

G-274

Diesel Exhaust Exposure Reduction

G-274.1 PURPOSE & SCOPE

Diesel exhaust (DE) and diesel particulate matter (DPM) are produced during the combustion of diesel fuel. DPM consist of elemental carbon cores with organic carbon compounds that adhere to their surface. These compounds include polyaromatic hydrocarbons, some of which have caused cancer when tested in animals. Health effects in humans range from headaches, eyes and nose irritation, nausea, respiratory disease and lung cancer.

To ensure the health and safety of fire service members and the public through the reduction of diesel exhaust exposure.

G-274.2 POLICY

It is the responsibility of all San Mateo County Fire agencies to ensure the health and safety of its employees and the public. Reducing exposure to diesel exhaust will contribute to limiting Firefighters' and the public's exposure to potential cancer causing agents.

G-274.3 REFERENCES

United States Department of Labor, OSHA (2013) Diesel Exhaust, downloaded from:
<https://www.osha.gov/SLTC/dieselexhaust/index.html>

G-274.4 PROCEDURES

Operating diesel engines at agency facilities

- Generators shall be properly vented to the outside and separated from living areas.
- When parking in station bays the apparatus shall be connected to a system that vents diesel exhaust to the outside.
- In the event that the exhaust system is mechanically nonfunctioning, the exhaust hose shall still be connected to control direction of exhaust. The engine should be shut down as soon as positioned in the station. The apparatus room should then be left open to provide for natural ventilation. Efforts should be made to insure timely repairs.
- When it is necessary to run a diesel engine at an agency facility; run times shall be kept at a minimum, measures to prevent exhaust from entering the building shall be taken.

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Operating diesel engines during emergency responses

- The Company Officer shall determine if running the diesel engine is essential to operational needs.
- During medical responses and request for public service, the apparatus should be spotted in a safe location, lighting reduced to four way flashers, and the diesel engine shut down.
- During motor vehicle accident, hazardous material, and/or fire responses where operational needs may change, it may not be practical or safe to shut down engines. However, whenever possible non-essential apparatus should be positioned in a safe location with flashers on and the engine shut down.
- When an apparatus or vehicle is required to remain running at an incident or training it should consider using an extension exhaust hose to direct exhaust away from crews operating in the immediate area. Example, the Incident Command Post (ICP) is often located at the rear of the vehicle next to the vehicle exhaust. The use of an extension exhaust hose would improve safety at the ICP.