

## Tips for Renovation

- Choose paints with no-VOC or low-VOC contents, such as water-based paints. Avoid using solvent-based paints.

When using water-based paints, there is no need to use organic solvent to dilute the paint or to clean the work area.

- Before you buy any paints, you should calculate the coverage area and the thinning ratio, and buy the right quantity of paints. In this way, you can minimize wastage.
- Note the VOC content on the labels of the paints.
- Use scrapers to remove old paints. Avoid using chemical paint strippers as they contain high levels of VOC.
- When you apply wallpaper, use water-based primer or base sealer for the undercoat. Do not use varnish which is high in VOC.
- Do not place soft and fibrous materials such as pillows and furry dolls inside the work site. These soft materials absorb the VOC in the air, and de-gas later on.  
Should the VOC accumulate in the air, future tenants of the premises would be affected. Remember to remove all fibrous materials from the work site before work commences.

## Protect our Blue Sky Limit VOC Emission!

For General Public

### 藍天行動 Action Blue Sky

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環境保護署  
Environmental Protection Department

## What causes the smog problem in Hong Kong?

The regional smog problem is caused by emissions of pollutants from vehicles, industrial activities and power plants in the Pearl River Delta Region including Hong Kong.

According to research, the emission of Volatile Organic Compounds is one of the major reasons for smog formation.

## What is VOC?

VOC is the abbreviation for Volatile Organic Compounds.

VOC are fumes emitted from solids or liquids that contain organic compounds. Most paints, printing inks, construction and renovation materials, cleaning solvents, disinfectants, insect sprays, cosmetics and hairsprays contain organic compounds.

When you use these products, organic compounds are discharged into the atmosphere. The photochemical reaction between organic compounds and nitrogen oxides in the presence of sunlight results in ozone which in the end becomes smog.

When you walk into a newly renovated room, or unwrap a piece of brand new wooden furniture. You would likely experience a pungent smell. You might feel uncomfortable in the eyes and respiratory tract. Though you might not pay much attention to it, you would have already inhaled VOC emitted from the paints, furniture and other VOC-containing products.

## What are the health effects in inhaling VOC?

In a brief intake of high concentration of VOC, it would suppress our central nervous system. That is why one may have dizziness, headaches, or in a serious case, loss of consciousness.

Some VOCs like benzene are toxic pollutants. Long term exposures could lead to increase risk in the sickness of leukemia and pernicious anemia.

Suppress the central nervous system  
Increase risk of having leukaemia and pernicious anemia

## How to reduce emission of VOC from architectural paints?

Hong Kong is clustered with tall buildings. Architectural paints are one of the main sources of VOC emission. We can reduce smog in Hong Kong by decreasing VOC emission.

The HKSAR Government has already enforced a regulation, effective since 1st April 2007, to control the content of VOC in architectural paints.

The public can do their share by using no-VOC or low-VOC paints when renovating their homes, for better air quality for all to enjoy.