



**We can test for:**

**Particulate**

(> 2.5 micron)

**Hydrogen halides and Halogens**

Including

Total Chlorides

Total Fluorides

Hydrochloric Acid

Hydrofluoric Acid

Hydrogen Bromide

**Aldehydes**

Including

Formaldehyde

Acetaldehyde

Propionaldehyde

Longer chain Aldehydes

**All Metals**

Welding Fume

Mercury

Volatile Metals (Zinc, lead, etc)

Heavy Metals (Cr, Cd, As, etc)

**Volatile Organic Compounds (VOC's)**

Halogenated Aromatics

Alkanes

Unburned hydrocarbons

**Organic/inorganic contaminants**

Including

Amines

Aliphatics

Aromatics

Urea Compounds

Sulphur Compounds

**How We Can Help You**

The Resource Management Act has placed the responsibility for the control of contaminants (including air pollutants) on industry. We offer you a one-stop (full) service for quantifying emissions, and advice on any required action.

We can advise you on air pollution control equipment and process tuning for maximum efficiency.

- All Equipment Provided (self-contained service)
- Wood Industry Specialist
- No Job too Small
- Flexible Working Hours

**We offer:**

Free Proposals

Standard Methods

Competitive Prices

Full Data Spreadsheets

Stand-Alone Reports

Results Returned Promptly

Scientific Support for Interpretation of Results

Expert Evidence

Resource Consent Preparation

RMA 4th Schedule Requirements

Occupational Health Testing

Odour Testing

**Some of the applications for our services are:**

Particulate and Gaseous Emissions for a Wide Range of Elements and Gases

Gas Flows

Parameters for Process Controls

AUSPLUME Modelling

Aldehyde Testing by USEPA 0011

Total Carbon Emissions (Kyoto Protocol)

Isocyanates

**Test Information**

*Interested in Our Services?*

We provide efficient and reliable service to industries concerned about air emissions and compliance with the Resource Management Act.

Test Results remain confidential between the client and Air Resource Management. Our client database is also confidential.

**IANZ Accredited Laboratory**

Member of

**NZACL**

New Zealand Association of Consulting Laboratories



**CLEAN AIR SOCIETY OF AUSTRALIA & NEW ZEALAND**

(Incorporated in New South Wales, Australia)

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# Fresh Air

The Newsletter of Air Resource Management Ltd

November 2006

**Comparative Testing –Excellent Results**

As part of our quality assurance programme and to comply with IANZ requirements we take part, from time

to time, in comparative tests with our colleagues in K2 Environmental and Watercare Services.

Recently ARM and K2 tested the same stack at the same time at Tasman Insulation.

The results were very close and gave us much confidence in the robustness of our methods.

The estimated uncertainty of measurement attached to a particulate emission test concentration (mg.m<sup>-3</sup> (NTP, dry) is ± 7%; not only did our three successive tests agree within this range, but one of them was exactly the same! Considering the number of different readings which, taken together, produce this result (approximately forty) and that this number is doubled for the two test teams the agreement is remarkable.

Congratulations are certainly in order for the staff involved – Andy, Abbey and Wendy from ARM and Sean and Michael from K2.

This is proof that our clients can be confident in the quality of our test results.

**Staff News**

- Wendy is to be married on 25 November.
- Darrell joins us again full-time from 20 November until March 2007.

- Abbey is off home to Boston for three months.
- Richard's final day at work will be 21 December.



Over to you.

**ARM Premises, 34 Lincoln Rd**

The new broom has not only taken over inside, but has been completely over the outside as well (paintbrush rather than broom). ARM premises are freshened up in grey & white.

**Efficiency Measurement For Air Pollution Control Devices**

ARM is frequently requested to conduct such tests, sometimes as a condition in a Resource Consent air discharge permit. Simultaneous sampling is undertaken before and after the pollution control equipment such as a scrubber or baghouse. These tests are predominantly for particulate control efficiency, but have also been for odour and solvents.

From time to time our results are chal-



## Richard Hoyle Retires

Since Glenn Veart became managing director on 1 August Richard has continued as a part-time employee. His last day at work will be 21 December 2006. This is his farewell.

My thanks to Glenn for allowing me this opportunity to reminisce.

It has been an eventful fourteen years since ARM started in 1992. The Resource Management Act became law the previous year and R.J. Bollard in the District Court at Whangarei dated 20 October 1998. Our client was found guilty in ahead of it. ARM's services were needed.

Highlights for me have been:

### Growth

From operating on my own to begin with ARM now employs 6 full-time and 2 part-time staff.

### Clients

ARM has a substantial base of loyal clients, some of whom have been with me from the very early days. Bad debts are practically non-existent.

### Analysts

ARM work produces many samples for analysis. The only in-house analysis we can do is weigh our filters. The analysts we employ provide us with results of a high standard and also much invaluable advice. I should like here to record my thanks to the late Dr Allan Aspell with whom I enjoyed many stimulating conversations. It was his opinion that ARM was one of his most difficult clients, but he said that as a compliment!

International Accreditation NZ ARM was the first air emission testing group to be registered (in 2003) with IANZ. The initial requirements, and the continuing operation of their systems, are rigorous and represent an onerous imposition on a small business. It has been calculated

that as intellectual property the value to ARM of this registration is \$70,000.

### Case Law

I refer to the decision of Judge R.J. Bollard in the District Court has mostly employed are pre-dominantly intelligent, friendly and a joy to have around. This year I was able to enjoy a six-week holiday in France and return to attack from three acknowledged experts was mounted on a monitoring report produced by ARM. I was not called to witness in this case, which centred exclusively on the ARM report written by me.

