (SCC 2104004000)

Ohio's household consumption of distillate oil is apportioned per county based on county population. NO_x and VOC emissions are calculated using EF of 18 and 0.71 lb/1000 gallons distillate fuel respectively. A heating value of 140 mmbtu/1000 gallon is used.

Residential Liquid Petroleum Gas Combustion (LPG) (SCC 2104007000)

Ohio's household consumption of LPG is apportioned per county based on county population. NO_x and VOC emissions are calculated using EF of 13 and 0.49 lb/1000 gallons LPG respectively.

Residential Natural Gas Combustion (SCC 2104006010)

Ohio's household consumption of LPG is apportioned per county based on county population. NO_x and VOC emissions are calculated using EF of 94 and 5.5 lb/MMSCF respectively.

Residential Wood Combustion

VOC and NO_x emissions from this area source are calculated for seven types of residential heating units that utilize wood for fuel. They are listed below with the appropriate SCC:

Fireplaces without inserts	2104008001
Fireplaces with inserts catalytic (non-U.S. EPA cert)	2104008002
Fireplaces with inserts non -catalytic	2104008003
Fireplaces with inserts catalytic (U.S. EPA cert)	2104008004
Wood stoves – Conventional	2104008010
Woodstoves – Catalytic	2104008030
Wood stoves – Non catalytic	2104008050

The number of Ohio homes with fireplaces are adjusted for those that burn wood. The following assumptions are applied to those adjusted homes:

- 92 percent of wood combusted in non-certified units
- 5.7 percent of wood combusted in non-catalytic units
- 2.3 percent of wood combusted in catalytic units
- A state consumption value is applied which is apportioned to each county based on its population. The table below shows the EF used for each of the seven types of indoor wood burners which make-up this category:

Emission Factors Used for Wood Burners included in Area Sources

SCC	2104008002	2104008003	2104008004	
SCC	2104008010	2104008050	2104008030	

SCC	2104008001			
RAPIDS Code	Non-Certified	Non-Catalytic	Catalytic	Units
VOC	53	12	15	Lb/ton
NOX	2.80E+00	2.80E+00	2.00E+00	Lb/ton

This category is adjusted by subtracting the wood consumption from OWB (discussed above) to account only for indoor wood burning emissions.

References:

[United States Census Bureau. Population Division.](#)