

LEAD Action NEWS

Vol 6 No 3

The journal of The LEAD (Lead Education and Abatement Design) Group Inc.

1998

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Good News Concerning Lead

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Editorial

So many of the 22 editions of *LEAD Action News* published to date, were full of bad news stories, that I decided it was time for good news. And what a bumper edition we came up with. There's no doubt that once you start looking for the good in things – you'll find it!

Happy Reading

Elizabeth O'Brien

PS this is the 4th and last newsletter for the year, counting *Lead Aware Times*. ♦

Disclaimer: Our policy is to give you all the information available to us, which you might need, in order to make informed decisions about lead hazards. The LEAD Group runs the government funded Lead Advisory Service (NSW). The information and advice given by the Lead Advisory Service (LAS) is given in good faith but with no responsibility taken. LEAD Action News is no longer approved of as part of the LAS funding., but is paid for by donations and subscriptions and created by volunteers. The views expressed in LEAD Action News are not necessarily those of The LEAD Group Inc. LEAD Action News does not purport to express Government views or policy on lead.

Reprinting articles: We encourage further publicity for our articles, but it is essential that you contact the editor before reprinting, especially since we may not own copyright. Phone Elizabeth O'Brien on (02) 9716 0014.

Acknowledgments: Thanks for the many contributions for consideration in the newsletter, sent in by Andrew Gray, Dr Garth Alperstein, Michael Marshall and Professor Brian Gulson. Thanks to those people who wrote articles: Ted Floyd, Dr Ben Balzer, Jenny Morton and Michelle Calvert, and thanks Gail Carson for graphics.

Editorial Committee: Carol Bodle and Elizabeth O'Brien.

Layout Design: Carol Bodle. ♦

News Briefs

Call for Lead Petrol Ban in Indonesia

A new blood lead study of school-children in Jakarta recommends reducing lead in Indonesian petrol as well as more monitoring of lead exposure. 26.7% of the children had blood lead levels above 10 ug/dL (micrograms per decilitre). [Ref: website <http://ehpnet1.niehs.nih.gov/docs/1998/106p499-501/heinze/abstract.html>]. It's good to see this evidence of greater lead awareness in Asia. Hopefully, the most sensitive populations, ie inner city pre-school aged

children will be tested in future studies. ♦

Mucus Removes Toxic Metals from Water

New Scientist (date xxx) cites research by Powell *et al* in London, that the mucus exuded by fresh-water snails, algae and bacteria (which grow on gravel) can soak up toxic metals from the water. Eg aluminium concentration in water fell 80% when snails were put in a bucket. Only a fraction of the aluminium went into the snails, most was in the slime in the bucket. The research was inspired by the knowledge that human digestive tract mucus absorbs toxic metals. [Ed: *does human female cervical mucus remove metals from semen?*] ♦

New Mass Transit People-Mover

Sydney company Bishop Austrans released a revolutionary light rail vehicle prototype on 8th December 98. The Austrans system will be developed under the largest ever (\$14 million) Federal Industry Research and Development Board Start Grant. The steel wheel on rail system allows rapid point-to-point personalised journeys. ♦

Hunter News

Formation of Hunter Branch of The LEAD Group Inc

The Hunter Branch of The LEAD Group was started on 14/10/98. The branch is run by parents of lead poisoned children and residents who care about children and the environment they live in.

The Hunter LEAD Group want to help as many children and adults as they can. We believe that every child deserves the best out of life and no child should have to suffer from lead. We are more than happy to help with information and advice about lead to anyone.

The LEAD Group is a non-profit community group that depends on donations in the way of money, time, stationery, equipment, furniture and any useful thing. The LEAD Group also depends on membership fees, which include a newsletter subscription to *LEAD Action News*. We always appreciate and acknowledge all donations and sponsors in *LEAD Action News*. Anyone that is able to help can make cheques payable to: **Hunter LEAD Group Inc**. Post cheques to **Hunter LEAD Group Inc., PO Box 3021, Glendale, NSW 2285**. ♦

Hold onto those Pasmenco Shares!

While some people would see the Pasmenco lead smelter upgrades (enlargements) and the opening of the new Pasmenco lead mine at Century in Queensland, as the environment losing out. But one prominent share market advisor, Rene Rivkin, on his subscribers-only (but very popular website), says to "hang in there" for an expected "near-doubling of Pasmenco's profits" after 1999. ♦

*The following is the first newsletter published by Hunter LEAD Group Branch. Written by Jenny Morton.
Reprinted here with kind permission of the Publisher: Jenny Morton Volume No.1 Issue No.1 Date*

28/10/98

Who's Who in the Zoo?

