



GENERAL ORDER 500.04

Diesel Exhaust Mitigation

LOGISTICS

Issue Date: 6/27/2014

Revision Date:

1 APPLICABILITY

2 All personnel

3 POLICY

4 In concert with the National Fallen Firefighter Foundation's (NFFF) 16 life safety initiatives and the
5 Howard County Safety Policy, the Department of Fire and Rescue Services (Department) seeks to
6 decrease exposure to airborne hazards associated with diesel exhaust.

7 DEFINITIONS

- 8 ➤ **Direct Source Capture (hose based)** – use either a pneumatic boot or a magnetic coupling
9 attachment to connect the hose to the exhaust pipe. The contained emissions are routed out of
10 the building using exhaust fans and ductwork.
- 11 ➤ **Direct Source Capture (vehicle mounted)** – consists of a specialized filter and diverter that are
12 mechanically installed alongside the vehicle's exhaust system. The system uses an electronic
13 control device that automatically diverts the vehicle's exhaust flow from its normal path and
14 through the filter after the vehicle starts.
- 15 ➤ **Building Space Filtration Systems** – These systems exchange the air in the apparatus bays by
16 pulling particulates and gases through a series of filters. Filtration systems are typically mounted
17 to the ceiling and diesel emissions are forced through a series of disposable filters that trap
18 particulates and chemically absorb other exhaust components.

19 PROCEDURES

20 DAILY USE

- 21 • The Department currently employs both the hose based Direct Source Capture system and
22 indirect capture building filtration systems.
- 23 • In instances where the hose based Direct Source Capture system is in place and functional, it shall
24 be utilized as prescribed by manufacturer specifications. The Grabber[®] (boot) connects to the tail
25 pipe, capturing and extracting virtually all exhaust fumes:

- 26 ○ For the magnetic version simply attach to the tail pipe and you are ready. We call this the
- 27 Plymovent “click and seal” principle.
- 28 ○ For the pneumatic version simply attach to the tail pipe, push the fill valve and quickly ensure
- 29 a positive seal around any size tail pipe; capturing and eliminating the risk that dangerous
- 30 exhaust fumes will escape in your station.
- 31 ● If the system is found to be in disrepair, immediate notification shall be made to the Department’s
- 32 Facilities Unit Leader.
- 33 ● In instances where the Building Space Filtration System is in place and functional, it shall be
- 34 utilized as prescribed by manufacturer specifications. If the system is found to be in disrepair,
- 35 immediate notification shall be made to the Department’s Facilities Unit Leader.
- 36 ● In the event vehicle mounted Direct Source Capture technology (or any new technology) is
- 37 employed by the Department, it shall be used as prescribed in manufacturer specifications. If the
- 38 system is found to be in disrepair, immediate notification shall be made to the Department’s
- 39 Facilities Unit Leader.

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41 **MAINTENANCE**

42 All systems shall be used and maintained according to manufacturer specifications.

43 **REFERENCES**

44 Howard County, *Safety Policy Statement*.

45 *NFFF 16 Life Safety Initiatives*: LifeSafetyInitiatives.com.

46 Plymovent:

47 [http://www.plymovent.com/Files/Billeder/Plymovent%20USA/Product%20Data%20Sheets/Plymovent-](http://www.plymovent.com/Files/Billeder/Plymovent%20USA/Product%20Data%20Sheets/Plymovent-FromYourStation-PNAFB0901009.pdf)

48 [FromYourStation-PNAFB0901009.pdf](http://www.plymovent.com/Files/Billeder/Plymovent%20USA/Product%20Data%20Sheets/Plymovent-FromYourStation-PNAFB0901009.pdf)

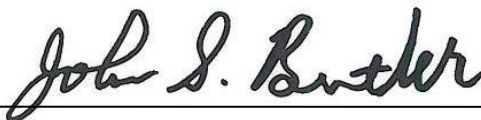
49 **SUMMARY OF DOCUMENT CHANGES**

50 None

51 **FORMS/ATTACHMENTS**

52 None

53 **APPROVED**

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55 Deputy Chief John S. Butler

56 Operations Command

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