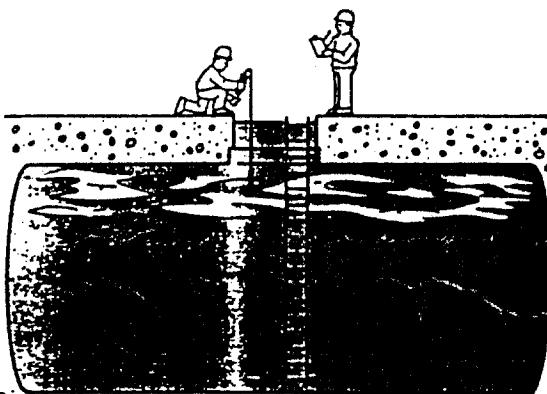


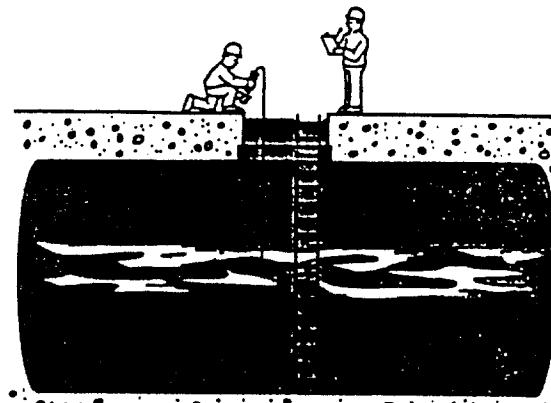
Atmospheric Testing

Depending on their weights, hazardous gases could be at the bottom, middle or top of a given confined space. Some gases are heavier than air, others lighter, some the same weight. Therefore, the only safe way to test the atmosphere of a confined space is to sample all levels (top, middle, bottom) at 4 foot intervals with properly CALIBRATED INSTRUMENTS.

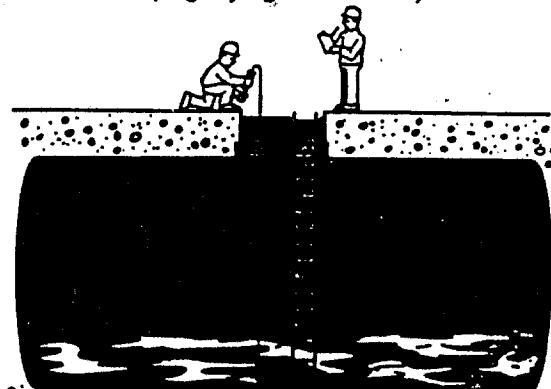


Methane Combustible Gas
(lighter than air)

If toxic gases, combustible gases or oxygen deficiency/enrichment are discovered, the confined space has to be ventilated and retested before any entry is permitted.



Carbon Monoxide (CO)
(slightly lighter than air)



Hydrogen Sulfide (H₂S)
(heavier than air)

Remember to put your trust in a properly calibrated instrument and not your senses. You can't see or smell many toxic gases, combustible gases or determine how much oxygen is present without a reliable instrument.

Weights of Various Gases Compared to Air

The following gases are lighter than air:

Name	Vapor Density (Air=1)
Acetylene	0.9
Ammonia	0.6
Carbon Monoxide	~1.0
Ethylene (Ethene)	~1.0
Helium	0.1
Hydrogen	0.1
Methane	0.6
Nitrogen	~1.0

The following gases are heavier than air:

Name	Vapor Density (Air=1)
Argon	1.4
Butane	2.0
Carbon Dioxide	1.5
Chlorine	2.5
Ethane	~1.0
Hexane	3.0
Hydrogen Sulfide	1.2
Methyl Ethyl Ketone	2.5
Methyl Mercaptan	1.7
Nitrogen Dioxide	1.6
Nitrous Oxide	1.5
Oxygen	1.1
Propane	1.6
Propylene	1.5
Sulfur Dioxide	2.2

LEL Correlation Data Table

	Gas	Methane
G	Acetone	1.7
a	Acetylene	1.3
s	Ammonia	0.8
	Benzene	1.9
	Butane	1.7
	Carbon Monoxide	1.1
B	Dodecane	3.0
e	Ethane	1.3
i	Ethanol	1.5
n	Ethylene	1.3
g	Hexane	2.3
	Hydrogen	1.0
	Isopropanol	1.9
	Methane	1.0
S	Methanol	1.1
a	Pentane	1.9
m	Propane	1.6
p	Styrene	2.2
I	Toluene	2.1
e	Vinyl Chloride	2.5
d	Xylene	2.5