Building Air Quality



Risk Management & Safety

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Secondhand Smoke and Engine Exhaust: What's the Big Deal?



Now that winter is upon us once again, there are certain situations that are aggravated by the change in the weather. Two of these issues are:

People tend to take smoking breaks closer to buildings (i.e., doorways and fresh air intakes) to stay out of the cold and wind.

Trucks, buses and other equipment must warm up longer. If located near fresh air intakes, docks and doorways the exhaust fumes can enter the entire building via the fresh air intakes or doorways.

Building Ventilation Systems

It is important to understand how building ventilation systems run in the winter. Due to colder outside temperatures and associated higher heating costs, central Heating, Ventilation, and Air-Conditioning (HVAC) systems re-circulate more of the indoor air. With less dilution from fresh air, odors and fugitive emissions will stay around longer. Many buildings do not have HVAC systems. In other words, there is no way to dilute secondhand smoke or exhaust without opening windows, doors, or using fans (which is impractical when it is 10 below zero outside).



Secondhand Smoke

Secondhand smoke is the combination of smoke from the burning end of a cigarette and the smoke breathed out by smokers. Secondhand smoke contains more than 7000 chemicals. Hundreds are toxic and about 70 can cause cancer. The Centers of Disease Control (CDC) states that exposure to second-hand smoke can cause adverse health effects on the cardiovascular system and can cause coronary

heart disease. Refer to the UW Regulation 2-180 "Regulating Smoking" at http://www.uwyo.edu/generalcounsel/ files/docs/UW-Reg-2-180.pdf

Diesel Exhaust

Diesel exhaust, according to the Occupational Safety and Health Administration (OSHA), can cause headaches and nausea. More severe health risks associated with higher air-borne concentrations are cancer and other respiratory disease. Carbon monoxide (a gas with no smell) can also be in exhaust emissions.

Conclusion

Remember, when people smoke too close to the building or vehicles idle near fresh air intakes or doors, it can affect the well-being of the building's occupants. In order to minimize these issues, refer to the tips given on the right. The bottom line: everyone needs to be aware of where they are and the consequences of their actions for others.

For More Information on this topic:

CDC: http://www.cdc.gov/tobacco/basic_information/secondhand_smoke/

OSHA: http://www.osha.gov/SLTC/dieselexhaust/index.html

Tips for keeping building air clean

When smoking, stand at least 25 feet away from any building doorway, window or fresh air intake. Keep wind direction in mind.

Do not idle engines near loading docks, windows, doors, or fresh air intakes. Turn the engine off. If you must warm the engine, choose a location away from the building.

Be aware of your surroundings. Make adjustments when needed. Little changes can make a big difference in the comfort and well-being of others.