On October 14th 1998, the LEAD Group found it's home in the Hunter. Founded by Ms Kate Hayter (President/Co-ordinator) is the Hunter LEAD Group Incorporated. Her caring partner Jeff Firkin has also taken membership along with his sister Pheona (Promotions Officer).

Mr Boris Naumovski, a local resident for many years, has of late, been interested in finding out about the damage that lead can cause. His lovely wife Alison is pregnant and the young couple plan to give their newborn the best start in life. Boris takes the place of Vice President, with Alison also taking on a membership despite her delicate position.

Ms Jenny Morton, a reasonably new resident to the area, has been helping Ms Hayter in her battle against Pasminco and the Environmental Health Centre from the very beginning. She takes on the position of Treasurer/Secretary. Her partner, Mr Michael Hawryluk has also taken on membership.

Mr David Holroyd is new to the scene but is a fast learner and keen to take on an active role along with his membership with the Hunter LEAD Group Incorporated.

Fundraiser Ideas

Kate has been extremely busy on the phone of late (so if you have been trying to contact her, you may have found it near impossible – just call in!!), in an attempt to raise sponsorship money to get the group up and running. Pheona Firkin has also been hot on the trail and together they have been rather successful.

Success has been with World 4 Kids who have kindly donated a Sony Playstation.

Hardware House at Glendale has offered a \$100 Power Tool as well.

The Hunter LEAD Group incorporated plans to raffle these items off to raise funds.

Dollar Video at Glendale has handed over 70 vouchers and The Lone Star has offer 4 free appetisers. These items will be dispersed among the 500 information bags we plan to hand out during our raffle on Friday 27th November outside Franklins at Glendale Supa Centre.

Other Sponsors

The Hunter LEAD Group Incorporated wishes also to thank:

- K-Mart for the donation of T-shirt to all current group members, we plan to have them printed with the logo and name.
- Zulu Printing who printed our fashion statement black shirts free of charge
- We have been issued with Hunter LEAD Group badges. They look very professional in black and white, from Sid Cohen Rubber Stamps.
- Affordable Printing are planning to issue us with business cards to leave around the local area and hand out as required, by Mr. Ron Barnes.
- D.P.R. Printing are kindly donating stickers for us to place in our information bags. We are however, in need of somebody to donate printed bags for us to fill with our information and goodies to hand out to the general public.
- Glendale Post Office has given us our very own Post Office Box free of charge. Without this our privacy may have been at risk along with the privacy of our clients, as some individuals in the area can get rather irate when it comes down to it!!
- Other freebies we have not yet decided what we should do with are:
 - ❖ Grand Hotel – dinner for 2
 - ❖ Kent Hotel – bistro meal valued at \$30
 - ❖ Bayside Tavern – dinner for 2
 - ❖ Northern Star Hotel – dinner for 2

The Hunter LEAD Group Incorporated has approached Pasminco for some form of sponsorship. We believe that since they are a major lead source in the area that they should provide something to the new local lead group. Hopefully they will find enough compassion for the children of the Hunter to respond to our request. [Sponsorship has since been refused.]

Anybody who would like any information regarding who we are, what we do, or how we can help, may contact The Hunter LEAD Group Inc. c/- Ms Kate Hayter in writing. please address all mail to P.O BOX 3021 GLENDALE NSW 2285. Anybody who may be able to provide sponsorship or donations of any description can also contact the group in the same way.

WE BELIEVE THAT WE CAN MAKE A DIFFERENCE!!!♦

Fruits of Recent Work of the Lead Advisory Service at Boolaroo

Elizabeth O'Brien, Manager of the Lead Advisory Service (LAS), has encouraged Kate Hayter (mentioned above) in the use of manifesting her vision of a safe house and a healthy child. Elizabeth has given many referrals to Kate including to world lead authorities, some of whom have already replied to Kate's request for guidance on whether to move back into her house should it be remediated. The NSW Ombudsman is now investigating her case as well as other complaints received from the area in the past 3 years. The Environmental Defender's Office is interested in the contamination of houses and the lake around the Pasmenco smelter. The Public Interest Advocacy Centre is also looking into whether several other cases should be pursued. Kate has also involved mediators and a conflict manager from the Newcastle Community Justice Centre at the suggestion of Theresa Gordon of NO-LEAD. With the promotion at Glendale SupaCentre, at least 20 locals who asked Kate for information were referred to the Lead Advisory Service.

