



**PPV Fan Test
9/30/00
South Boston, Va. Burn Facility**

CO From Tempest PPV Gas Fan w/o Exhaust Extension

Distance in Feet	CO PPM
1	29
2	28
3	18
4	14
5	12
10	12

These tests were conducted by Mr. Doug Cline, a certified Live Burn Instructor for the North Carolina Department of Insurance - Fire & Rescue Division, and the NC Community College System.

The blower used was a Tempest model BD24H65, which was a new 24" Blower with a 6.5hp Honda engine. This engine was built in 2000 by Honda and appears to put out much less CO than the standard requirements of OSHA and EPA.

Mr. Cline believes that high concentrations of CO in a burn structure, when using gasoline powered PPV Blowers, could be as the result of: 1) Smoldering fire still active in the structure or, 2) Inadequate opening of a structure which does not allow the "bad air" to move out (even the CO produced by the Blower) and the "good air" from the outside of the structure to move in. Therefore CO from the fire and/or the Blower is trapped inside the structure. It is suggested that "Exit Ports" for PPV, when using an 18" to 24" PPV Gas Powered Blower, should be 1.5 to 2 times larger than the "Entry Port" of the PPV - even larger in the later stages of "overhaul". If a gas powered PPV is used for the quick Fire Attack (PPA), then Electric Blowers may be brought in during the later stages of "overhaul" to remove all CO, especially where the structure is being released back to the occupants.

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