



CAPITOL INFORMATION & EDUCATION DAYS

Commercial Tobacco's Impact:

Costly for California's Environment and Communities

Tobacco product waste (TPW) such as cigarette butts and packaging, are an environmental, economic, and health concern for communities.¹ Despite the best efforts of local government, volunteer groups, and private entities to conduct cleanups, tobacco waste ends up on the streets, sidewalks, beaches, parks, and parking lots where it is transported to marine environments via storm drains and streams. It is estimated that TPW costs \$265 million collectively in the 30 largest cities in the United States.² The tobacco industry should be held responsible by shifting accountability for costs to communities and public agencies to the industry.



Tobacco Industry toxic waste creates a threat to human health and the environment.

- California agencies spend over \$41 million each year on tobacco waste cleanup from roadsides.³
- Large California cities spend between \$7.1 million (San Francisco) and \$19.7 million (Los Angeles) per year on tobacco waste cleanup.⁴
- Cigarette butts continue to be the #1 trash item found on beaches and roadsides, representing 34% of the total trash items collected in California. Over 4.5 trillion cigarette butts are littered each year and are made from a nonbiodegradable single-use plastic called cellulose acetate. The global weight of discarded cigarette butts is roughly 680,000 metric tonnes.
- Single-use plastic can have a range of secondary costs to human health, the environment, and economy that can be hard to quantify, such as ingestion of single-use plastics by marine life and the economic impacts of marine litter on tourism.

- Cigarette butts and e-cigarettes have also been linked to costly, destructive structural fires and wildfires which threaten both wildlife and communities.⁶ According to the EPA, vape batteries pose one of the greatest fire risks to the waste system.⁷
- > Fires caused by lithium-ion batteries in e-cigarettes have become so prolific that insurance costs for hazardous waste facilities have skyrocketed, the cost of which is passed down to households.
- Cigarette butts may release toxic chemicals such as nicotine, formaldehyde, acetone, benzene into the environment as well as heavy metals including arsenic, lead and cadmium.^{10, 11, 12}
- Toxic chemicals in tobacco waste threaten our precious aquatic ecosystems and are toxic to freshwater and saltwater organisms.¹¹ Children, pets, and wildlife are poisoned by ingesting discarded cigarette butts and nicotine-containing e-liquid.²
- 813,925 pounds of toxic chemicals were released from U.S. tobacco facilities in 2018.¹³

- ➤ The Tobacco Industry contributes to high deforestation. Approximately 600 million trees are cut down every year by the industry. It takes 13 million acres to produce the world's tobacco supply, which is about 17 times the size of Yosemite National Park.¹³
- The tobacco industry harms the global climate. It is estimated that the tobacco industry emits 0.2% of all global greenhouse gas emissions.¹⁴

REFERENCES

- 1 Novotny TE, Slaughter E. Tobacco product waste: an environmental approach to reduce tobacco consumption. Curr Environ Health Rep. 2014 May 6;1(3):208–16. doi: http:// dx.doi.org/10.1007/s40572-014-0016-x PMID: 25152862
- 2 Bull World Health Organ 2022;100:620-627 | doi: http://dx.doi.org/10.2471/BLT.22.288344
- 2 Lippner, G., Johnston, J., Combs, S., Walter, K., and Marx, D. Results of the CalTrans Litter Management Pilot Study. 2001.
- 3 Schneider JE, Scheibling CM, Peterson NA, Granados PS, Fulton L, Novotny TE. Online Simulation Model to Estimate the Total Costs of Tobacco Product Waste in Large U.S. Cities. Int. J. Environ. Res. Public Health 2020;17;4705. https://doi.org/10.3390/ijerph17134705
- 4 Araújo, Maria Christina B., and Monica F. Costa. "A Critical Review of the Issue of Cigarette Butt Pollution in Coastal Environments." Environmental Research, vol. 172, May 2019, pp. 137–149, www.sciencedirect.com/science/article/pii/S0013935119300787, 10.1016/j.envres.2019.02.005.
- 5 Americans for Nonsmokers' Rights Foundation Wildfires, Air Quality, and Cigarette Butts: Smokefree Laws Save Money and Lives. June 18th, 2018. https://no-smoke.org/wildfire-air-quality-and-cigarette-hutts-smokefree-laws-save-money-lives/
- 6 An Analysis of Lithium-Ion Battery Fires in Waste Management and Recycling. 2021.
- 8 "Education Materials." Sierra Club Tobacco Product Waste and Environmental Justice Project, www.stoptoxictobaccowaste.org/education-materials.
- 9 Moerman JW, Potts GE. Analysis of metals leached from smoked cigarette litter. Tob Control. 2011;May20 Suppl 1:i28–32. doi:10.1136/tc.2010.040196.
- 10 Novotny TE, Slaughter E. Tobacco Product Waste: An Environmental Approach to Reduce Tobacco Consumption. Curr Envir Health Rep 2014;1(3):208–216. DOI 10.1007/s40572-014-0016-x
- 11 California Department of Public Health Tobacco Control Program. Tobacco Waste Infographic http://tobaccofreeca.com/environment/cigarette-butts-are-toxic-to-the-environment/
- 12 Truth Initiative. "Tobacco and the Environment." Truth Initiative, 8 Mar. 2021, truthinitiative.org/research-resources/harmful-effects-tobacco/tobacco-and-environment.
- 13 Mock, Jeremiah. "Notes from the Field: Environmental Contamination from E-Cigarette, Cigarette, Cigar, and Cannabis Products at 12 High Schools San Francisco Bay Area, 2018—2019." MMWR. Morbidity and Mortality Weekly Report, vol. 68, 2019, <a href="https://www.cdc.gov/mmwr/volumes/68/wr/mm6840a4.htm?s_cid=mm6840a4_w, 10.15585/mmwr.mm6840a4.htm?s_cid=mm6840a4_w, 10.15585/mmwr.mm6840a4_w, 10.15586/mmwr.mm6840a4_w, 10.15586/
- 14 Novotny TE, Hardin SN, Hovda LR, Novotny DJ, McLean MK, Khan S. Tobacco and cigarette butt consumption in humans and animals. Tob Control. 2011 May20 Suppl 1(Suppl_1):i17-20. doi: 10.1136/tc.2011.043489
- 15 Environ. Sci. Technol. 2018, 52, 15, 8087–8094 Publication Date: July 3, 2018 https://doi.org/10.1021/acs.est.8b01533