Through regular attendance of the six weekly public meetings of the North Lake Macquarie Environmental Health Liaison Meeting, and through constant interaction with locals by telephone, Lead Advisory Service (LAS) staff have helped to bring about the following improvements to the Liaison Meetings:-

1. Robin Mosman's suggestion that Pasmenco should present quarterly reports to the Liaison Meetings has been accepted and so far 2-3 reports have been given. Elizabeth O'Brien's suggestion that the main points from each report be photocopied and distributed at the meetings, was accepted at the meeting of 18-11-98;

2. Elizabeth's suggestion to have a Register of Questions and Answers coming out of Liaison Meetings, has been taken up with a vengeance by the local residents who are now contributing the sorts of questions we used to compile from phone calls between meetings and notes taken at the meetings. Two copies of the Register of Questions and Answers have been provided by LAS, for local people to gain access to the Register, at both the Neighbourhood Centre and the local library. The Lake Macquarie Council will add the Register to its website for even wider access to the public and ease of searching the growing lists of important answers to questions, some of which had been unanswered for many years. The new chair of the meetings, Val

Koglan-West, was so taken with the Register that she suggested that the most common questions be copied and bound into a booklet and given to new attendees of the Liaison Meetings (which are held every 6 weeks and are open to the public);

3. Michelle Calvert assisted in writing draft Terms of Reference for the Liaison Meetings and these will be on the agenda of the first Liaison meeting next year (6:30 pm on 27/1/99 at Lake Macquarie Council Chambers). ♦

Pasmenco Reports \$63.3 Million Profit for FY 1997-8

Thanks to the generous donation of a copy of the *Pasmenco Annual Report 1998*, by a shareholder, we can pass on that Pasmenco's Vision is "to be the best from mine to market through performance, quality and respect", with the financial objective being to "Sustain profitability at all points in the metal cycle". The \$63.3 million profit was marginally down on the \$64.7 million profit made in FY 1996-7. Environmental objectives include to "Minimise our impact on the environment" and "Build community confidence in our operations" (including sponsorship).

One of the main environmental issues reported to shareholders was sulphur dioxide emissions exceedences at Cockle Creek smelter at Boolaroo, in contravention of consent conditions on the smelter upgrade imposed by the Department of Urban Affairs and Planning. Another environmental issue reported was the exceedence of lead in air levels at the boundary of the ARA secondary lead smelter in Melbourne. Interestingly, the Annual Report 1997/98 of the Victorian Environment Protection Authority (VEPA), claims "zero breaches of SEPP [state environment protection policy] objectives for lead". Though VEPA does admit to a "lack of an adequate information base on air toxics".

Huge Pasmenco Salary Packages

While the Pasmenco Cockle Creek smelter finds itself unable to make any donation to Hunter LEAD Group, or to buy up the contaminated properties of lead poisoned kids (See "Getting a Child out of Prison – Will Industry Help?" in a previous LEAD Action News), they do pay huge salary packages.

According to the *Pasmenco Annual Report 1998*, Pasmenco's Managing Director received a total salary package of \$769,646 last financial year, with the director of mining receiving \$414,664 and the Australian Smelting Executive General Manager, \$338,652. The top figure paid to a director of the Board was \$106,000 – this sum alone is enough to buy up two small houses in Boolaroo! ♦

Positive Feedback

For the past couple of months Lead Advisory Service staff have been keeping a Feedback Register – here are some of the accolades from the Register.

About LEAD Action News

“Doctor-Led Recovery” *LEAD Action News* [vol 6 no 2] is really useful. Leichhardt Council wants LAS to distribute the newsletter to every doctor in Leichhardt council area;

Lead expert says *LEAD Action News* for doctors is excellent.

Sadly, LAS has lost the Lead Reference Centre (LRC’s) funding to write LEAD Action News.

About the Boolaroo situation in the Hunter:

Four letters of appreciation were sent by residents to the Lead Reference Centre re: attendance by Elizabeth O’Brien and Michelle Calvert of the Lead Advisory Service at Boolaroo Liaison meeting 1/7/98;

Elizabeth O’Brien and Michelle Calvert of the Lead Advisory Service were congratulated by the council representative for handling the barrage at Liaison meetings;

Elizabeth O’Brien and Michelle Calvert of the Lead Advisory Service & Theresa Gordon of NO-LEAD have given resident valuable assistance;

No-LEAD rep. Theresa Gordon, has done more for Argenton resident than any other local person; (including supplying written information).

