

# Ma Pwacye ke Volatile Organic Compounds (VOCs)



NUHSIN MWET MA MUHTA MAUI SUC SUUN ONGAIYAC KE SRIHPEN E SAC

## Meac se inge Volatile Organic Compounds (VOCs)?

VOCs pa kais kuhtuh ono pwacsin ma fihsracsr in fahsrelihk ke acn engyeng uh. Kuhtuh sin ma inge pahngpahng benzene, toluene, trichloroethylene (TCE), ac perchloroethylene (TCE). VOC uh, kwacna orekmakihnyuck luun ma ma oreklac tuh mwet uh in orekmakihns (oacna plastic, mwe sral, ono in ahknwacsnwacs, mwe fulus nuhke acn uh (adhesives)) ac kuh pac in tuhkuh liki pacl se oreklac kuhfwen orekma (oacna carpet, linoleum, ma ma oreklac ke sahk, insulation). Ma inge kuh pac in som nuh fin acn uh ke fofosr me tuhkuh liki e luhlahp, lohm ma fihrihyack, ac ke sahk fihrihr, oil, kuh gas.

## VOC Iuun Kof In Nihmnihm Tukun E Luhlahp

Pwacsin ke VOC uh, kuh na in sifyak ke pacl se e luhlahp uh orek ac sun kuh kuhnahoslah mwe wiwac kof (oacna paip in kof, valve, kuh meter), ac ma pwacsin kac uh som nuh luun nien kof in nihmnihm fin acn uh. Nien kof in nihmnihm fin acn California tuh ahkkahlwemyeyuck lah fohkfohklah ke luhpah yohk ke ma inge VOC, tukun e luhlahp se ma sifyak in yac 2017 ac 2018.

Pwacye lah tiac arlac etweyuck lah meac pwacnacng e inge, tuhsruhktuh pwacsin kuh fohkfohk kuh in sifyak ke srihpac inge:



Fihrihyak luhn polyvinyl chloride (PVC), high density polyethylene (HDPE) kuh kuhtuh plastik sahyac me sun e uh.



Fin fokokoiyacn usren kof uh muhnahslah ke srihpacn paip in kof muhsahllah kuh orekmakihns kof oruh sie orekma upac kuh sensen, ac oasr fofosr, eng fol, ac ono pwacsin (oacna VOC uh) mokeyuckyak nuh luun paip in kof uh.

Fohfoklah luhn kof uh sahp ac kuh na in orek ke tiac kahlwem lah meac muhsahllah; pwacnacng in orekmakihns mwe srihkarsak kof pa inkacnek se sefanna in liye fin oasr VOC luun kof uh.

## Luhpah ke VOC ma tiac sensen

Ip luhn US Environmental Protection Agency (EPA) oraclah sie oakwuk in orekmakihnyuck ac tuni fin oasr VOC luun kof in nihmnihm uh

Ono	Mwe Srihkarsak Luhn US Nuhke Ma Ma Pwacsin kuh Fohkfohk (parts per billion)*
Benzene	5
Carbon tetrachloride	5
p-dichlorobenzene	75
Trichloroethylene	5
Vinyl chloride	2
1,1,1-trichloroethane	200
1,1-dichloroethylene	7
1,2-dichloroethane	5
cis-1,2-dichloroethylene	70
Ethylbenzene	700
Chlorobenzene	100
o-dichlorobenzene	600

# Ma Pwacye ke Volatile Organic Compounds (VOCs)



NUHSIN MWET MA MUHTA MAUI SUC SUUN ONGAIYAC KE SRIHPEN E SAC



## VOC ac Moul luhn mwet

Finnwe oasr enenuh ke kais sie ono inge, oasr mwe sensen ma kuh in sikyak nuhke ke moul lal, el fin el VOC:

- **Ma kuh in sikyak in paci sac na:** woht, inse ngal, sruhi, ke mutul, tuhlaklak kuh rarrar mahno, ac pihsrihsr kihmkihm ke at (heart).
- **Ma kuh in orek ke luhsen paci loes:** srihklac iron ke srah, cancer, mas ke brain (neurological effects), ahkkulukye acn in orek tuhlihk luhn mwet se, ac ahkkulukye kapwkapwack luhn sie mwet.

### Mwe Kahsruh

- [Contamination of Drinking Water Distribution Systems \(epa.gov\)](#)
- [Volatile organic compounds | Chemical Classifications | Toxic Substance Portal | ATSDR \(cdc.gov\)](#)
- [Oakwuck luhn EPA Nuhke Kof In Nihmnihm Luhn Mwet Nuhkewa](#)
- Kof in nihmnihm ma fohkfohk lah ke ma ma som liki plastik muhsahllah: ke srihpene luhlahp ac kuhtwena lohm kuh ma ma fihrihyak. Isaacson KP, Proctor CR, Wang QE, Edwards EY, Noh Y, Shah AD, ac Whelton AJ, Ip luhn Environmental Science: Water Research and Technology, 2021, 7, 274-284, <https://doi.org/10.1039/d0ew00836b>

## Luhpah ke VOC ma tiac sensen

Ono	Mwe Srihkasrak Luhn US Nuhke Ma Ma Pwacsin kuh Fohkfohk (parts per billion)*
Styrene	100
Tetrachloroethylene	5
Toluene	1,000
Trans-1,2-Dichloroethylene	100
Xylenes	10,000
1,2-dichloropropane	5
Dichloromethane	5
1,1,2-trichloroethane	5
1,2,4-trichlorobenzene	70

\*Maximum Contaminant Level (MCL): luhpan ma fohkfohk yohk emeet ma kuh in oan ke kof in nihmnihm

## OASR KIHSEN SIYUCK?

Ohfuhs luhn Hawai'i Poison Control Center: 1-800-222-1222  
[health.hawaii.gov/mauiwildfires](http://health.hawaii.gov/mauiwildfires)

NUHNAKMUHNHAS AHKOS MA NUHKEWA MWET KOL  
KE ACN LOM FWAHK.

