

## Particulate Testing Methods

There are at least six standard methods for particulate testing. We choose the Australian Standard which, by agreement with the Australia/New Zealand Standards Committee is standard in both countries.

Within the method are various options which are intended to allow us to test with maximum accuracy and efficiency. The options cover sample size, number of samples, sample duration and number of test ports. Councils who issue Resource Consent discharge permits differ in their monitoring requirements, but often the choice is left to us. We are happy to discuss our tests in detail.

## Discharge Permit Conditions

A Consent Authority (Regional or District Council) issues a Resource Consent with discharge permit conditions. These are arrived at historically, scientifically, politically and more recently using a document circulated by the Ministry for the Environment: "Compliance Monitoring and Emission Testing of Discharges to Air" (see below).

We have compiled a list of ten galvanising plants with widely different limits which illustrate the magnitude of the problem.

A recent meeting of the Air Quality Working Group (see Fresh Air Oct 98) received a paper entitled Code of Practice for Hot Dip Galvanising Plants, sponsored by the galvanising industry acting together. Their intention is to encourage fair and consistent limits between competing plants. We hope the paper will assist the Council officers in achieving this outcome.

### 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 025-304 546

dhovell@clear.net.nz

Scott Ebbett

sebbett@clear.net.nz

#### **Graham Environmental Consulting Ltd**

PO Box 21-639 Henderson

Phone 0-9-836 6184

Fax 0-9-838 8523

#### Contact

Bruce Graham

Mobile 021-615-273

bruce.graham@clear.net.nz

## Y2K

Except for our accounting package (which we are in the process of updating) we are independent of computer problems associated with 31 December 1999.

All our reports and data spreadsheets are calculated and printed with hard copies to file. If at any time you require updating on the complete history of your association with us this information is immediately available independent of any computer.

### Oxides of Nitrogen Emissions from Stacks

Combustion processes emit oxides of nitrogen, predominantly nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). Collectively these are known as NO<sub>x</sub>. Some test methods produce a single result as "NO<sub>x</sub> expressed as NO<sub>2</sub>". Others are able to distinguish between the two.

Of the several methods available those using electronic instruments are the most satisfactory, but also the most expensive. A screening test involving the use of gas absorption tubes is cheap and quick but has a high margin of error. Fuel cell instruments work well in some cases and not in others.

There are also several chemical sampling train methods officially sanctioned by the EPA. We are now set up to do these tests on a regular basis.

### Compliance Monitoring and Emission Testing of Discharges to Air

This document was published by the Ministry for the Environment in August 1998. One of its stated intentions is "to promote consistency and good science in the management of discharges to air."

The history of the way discharge permits are written is that, to a large extent, the initial permit issued to a plant was based on (or often a copy of) the Clean Air Act licence held under the old legislation.

After eight years of RMA the following trends in discharge permits are apparent:

- increasing complexity of permits
- increasing "good science" in permits
  - more conditions are effects-based
  - conditions are stricter
  - less (or no) emphasis on air pollution control mechanisms
  - continuing use of "catch-all" conditions

The "best practicable means" phrase from the Clean Air Act was carried over in the RMA as the "best practicable option". The phrase is defined at the beginning of the Act. However, whereas the BPM had great influence in the design of Clean Air Act licences, the BPO is little-used in the RMA.

The most obvious example of this change is found in practice in the two types of air pollution control used in asphalt plants. One

control device used is a bag filter and the other a wet-scrubber. Since the performance of these two devices is different the discharge permit limits set are different. Under the Clean Air Act one of the two devices would be regarded as the BPM so that all plants would be fitted with the same type. Consistency was attained. Under RMA two plants next door to one another might have two different devices operating under two different limits.

### Blood Bank

Congratulations to all our staff for a 100% turn-out during the February visit to Henderson of the Blood Transfusion Service.



*"Sales on the Website are down. I figure the server's Chi is blocked, so we're fudging around the Feng Shui in the computer room, and if that doesn't work, Ronnie's got a chant that should do it."*

*The 5th Wave*

*email Rich Tennant:the5thwave@tiac.net*