Sadly, the Lead Reference Centre has literally decimated funding (reduced it by 90%) for LAS staff to deal with point source communities.

A resident trained & supported by Elizabeth O’Brien in fighting a demolition case, was extremely helpful to another resident, who has in turn helped a third woman with similar problems.

Elizabeth O’Brien at The LEAD Group’s volunteer telephone service helped the caller a great deal in 1993. He’s glad we’re now funded and still helping tenants with lead problems.

LRC told that they have spent their money well by funding LAS (see Andrew See’s letter below);

ABC announcer Dr Karl Kruszelnicki applauds Elizabeth O’Brien for developing a huge body of intellectual property re: leaded petrol;

The talk Michelle Calvert gave at the Cremorne Early Childhood Health Centre (EHC) has been “raved about and caused a great deal of interest even weeks later. Fascinating information”;

According to one lead poisoned police shooting instructor, Michelle Calvert has been “one of the few people to give lead-poisoned police helpful information. The blokes were very appreciative.” [See the later section *Talks, Conferences and Seminars.*]

Sadly, LRC has cut LAS funding by 27% over the year, during the 2nd quarter of the financial year.

Accolades for Others

Penny from LRC was also helpful [to the police].

One Sydney lead assessor only refers clients to Walter Heim for paint stripping and Penlington paint contractor because they’ve always done good work.

Shaun the Builder, in Sydney, is capable of listening to his clients and carrying out building and clean-up work in a lead-safe way. He cleaned up after a ceiling collapsed 2 yrs ago. [As such, this is the only positive report we have heard about a working builder.]

A woman in Newcastle who rang Pollution Line for Lead Safe Factsheets was very happy to then receive the Renovator’s Guide (unsolicited, when it was freshly published) which she says is fantastic. ♦

Letters

Formation of ALARA



12 October 2020

Dear Elizabeth,

Further to our recent telephone conversation regarding recent positive developments in the lead assessment and remediation industry I am pleased to provide details of the newly established Association of Lead Assessors and Remediators of Australia (ALARA).

ALARA was established by three founding companies; Lead Remedies Pty Ltd, Lead Safe Pty Ltd and Condor Commercial Insulation Pty Ltd (form-erly Be Cool) in September 1998. ALARA is currently finalising all issues relating to incorporation, insurance coverage and code of practice, which will be completed by the end of 1998. Applications for membership will be offered to interested parties early next year.

The Board of Directors and Officers:

President - Steve Moore
Vice President - Brad Kirkness
Secretary - Lou Brewer
Treasurer - Garry Disher
Public Relations Director - Jason Bawden-Smith
Solicitor - Brendan Piggott

ALARA Purpose and Objectives:

1. Provide a forum to foster the exchange of information and ideas on all aspects of lead hazard assessment and remediation;
2. Promote public, industry and government awareness of lead poisoning and its prevention;
3. Improve communication between the lead assessment and abatement industry, the public, government and industry;
4. Develop and promote environmentally sound lead management practices and foster cooperation within the lead assessment and remediation industry; and
5. Provide an information resource on lead hazards, hazard assessment and remediation.

Yours truly,
Jason Bawden-Smith

LAS (NSW) is Unique and Effective

Letter to: Mr Graeme Head
Acting Assistant Director-General (Strategic
Planning and Programmes)
NSW EPA

Dear Sir,

I am both perplexed and troubled by the proposal to reduce funds to the Lead Advisory Service [by 27%].

Just prior to moving from Perth to Sydney (Glebe) in 1996, my husband and I had no understanding of the sources of lead contamination in residential Sydney other than by fuel emissions. It was through repeated phone calls from Perth to the Lead Advisory Service (predominantly with Elizabeth O'Brien) that we realised that lead paint was the greatest source of contamination. Because this knowledge had been imparted to us we were able to be pro-active in decontaminating our house before moving in. The Lead Advisory Service were of great assistance in providing names of people able to help in the lead assessment and abatement process.

Once living in Glebe we were able to keep our children's blood lead levels well down by practising

the techniques recommended by both the Lead Advisory Service and our lead abatement consultant. Several months later, neighbours applied for permission to demolish their house and to redevelop the site. We were not opposed to this but were very concerned that the council, in our opinion, had limited conditions in place to protect our children from possible lead contamination when the demolition occurred.

