

## Standards and Enforcement

The organizations below all recognize vehicle exhaust emissions in their standards and enforcement policies. They in turn, recognize **Source Capture Extraction** as being the only effective means of removing the hazardous effects to this problem. We have listed for your convenience the position of these organizations to allow you to easily justify the financial commitment you will make in funding this project.

- **ACGIH** – American Conference of General Industrial Hygienist – *the threshold limit value (TLV) for diesel has been reduced from 5mg/m<sup>3</sup> to a **new more aggressive standard of 0.020mg/m<sup>3</sup> (elemental carbon)**.* [www.achih.org](http://www.achih.org)
- **NIOSH** –National Institute of Occupational Safety and Health – *in accordance with Niosh pocket guide for chemical hazards and its documentation for immediately dangerous to life or health concentrations, NIOSH recommends (Appendix A) that vehicle exhaust fumes are a potential human carcinogen and **recommends that occupational exposure to this carcinogen be lowered to the lowest feasible concentration**.* Supporting documentation “Current Intelligence Bulletin 50” and NIOSH RELs and General Recommendations for Safety and Health. [www.cdc.gov/niosh/88116\\_50.html](http://www.cdc.gov/niosh/88116_50.html)
- **OSHA** –Occupational Safety and Health Administration – 29 CFR 1990.103 “*potential occupational carcinogen means any substance, or combination or mixture of substances, which cause an increased incidence of benign and/or malignant neoplasm, or a substantial decrease in the latency period between exposure and onset of neoplasm in humans or in one or more experimental mammalian species as the result of any oral, respiratory or dermal exposure, or any other exposure that the site of administration.*” **OSHA is aggressively enforcing stricter preventive measures due to the increase awareness of the health effects related to vehicle exhaust emissions.** [www.osha.gov](http://www.osha.gov)
- **AFSCME** – American Federation of State County and Municipal Employees (AFL-CIO) – AFSCME states, under control for vehicle exhaust emissions (diesel exhaust), that “**Local exhaust ventilation is the best way to reduce potential hazards to diesel exhaust.** A good ventilation system should include both intake and exhaust fans that remove harmful fumes at their source. Tailpipe or stack exhaust hoses should be provided for any vehicle being run in a maintenance shop” and “**General ventilation uses roof vents, open doors and windows, roof fans, or floor fans to move air through the work area. This is not as effective as local exhaust ventilation, and may simply spread the fumes around the work area.** General ventilation may be helpful, however, when used to supplement local exhaust ventilation.”

- **NRDC – Natural Resources Defense Council** – “the scientific evidence is clear: diesel exhaust is a complex mixture comprised of hazardous particles and vapors, some of which are known carcinogens and others probable carcinogens. Diesel exposure poses a significant and avoidable increase in human health risks. **Compelling evidence from dozens of well-designed studies supports the conclusion that diesel exhaust causes cancer.**” [www.nrdc.org](http://www.nrdc.org)
- **NFPA – National Fire Protection Association 1500 – 2002 edition** – A.9.1.6 “for the previously stated reasons and numerous support documentation, **this technical committee recognizes and advocates the need for the elimination and the containment of all vehicles exhaust emissions to a level of no less than 100 percent effective capture.** This complies with NIOSH’s requirement to reduce the emissions to the lowest feasible level in an effort to reduce the health impact on human life. This, in turn, reduces the department’s liability and risk. The containment of the vehicle exhaust emissions should be achieved with a goal of eliminating all exhaust emissions from the breathing zone of the human inhabitants present in the station. Any system installed to suit this purpose should be made using “best available control technology.” [www.nfpa.org](http://www.nfpa.org)
- **SBCCI / IMC – Southern Building Code Congress International / International Mechanical Code (BOCA, UMC) - 502.11 Motor Vehicle Operation.** “In areas where motor vehicles operate, recirculation of ventilation air is prohibited. Additionally **areas in which stationary motor vehicles are operated shall be provided with a source capture system that connects directly to the motor vehicle exhaust systems.**” Exceptions” 1). This section shall not apply where the motor vehicles being operated or repaired are electrically powered.” 2.) This section shall not apply to one and two family dwellings. [www.sbcci.org](http://www.sbcci.org)