

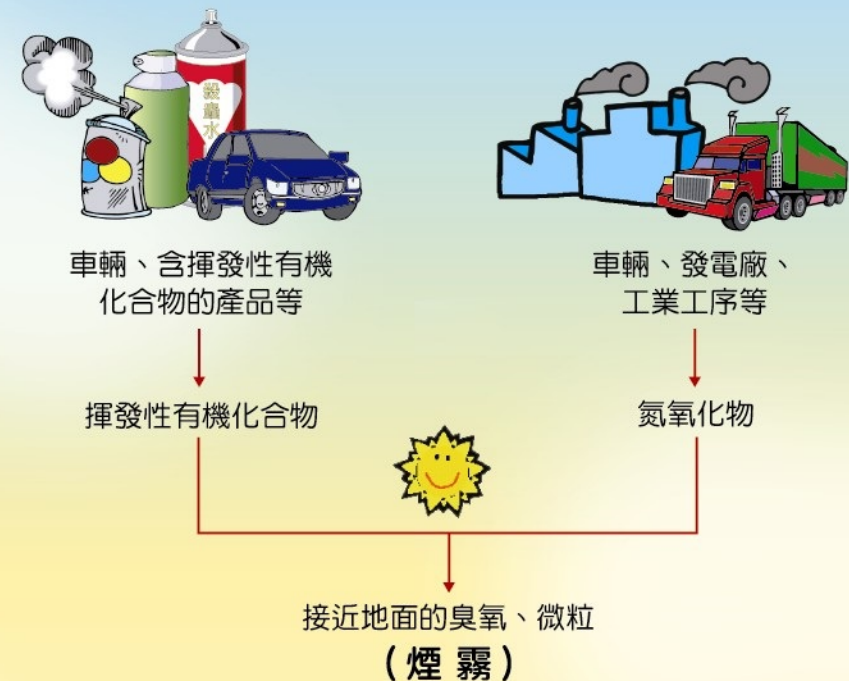
什麼是揮發性有機化合物？

揮發性有機化合物可見於很多產品之中，如溶劑漆料、印墨、許多消費品、有機溶劑和石油產品。車輛和船舶亦會排放揮發性有機化合物，最終造成空氣污染和煙霧問題。



揮發性有機化合物如何形成煙霧？

揮發性有機化合物對大氣中臭氧和微粒的形成扮演著重要角色。臭氧和微粒積聚會形成煙霧，令能見度下降。隨著珠三角地區經濟增長，有關污染物形成的情況亦日益嚴重，加劇了區域性的煙霧問題。當陽光充沛和大氣處於靜止狀態，如颱風迫近或秋天普遍吹北風的時候，煙霧的問題尤為嚴重。



煙霧如何影響我們？

煙霧會刺激我們的眼睛、鼻子和喉嚨，甚至或令患有心臟或呼吸疾病（如哮喘）的人士病情惡化。長時間身處嚴重的煙霧環境中，可能會對人體的肺部組織造成永久傷害，損及免疫系統。再者，煙霧令能見度下降，不利旅遊業發展。



政府在減少排放揮發性有機化合物方面有何建樹？

為解決區域性的煙霧問題，香港特別行政區政府與廣東省政府緊密合作，訂定減排目標，務求共同減少珠三角地區的揮發性有機化合物排放量。香港特別行政區政府已：

- 規定本地油站在進行卸油和汽車加油時，必須回收釋出的汽油汽體
- 收緊汽車廢氣排放的標準至歐盟標準；
- 制定《空氣污染管制（揮發性有機化合物）規例》，由二零零七年四月一日起分階段管制建築漆料、印墨和六種指定消費品（即空氣清新劑、噴髮膠、多用途潤滑劑、地蠟清除劑、除蟲劑和驅蟲劑）的揮發性有機化合物含量，及要求某些印刷機裝置管制排放物器件。
- 於二零零九年修訂該規例，擴大其管制範圍至汽車修補漆料/塗料、船隻和遊樂船隻漆料/塗料黏合劑及密封劑，並由二零一零年一月一日起分期執行。
- 於二零一七年進一步修訂規例，以涵蓋潤版液和印刷機清潔劑，由二零一八年一月一日起生效。

我可以如何幫助減少排放揮發性有機化合物？

- 避免使用噴霧式消費產品，因為這些產品通常以揮發性有機化合物作推進劑。非噴霧式消費產品一般以固體、液體、凝膠、泵噴或走珠形式使用。




- 以水劑漆料代替溶劑漆料。如必須使用溶劑漆料，則應避免使用噴灑器而改用油刷或滾筒刷塗抹。這樣可減少使用天拿水（一種差不多百分百含揮發性有機化合物的溶劑），亦可減少噴出過多漆料，造成浪費。
- 避免使用含揮發性有機化合物的產品，例如有機清潔劑，並要求供應商或商店提供不含揮發性有機化合物或低含量揮發性有機化合物。
- 將含揮發性有機化合物的產品貯存在密封容器內。
- 購買少包裝的產品，因印刷包裝物料時，會產生揮發性有機化合物。
- 減少駕車，安排同載，儘量使用公共交通工具。