Again it was the Lead Advisory Service and our consultant that, through imparting knowledge they had acquired, enabled us to effectively argue our case to the council for greater safety standards. I understand that the responsibility of educating councils to insist on greater safety standards in regard to lead hazards fell under the jurisdiction of the Lead Reference Centre. Clearly they had not yet achieved this goal and we were therefore forced to deal with this matter ourselves.

The council's eventual response was to engage an expert in the area of lead contamination to create a protocol sufficient to adequately protect our and other people's children from possible contamination. The precedent set by the council is one for which we were very grateful and which should now facilitate the Lead Reference Centre in persuading other councils to update their protocols.

I believe that if the Lead Advisory Service is in any way compromised not only will this be an appalling disservice to the public, but the Lead Reference Centre will be losing a necessary complementary service. I do not believe that the Lead Reference Centre could have helped us in the capacity that the Lead Advisory Service did, nor is it intended to do so.

We also believe that the [NSW EPA's] Lead Pollution Line, while a very effective service, would not have been able to assist us in the same capacity as the Lead Advisory Service. We had reason to contact this service on one occasion on another matter and while effective in the role of first contact with regard to regulatory matters and the provision of general information, there was not the depth of knowledge that was readily available from the Lead Advisory Service. Without access to this depth of knowledge we would not have been able to be pro-active and our children may have become yet more statistics.

There is probably no other person with as great a depth of knowledge of and commitment to this issue as Elizabeth O'Brien. She has altered the course of our children's future. Our children are the best assets we will ever have. We are extremely indebted to her.

While I am now a full time mother, I previously worked as a physiotherapist and worked with many people with disabilities which could not have been avoided. It is therefore imperative to work to educate people to avoid disability which can be avoided. As

you can see from our story the Lead Advisory Service has been very effective in achieving this and should be allowed to continue their good work.
Yours Sincerely,
Kathy See

cc Ms Ann Carroll, Manager Lead Reference Centre
Ms Elizabeth O'Brien, Lead Advisory Service (NSW)
Hon. Ernie Page M.P., Minister for Local Government
Hon. Pam Allan M.P., Minister for the Environment
Hon. Dr Andrew Refshauge M.P., Deputy Premier and Minister for Health
Dr Steven Corbett, Director Environmental Health (Food and Nutrition Branch) NSW Health Dept.



Heavy Metals Awareness for Medicos

Chelation & Detox Training

Australian College of Nutritional and Environmental Medicine:- Courses

Quite a few dentists have now been trained in the courses listed below, which are usually for GP's.

[The following information is an extract from the website (www.acnem.org) of the Australian College of Nutritional and Environmental Medicine (ACNEM). The ACNEM Course Program was last updated Tuesday, 22 September 1998]

ACNEM will run a **Specialist Training Program** in 1999, including training on **Chelation & Detox** for ACNEM Primary Course graduates, to be held in Melbourne on **February 23-28, 1999**:

ACNEM Primary Course Program

ACNEM's 31st Course in Nutritional and Environmental Medicine is to be held in Melbourne (the Capital of Victoria) from 24th to 28th February 1999.

The following are included in the [Primary Course] program:

- GIT Ecology, Dysbiosis and Detoxification (Dr. Ian Brighthope)
- Heavy Metal Toxicity (Dr. Mel Sydney-Smith)

- Dental Amalgams and Mercury Toxicity (Dr. Mel Sydney-Smith)
- Chelation Therapy (Dr. Ian Brighthope)
- [2 hour] Case Histories, Practical Applications and Solving Common Problems (panel)
- Discussion
- PRESENTATION OF CERTIFICATES

The Course is presented by some of Australia's leading medical nutritionists and researchers, who are experienced lecturers. The program will be comprehensive, concentrating on nutritional therapeutics for all human disease. It will cover the nutritional, ecological and biochemical factors in physical and mental health.

Comprehensive printed notes, which become a valuable working reference, are included in the cost of the Course.

The dates for all **Primary Courses** in 1999 are as follows:

February 24-28, 1999	Melbourne, Victoria
June 16-20, 1999	Gold Coast, Queensland
September 15-19, 1999	Sydney, NSW

© ACNEM



Questions Being Asked About Heavy Metals – Effects and Assessment

A number of callers to the Lead Advisory Service NSW have asked questions about the health effects of various heavy metals, and how human exposure might best be assessed, for example:

- Anna Priest asks whether radiation (eg from computers) draws lead out of the bones in the same way as mercury vapour is drawn out of teeth by radiation. Any ideas anyone?

