

MechSE *WELLness*

A10 Combustion Minimization

Intent: Reduce human exposure to combustion-related air pollution from heating and transportation sources.

Exposure to combustion-related emissions, via use of space heating (kerosene), cooking or transportation (vehicles) degrades human health and largely goes unnoticed as it occurs outside the facility. Yet such emissions, despite all attempts to reduce, can potentially enter a facility and introduce harmful levels of carbon monoxide. Inhalation of elevated levels is linked to headaches, visual impairment, reduced cognitive functioning, and reduced ability to perform complex tasks.

Impact: Eliminating or reducing indoor sources of pollution helps achieve high indoor air quality.

Requirements for the Sidney Lu Mechanical Engineering Building:

1. Combustion-based space heaters, ranges, or ovens are prohibited.
2. Vehicle engine idling for more than 30 seconds is prohibited in rented parking spaces with “No Idling” signage present to educate users.
3. Boiler and water heaters meet California’s South Coast Air Quality Management District rules.

How do we accomplish these requirements? MechSE enforces a strict policy preventing the use of combustion-based space heaters or similar pollutant introducing equipment into the facility, by either regular patrons or construction crews. Signage is posted at our three rental parking spaces in the lot just north of LUMEB indicating no idling. Signage is placed at the door leading to the parking lot educating users regards vehicle idling and its impact on our facility. The (4) natural gas, high efficiency boilers and (3) water heaters were selected and verified to meet California’s rules. Additionally, the effluents from the heating equipment rise to the roof and are ventilated remotely from any outdoor air sources.



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