

Staff Changes

Scott Ebbett has left us to work first in Wellington, and later overseas. We have enjoyed having him with us at ARM.

To prove that immigration does, to a certain extent balance emigration, Andy Cole has joined us in a part-time capacity. Andy has had experience in the UK running a stack emission testing service.

Toxic Heavy Metal Emissions

We last reported these in our newsletter for August 1995. That list has since been updated. A condition in a Resource Consent discharge permit issued to one of our clients recently specified the following metals: lead, chromium, copper, zinc, tin, antimony, vanadium and strontium. Others mentioned in addition to these in other permits are arsenic, nickel, manganese and cadmium.

To determine these emissions a particulate test is first conducted using either the standard glass fibre filter thimble, or a nitrocellulose, polycarbonate or Teflon filter depending on particle size and/or ease of acid digestion for subsequent analysis. Often the emission is in both particulate and gaseous form, the latter more correctly expressed as fume. A good example of this is molten lead which is called volatile. To include all of a heavy metal emitted it is therefore necessary to include a solution of nitric acid in the first impinger in the sampling train. Subsequent analysis is by atomic absorption or ICP spectrophotometry. Luckily these techniques do not require separate samples for each metal.

The final report, taking lead as an example, specifies total particulate, particulate lead and volatile lead emissions in levels between 10 and 1000 micrograms per cubic metre.

Environmental Impact Assessments

Daniel has processed a number of Resource Consent applications this year. A significant part of these is an environmental impact assessment, including air dispersion modelling and liaison with neighbours. The exercise

Where we are and how to contact us

Premises

34 Lincoln Road, Henderson

Air Resource Management Limited

P.O. Box 21-639 Henderson
Waitakere City

Phone 0-9-836 0489

Fax 0-9-838 8523

Contacts

Manager Richard Hoyle

Mobile 025-977 852

ah 0-9-836 0492

rhoyle@clear.net.nz

Andrew Parkin

Mobile 025-766 520

aparkin@clear.net.nz

Daniel Hovell

Mobile 025-783-874

dhovell@clear.net.nz

is an important undertaking for both ARM and the client.

When the application for a Resource Consent is submitted to the Regional or District Council it must be accompanied by a fee. It was a pleasant surprise to find that an application submitted on behalf of one of our clients was judged so well prepared that part of this fee was remitted.

Health & Safety

This subject was last referred to in our newsletter of December 1994. Recent changes in legislation have allowed us the opportunity to revise and improve our systems:

- Our H & S Manual has been revised.
- We have complete records for each stack tested (Job Safety Analysis Sheet).
- Staff members have recently attended courses for operating a cherry picker, in First Aid, and for Defensive Driving.
- Every piece of electrical equipment is checked by a registered electrician every six months.

When completing a questionnaire for our insurer we were given several options to answer "yes" or "no".

- Do you work at heights >3 metres?
- Do you work with high temperatures?
- Do you work with flammable solvents?
- Do you work with toxic gases?

Since the answer to all these questions was "yes" one might have expected extremely high premiums. However, our cover has been obtained at modest rates, no doubt because of our excellent no-claims record. We have selected Fusion as our accident insurer.

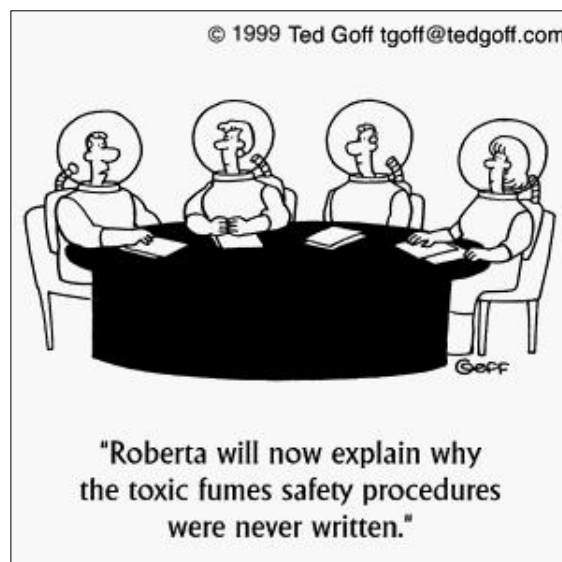
Calibrations

In any single stack emission test a large number of parameters are recorded. It is important that these are accurate. We therefore have the following equipment checked on a regular basis:

- Micromanometers
- Pitot tubes
- Gas meters
- Temperature probes
- Balances
- Barometer

In-House Emission Testing

Our business is to provide emission testing services to clients. From time to time we are asked to assist our clients in setting up their own in-house testing service. This is usually to enable them to conduct regular checks for themselves between our (less regular) visits.



An important part of this service is the conduct of concurrent comparative tests, an invaluable exercise for both the client and ourselves. We are happy to assist clients to:

- Purchase suitable apparatus (suppliers and costs provided)
- Construct the sampling train (tips for assembly)
- Test its accuracy (calibration)
- Audit the routine tests (comparative testing)

Occasionally also we allow clients to borrow our equipment.

Liaison With Councils

Regional Councils grant Resource Consent discharge permits under the Resource Management Act. Many permit holders have permits granted by local councils under delegated authority. It is pleasing to note an increasing level of pro-active investigation which goes beyond that required by conditions in permits. We are pleased to play a part in this process which is beneficial in relationships with councils.

Holidays

ARM will be closed from Friday 24 December and re-open on Monday 10 January. Our thanks to all our clients for their business during 1999; may your businesses prosper for the next thousand years!