- Allan Gow asks how all the heavy metals that come out of the Pasmenco Cockle Creek lead smelter, might affect the aquatic life as well as humans (especially those dependent on shellfish etc) and whether arsenic, cadmium, selenium, thallium, antimony, mercury, etc are best assessed by hair, teeth, blood or urine analysis. We've asked around but would like any input.



Medical Lead Awareness:- LEAD Group Campaign

by General Practitioner, Dr Ben Balzer, Vice President of The LEAD Group Inc.

Background

Previous programs by Lead Advisory Service (LAS) and the Lead Reference Centre, have developed infrastructure, and have increased community awareness of Lead Poisoning as a major issue.

Expansion and Integration

The 1998-99 Program is based on community empowerment and expansion of awareness, and expansion of case identification by GPs, and integration of action with other community based groups.

A. Community Empowerment Program

- Continue successful outreach (COE, Community Outreach and Education) program of the LAS;
- Forge ties with other community organisations eg Childbirth Educators Association, Parents Centres Australia, Centacare Parent line, ACE Associates in childbirth education, Tresillian, Karitane and promote their awareness of lead-related issues.

B. Medical Awareness Campaign

- This campaign aims to increase awareness of lead poisoning amongst doctors and the community alike. The basis is the development of a risk-identification questionnaire, to identify children at risk of lead poisoning by the use of a simple questionnaire. If there is a positive response to any question about a risk factor, then blood testing is medically indicated.

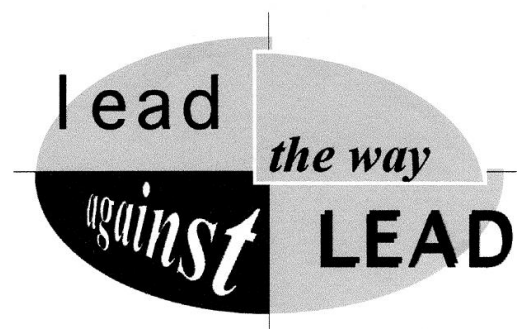
This strategy is a "pull" strategy. It aims to generate the attention of doctors by bringing "at-risk" children to their notice. This is in contrast to "push" strategies such as educational mail-outs.

- It is aimed for the questionnaire to be issued in the waiting room of the doctor's office, and self-administered by the parent. This has the advantage of taking a minimum of the doctor's time, and also acting as an educational tool for the parent.

- An essential part of the questionnaire is to include contact numbers for parents and doctors alike to obtain further information, in line with the stated goal of empowerment.

The steps in this program are:

1. Questionnaire development;
2. Pilot testing – approximately 20 GPs to be recruited, with 4-6 GPs having their pathology provider forward details to us;
3. Evaluation – the number of questionnaires completed will be compared to the number of blood lead tests generated. Blood lead test results of the 4-6 GPs will be collected and remembering that a small number of people will request a blood lead test WITHOUT a risk factor being present. Co-operation of pathology provider required;
4. Expansion to further inner city practices;
5. Regular feedback to doctors;
6. Continuing education program – evening lectures;
7. If successful, expansion to further inner city practices, to inner city pharmacies and early childhood centres. Trial of routine administration by early childhood nurses (ECHN's) as part of routine well-child checks. It is likely that ECHN's may be able to run a short trial as a quality assurance exercise;
8. Further expansion to other metropolitan areas, publication of risk questionnaire in such publications as "Australian Doctor Weekly", local papers, "Sydney's Child" etc...



Comment on Questionnaire-Based Assessment:

The NHMRC have established a clear recommendation that the use of questionnaire based surveillance be studied. I am unaware of any such data to date (some data was collected in the Mira 1996 study but not published).

This proposal is probably not rigorous enough to be published in peer-reviewed literature as a study but will hopefully give good hands-on experience of the use of this approach. Hopefully, it will make it clear if this is a useful and cost-effective approach, which is the main pragmatic issue. ♦

Funding News

Mira Grant for Doctor Education

Professor Michael Mira, Director, Central Sydney Division of General Practice (CSDGP) has successfully applied for an \$80,000 grant to educate Central Sydney GP's in their own surgeries on lead poisoning, through academic detailing. The federal government grant is from the General Practice Education Program (GPEP) and work will begin in February 1999, following ethics approval. ♦

Will LEAD Group get GVCO Grant?

