

AP42 Section 2.6

Reference: 4

Title: Private communication with D. F. Walters,  
U. S. DHEW, PHS, Division of Air Pollution,  
Cincinnati, OH,

July 19, 1963.

Note: This is a reference cited in *AP 42, Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at [www.epa.gov/ttn/chief/ap42/](http://www.epa.gov/ttn/chief/ap42/)

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02\_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

Ref 4, Feb '73  
Ch. 2 Sec 2.2

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Before

AUTOMOBILE BODY  
INCINERATION  
AP-42 Section 2.2  
Reference Number

Files: Auto Body Burning

June 24, 1963

Donald F. Walters

Automobile Body Burner at the Alport Scrap Company, Detroit, Michigan

During the APCA National Meeting in Detroit, a visit was made to the above company as part of a tour. The auto body burner inspected appeared to be a very satisfactory design. A sketch of the equipment is attached.

The owner reported that the equipment had a maximum capacity of 100 cars per day with an average capacity of 80 cars per day. The dimensions of the burner are such that there will be 5 cars in the burning chamber and two cars in the air-lock at any given time. The cars are ignited in the air-lock by hand with a gasoline-diesel oil mix just prior to entering the combustion chamber. Smoke from the combustion chamber is pulled through a horizontal, cylindrically shaped afterburner as shown on the attached sketch. The afterburner fan is made of stainless steel to withstand high temperatures. The afterburner is gas-fired and it was stated that the gas bill was \$800 per month. The burning operation adds \$6.00 to the cost of each ton of scrap steel - roughly \$3.00 per car. During this inspection, the afterburner was operated with No. 1 to 2 Ringelmann visible smoke. It was stated that by increasing the auxiliary gas all smoke could be eliminated, but for economical reasons the company chooses to operate with a slight amount of visible smoke.

Under-fire combustion air is supplied with a fan that pulls air from the air-lock as shown on the attached sketch. The under-fire air also serves to cool the conveyer chain which is ordinary carbon steel and will not withstand excessively high temperatures.

Auxiliary equipment needed with the automobile body burner are 3 fork lifts and one crane. There is also a baler on the premises which was not seen during this trip.

The quenching pit which is also an air seal on the discharge is cleaned out approximately once a week to remove broken glass, dirt, non-ferrous materials, and other miscellaneous materials.

Cars that were shipped to the unit are stripped of engine, radiator, and tires. Car windows are broken and the trunk lids opened to facilitate complete combustion.

In general this equipment appeared to have the potential of operating in such a manner that it would be satisfactory in most areas.

Donald F. Walters

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# Auto Body Burner

Dimensions (Approx.)

100 cars/day capacity

Alpont Scarp Company  
Detroit, Michigan