如欲查詢更多資料，請聯絡：

環境保護署

香港灣仔告士打道5號稅務大樓33樓

電話：2838 3111 或瀏覽環保署網頁：<http://www.epd.gov.hk> 2017年修訂

 採用環保油墨及再造紙印刷

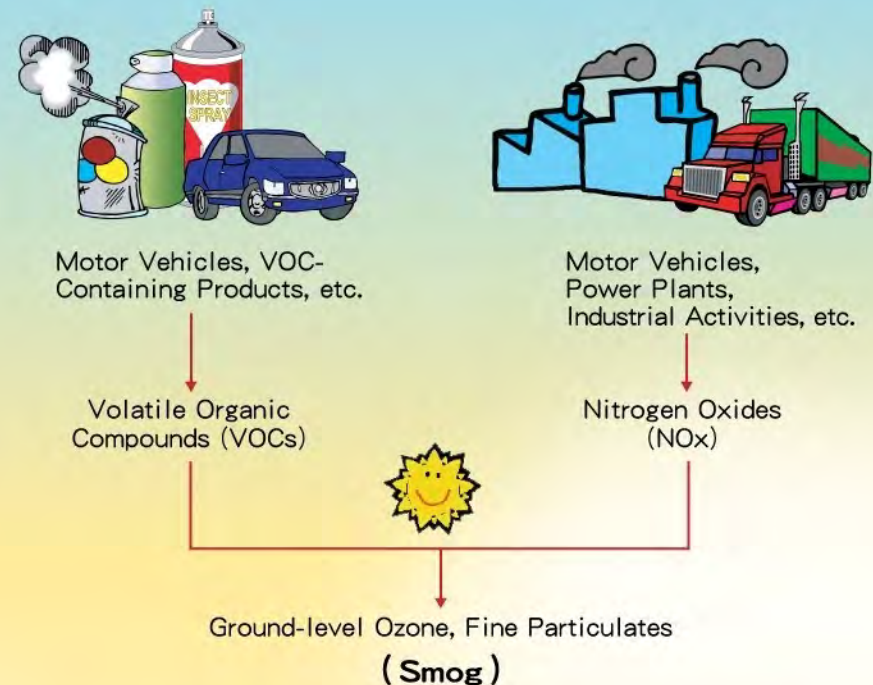
Volatile Organic Compounds and Smog



Environmental Protection Department

What are VOCs?

VOCs mean volatile organic compounds and are found in a lot of products such as solvent-based paints, printing inks, many consumer products, organic solvents and petroleum products. Motor vehicles and vessels also emit VOCs that eventually cause air pollution and smog.



How do VOCs cause smog?

VOCs play a significant role in the formation of ozone and fine particulates in the atmosphere. The accumulation of ozone and particulates results in smog that reduces visibility. The economic growth in the Pearl River Delta comes with increased formation of these pollutants, thus aggravating the regional smog phenomenon. Smog is particularly severe under strong sunlight and stagnant weather conditions, e.g. with typhoon approaching, or with prevailing northerly winds that are common in autumn.

How does smog affect us?

Smog can irritate our eyes, nose and throat, or can worsen existing heart and respiratory problems such as asthma. Prolonged exposure to severe smog condition may cause permanent damage to lung tissues and affect our immune system. In addition, smog impairs visibility and has a negative impact on tourism.



What has the Government done to reduce VOC emissions?

To address the regional smog problem, the HKSAR Government is working closely with Guangdong Provincial Government to set targets to jointly reduce VOC emissions in the Pearl River Delta region. The HKSAR Government has:

- required the recovery of petrol vapour released during petrol unloading and refuelling at local petrol stations;
- tightened emissions standards of motor vehicles in line with the European Union; and
- enacted the Air Pollution Control (Volatile Organic Compounds) Regulation (VOC Regulation) which with effect from 1 April 2007 places control in phases on the VOC content in architectural paints, printing inks and six selected consumer products (i.e. air fresheners, hairsprays, multi-purpose lubricants, floor wax strippers, insecticides and insect repellents), and requires emission reduction devices to be installed on certain printing machines.
- amended the VOC Regulation in 2009 to extend the control in phases starting from 1 January 2010 to vehicle refinishing paints/coatings, vessel and pleasure craft paints/coatings, adhesives and sealants.
- amended the VOC Regulation further in 2017 to cover fountain solutions and printing machine cleaning agents with effect from 1 January 2018.

How can I help reduce adding VOCs to the air?

- Avoid using aerosol consumer products that often use VOCs as their propellants. Non-aerosol consumer products are usually in pump, solid, liquid, gel, or roll-on forms.



- Replace solvent-based paints with water-based paints. If solvent-based products cannot be avoided, apply them with hand brushes or rollers instead of sprayers to reduce the use of thinners (which are almost 100% VOCs). This also minimizes overspray and wastage.



- Avoid using VOC-containing products such as organic cleaning solvents and ask suppliers or stores for non-VOC or low-VOC alternatives.
- Store VOC-containing products in air-tight containers.
- Buy products with less packaging as the printing of packaging materials generates VOCs.
- Drive less, share rides and use public transportation.



For more information, please contact:
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Telephone: 2838 3111
Or visit EPD's website at: <http://www.epd.gov.hk>

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揮發性 有機化合物 與煙霧