By mid December 1998, The LEAD Group should know whether we've been successful in gaining funding from the federal government's Grants for Voluntary Conservation Organisations (GVCO), for The LEAD Group to set up Regional Branches in:

- Hunter
- Illawarra
- Broken Hill
- Mt Isa / Cannington / Century (QLD Mines)

Here's hoping! ♦

Gulson Bone Study Funded

Great news!! The very deserving Professor Brian Gulson, a member of The LEAD Group's Technical Advisory Board has been awarded another \$1 mill. grant from the US NIEHS (National Institutes of Environmental Health Sciences). Prof Gulson of Macquarie University and CSIRO will continue to

research mobilization of lead from bones during pregnancy and lactation. The research is specifically aimed at determining the protective effect of the recommended daily intake (RDI) of calcium, especially using calcium supplements.

Call for Volunteers for the Study

Prof. Gulson needs help to recruit 50 Eastern European women aged 18 to 36 years, within 3 months of their arrival in Australia. Phone (02) 94908713, if you can help. ♦

New Appointments

Dr Chloe Mason Reducing Car-Use

Chloe Mason of The LEAD Group's Technical Advisory Board has a new job as car-use reduction project leader at NSW University.

Don Bartlett joins CTI Consultants

Don Bartlett has joined CTI Consultants, taking charge of the Victorian branch since September 1998. Don was previously Secretary and Executive Officer for APAS (Australian Government Analytical Laboratories, formerly the Government Paint Committee).

Don has long been involved in the assessment of residential properties for lead paint, including similar work for the Dept of Housing in Melbourne.

Don's impressive background in coating technology and corrosion science complements CTI's existing fields of expertise, and his experience in Lead Paint Management will reinforce CTI's reputation as Australia's pre-eminent consultancy for assessing and managing lead paint. ♦

Entertaining with Lead

You know that lead awareness is increasing when it starts appearing on game shows and comedies:

On *Battle of the Sexes* (Australian game show, Channel 10, 2/12/98) there was the question – "What heavy metal found in old paint is now considered a health hazard?" Of course we all know the answer!

And on *Roseanne* recently, when they were painting the house, they considered the possibility of intentionally lead poisoning the kids, as a joke! ♦

Good News on Stormwater

Lead Acid Batteries - the New Stormwater Issue?

By Ted Floyd (stormwater and car-use reduction activist) – with source list by Elizabeth O'Brien (of The LEAD Group)

The NSW State government has begun several initiatives on stormwater in central Sydney in the second half of 1998. Three total catchment management committees have been formed, covering Sydney Harbour, including The Port Jackson Total Catchment Management Committee which covers the CBD and inner Sydney suburbs. These committees have community, environment group and Aboriginal representatives. Also, the EPA has directed Municipal Councils to develop a catchment management plan with \$ 60 million of funding available for projects.

The LEAD Group asks these catchment committees: do they realise the importance of lead as a problem, in sediments of drains, Sydney Harbour, Botany Bay and other coastal estuaries?

Do the committees know the relative contribution of the different sources of lead in sediments? Run-off from contaminated sites and from buildings being renovated or demolished or just simply losing flaking or chalking leaded paint, need to be assessed for their contribution. Though new paint now contains less than 0.1 % lead, the pavement dusts and soils in older areas, contain the lead from paint and other sources built up over many years. What strategies will the committees use to control, at the source, this lead pollution? How will they control site run-off?

And as for cars as a source of lead in road run-off, The LEAD Group knows that the following will contribute lead to stormwater long after controls are implemented on the consumer product. Eg, even if lead is removed from petrol for the Sydney Olympics, 25 % of the lead from the petrol that has ever been used in a pre 1986 vehicle, remains in the engine and exhaust system, waiting to be loosened by rough roads or harsh driving.

How do cars contribute to lead contamination of road run-off?

The oft-quoted standard list by Maestri et al (1985) of sources of lead in road run-off, is:-

- leaded petrol (auto exhaust),
- tyre wear (lead oxide filler material),
- lubricating oil and grease, bearing wear.

Q: Why are lead acid batteries rarely listed as a source of lead in road run-off?

A: *Maybe because the lead producers say they're "safe", "green" "100% recyclable".*

One study cited in *The Leichhardt Municipal Council State of the Environment Report, 1996*, gives "lead acid battery releases during vehicle accidents" as a "common source" of lead in gutter sediments in inner and outer Sydney. However, it seems likely that lead in lead acid batteries contributes to the lead in road run-off during normal driving as well. That is:-

1. the lead sulphate powder that develops on the terminals could be loosened by the vibration;
2. lead-contaminated sulphuric acid must leak from batteries or you wouldn't ever need to replenish the batteries with distilled water.