The defence concentrated on disputing the results reported; however, the Judge noted that the Court was informed consistently during the hearing that ARM was (and is) regarded as a competent firm qualified to undertake monitoring work of the kind in question.

None of our clients operates a process which is 100% guaranteed never to exceed its emission limits. It is always a cause of concern, to them, as well as to the authorities, when this happens. If the consequences are a prosecution (which seldom happens) then that here to record my thanks to the late Dr Allan Aspell with whom I enjoyed many stimulating conversations. It was his opinion that ARM was one of his most difficult clients, but he said that as a compliment!

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### Finance

ARM has been profitable every year and recently quite stable financially. Nearly all the profits have been reinvested in the business. The outlook is favourable.

### Staff

With two exceptions no staff member has stayed longer than three years, and twice all staff except me had mere months of experience. The young staff ARM has mostly employed are pre-dominantly intelligent, friendly and a joy to have around. This year I was able to enjoy a six-week holiday in France and return to attack from three acknowledged experts was mounted on a monitoring report produced by ARM. I was not called to witness in this case, which centred exclusively on the ARM report written by me.

### Health & Safety

All our clients recognise the importance of H & S and the burden placed on us all in striving to remain uninjured. ARM staff face these hazards: heights, heat, toxic/corrosive/flammable materials, industrial machinery, dirty/slippery/wet working conditions, and driving on busy roads. Our clients have been very generous in providing excellent training for us over the years. It was a great relief to complete fourteen years in business without a single serious staff injury.

### Retirement

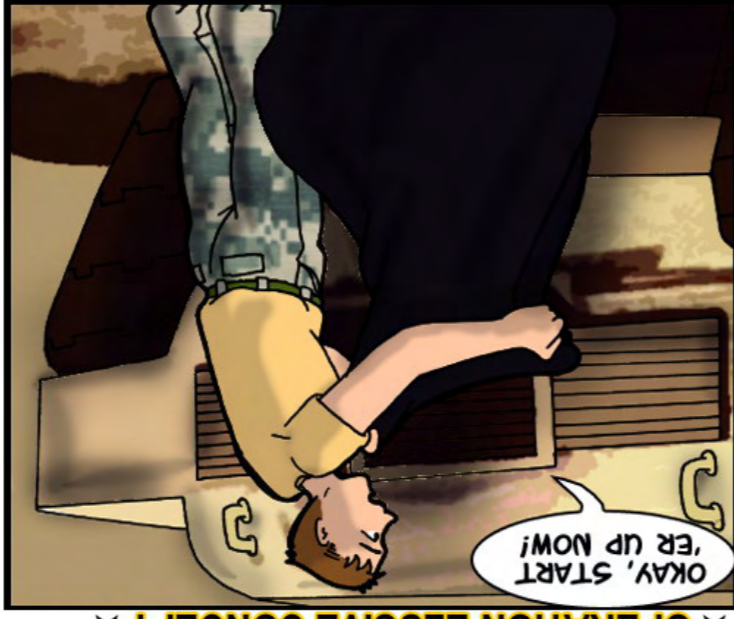
My first emission test was in 1968 at the fertiliser works in Napier; my last just recently for ARM's first client, Tasman Insulation.

Now my charms are all o'erthrown,  
And what strength I have's mine own,—  
Which is most faint:  
—*The Tempest*

I may not get as far as Naples, but a short trip to Honolulu or Hong Kong sounds quite attractive.

Good luck, and good-bye.

| Schedule to                         |  | CERTIFICATE OF ACCREDITATION  |                                   |
|-------------------------------------|--|---|-----------------------------------|
| Laboratory Accreditation Programmes |  | <p>International Accreditation New Zealand - Telephone 09 525 6655 - Facsimile 09 525 2266<br/>Standard Form AS 9/3, March 1998<br/>Page 1 of 2</p> |                                   |
| Client No.                          | 7040   | Authorised Representative   | Mr Richard Hoyle<br>Manager       |
| Telephone                           | 09 836 0489  | Facsimile   | 09 838 8523                       |
| Address                             | 34 Lincoln Rd, Henderson,<br>AUCKLAND  | Programme   | Accredited Laboratory<br>Chemical |
| Application Number                  | 1037   | Date of Accreditation   | 18 March 2003                     |
| Date of Application                 | 9 November 2001  | Accreditation Number  | 847                               |
| Conformance Standard                | NZS/ISO/IEC 17025:1999<br>General requirements for the competence of testing and calibration laboratories. | Testing Services Summary  | ENVIRONMENTAL MONITORING<br>2.58  |
| Signatories                         | Mr R Hoyle<br>2.58   | Authorized General Manager  | <i>Richard Hoyle</i>              |
| Issue                               | 9  | Date  | 14/07/06                          |
| Page                                | 1 of 2   |   |                                   |



★ OPERATION ELUSIVE CONCEPT ★



BY CHRIS ASHBY - WWW.ELUSIVE-CONCEPT.COM

### FEEDBACK

Our thanks to Kevin Mahon from the ARC for his comments on the article in the last issue of Fresh Air about Motor Vehicle Emissions. The interpretation of local ambient test data in conjunction with overseas epidemiological research is obviously too complex for the type of treatment the quick summary in Fresh Air gave to it. In any case, the objective of a continuous improvement in motor vehicle emissions is unaltered. As Auckland grows the only alternative to the present over-use of private cars is improved public transport.

### FEEDBACK

Such problems are not easy to spot and we are developing some expertise in industrial forensics.

- Saturated scrubber liquor
- Multiple inlets
- Re-entrainment

revealed. Examples are:

lenged, especially when the outlet concentration is greater than the inlet concentration which at first glance does not make sense. On further investigation the reason is revealed. Examples are: