

GPG 28 Volatile Organic Compound Emissions



Governing Legislation and Standards:

Environment Protection Act;
State Environment Protection Policy (Air Quality Management).



Summary Information:

Within automotive service, volatile organic compounds (VOC's) are generally hydrocarbons used as solvents, for parts washing or as a by-product of combustion.

VOC's are recognised by their tendency to evaporate into the atmosphere easily, usually with a distinctive odour.

Some VOC's containing class 2 or class 3 indicators are very harmful to both people and the actual environment and may cause respiratory problems, photochemical smog or deplete the ozone layer. Businesses that generate VOC emissions are responsible to identify individual VOC's and then to assess potential hazards and implement appropriate controls.

Emissions of VOC's must be managed to reduce harmful effects. Class 3 indicators (the most harmful) must be reduced to the maximum extent achievable.



Further Help:

Environment Protection Authority;
VOC Suppliers;
A guide to the Sampling and Analysis of Air Emissions www.epa.vic.gov.au;
Local Council;
Managing emissions of volatile organic components publication 929 November 2003.

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Good Practise Risk Control:

Environmental Risk Control Steps

Review the use of all VOC's including all solvents and liquid fuel.

1. With the help of suppliers identify the material within all VOC's;
2. Quantify how much VOC emission is created;
3. Assess potential harm;
4. Control the emission where possible.

Emission Control

Use the waste hierarchy where possible, by applying 1, or if that is not possible 2, 3 etc...

HIERARCHY OF RISK CONTROL	EXAMPLE
1. AVOID	Avoid the use of the VOC completely
2. RE-USE	Re-issue VOC's where possible by storing in sealed containers between uses.
3. RE-CYCLE	Re-cycle VOC's by having a process to clean the material for further use (such as a gun wash solvent re claiming machine)
4. RECOVER ENERGY	Process the used VOC rather than to dispose it (probably not applicable to automotive service)
5. TREAT PRIOR TO DISPOSAL	Treat the VOC by getting technical advice from your supplier to make the material less harmful prior to disposal.
6. CONTAIN	Contain the VOC to minimise the release to atmosphere.
7. DISPOSE	Dispose the VOC wastes to a permitted contractor.

Develop an Action Plan

Apply for or review any EPA emissions licenses to ensure you comply with current requirements. Create a record of your review and assessment. Review your VOC management at least annually.