

# Candles, Toxins, and Environmental Injustice



<https://lovery.com/products/scented-soy-candles-6pc-amber-jar>

CEE Honors Thesis

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## Abstract

The burdens of environmental health hazards are disproportionately felt by people with low economic status and people of color. Outdoor air pollution has drastically improved for everyone since the passage of the Clean Air Act. However, indoor air quality is not monitored or enforceable in the United States. Candles have been well characterized as a source of volatile organic compounds (VOCs). VOCs can have a wide variety of negative effects on human health. A benchtop and pilot-scale study were used to characterize the accumulation and long-term steady state concentrations of total volatile organic compounds (TVOC) from candles that are commercially available at different price points. The high dollar candles produced lower steady state TVOC concentrations compared to the low dollar candles of similar scent. Unscented candles had the lowest steady state concentrations when compared to scented candles of the same make. This suggests that this is one more way that households with lower income suffer harsher consequences for similar choices.