Even now, 64% of the world's lead and 71% of Pasmenco's lead goes into producing lead acid batteries, and this is increasing as more and more cars are built. Therefore, this problem will only increase.

In fact all leaded componentry of cars can contribute to lead in road run-off whenever the material is loosened during driving, and especially when the car is smashed or burned and the debris enters the stormwater system. The Ford and Dale study in Leichhardt Council (and outer Sydney) mentioned above, lists "lead wheel weights being flattened on the road or being scraped against gutters" as another common source of lead in gutter sediments and soils.

So, a more complete list (including the Maestri one above) of sources of lead in stormwater from vehicles, would include:

- auto paint (which can still contain 10% lead),
- lead acid batteries,
- wheel balancing lead weights,
- radiator solder,
- terne plated metal (lead plated metal) used for fuel tank lining,
- PVC in vehicle interiors eg mats,
- PVC flexible bumper strips,
- PVC oil and air filters,
- PVC body side moulding and mudflaps etc,
- auto body solder for panel beating (burning and grinding),
- leaded petrol (auto exhaust),
- tyre wear (lead oxide filler material),
- lubricating oil and grease, bearing wear. ♦

Talks, Courses, Seminars and Conferences

Phytoremediation of Lead Using Sunflowers and EDTA

*P. Yong and J.L. Schnoor, Department of Civil and Environmental Engineering,
125 Engineering Research Facility, The University of Iowa, Iowa city, IA 52242*

Lead is rather difficult to separate from polluted soils because it precipitates with most common anions, such as SO_4^{2-} , PO_4^{3-} , CO_3^{2-} , S^{2-} . Current cleanup methods are either too expensive, time-consuming, or devastating to soil properties.

In this research, common sunflowers were grown hydroponically and their potential for uptake and translocation of lead was assessed. EDTA was added to Hoalgand nutrient solution to study its role in lead transport between sunflower tissues. Daily gravimetric transpiration data were also recorded to examine toxicity of lead to sunflowers.

Pre-rooted sunflowers were relocated from soil to 400 ml bioreactors. About 200 ml Hoalgand solution was initially put into each flask. Hoalgand solution was resupplied when about 30 ml was left in the flask. After 7 days of cultivation, sunflowers were weighed and divided into four groups: control (1), lead-added (2), EDTA-added (3), and lead-EDTA-added (4). The concentration of lead was set to about 50 PPM above soil background (a representative soil-water concentration) in order to assess lead toxicity. The ratio of lead to EDTA was 10: 1. After exposure, each sunflower was cut into roots, shoots, and leaves. Samples were treated and measured with recommended method in AA Winlab™ Software by Perkin Elmer 3300.

The uptake efficiency of whole sunflower was calculated with mass balances. Lead uptake varied from 59% to 78% for the individual sunflowers. There was no significant difference of uptake efficiency between group 2 and group 4 (no EDTA versus added EDTA) which was 67% (stdv.=8%, n = 3) and 74% (stdv.=6%, n = 4), respectively. These

results indicate that lead availability in hydroponic solution was not limited and chelation by EDTA may only increase the bioavailability of lead in soil. Soil experiments are currently underway to investigate this possibility.

Although the presence of EDTA did not affect lead uptake, it did significantly influence lead transport between plant tissues. Generally, roots of groups 2 and 4 showed a great ability to retain lead (from 28,000 to 42,000 mg Pb/ kg Dry Weight). This conclusion, that roots accumulate lead, was similar to other reports. The effect of EDTA on lead transport is clear when shoot and leaf concentrations are compared for the two groups. The sunflowers in group 2 showed higher shoot uptake than group 4, 563 (stdv.=286, n = 4) and 232 (stdv.=44, n = 3) mg Pb/kg DW, respectively. This trend was reversed with respect to leaf tissues where about 1000 mg Pb/kg DW (stdv.=207, n = 3) was translocated for group 4 and no lead was detected in leaves of group 2.

During 10 days of exposure, the normalized transpiration (defined as 1 for controls) decreased slightly for group 4. Although no distinct visible symptoms such as chlorosis were noticed for any group, the trend of transpiration decline for group 4 indicated a slight toxicity for the 50 mg/L dosage. Longer toxicity experiments are needed and the ability of sunflowers to complete the life-cycle (go to seed) should be determined since the accumulation of lead in aerial tissues may present larger bioaccumulation issues.

Key words: remediation, sunflower, lead, EDTA
<http://www.engg.ksu.edu/HSRC/97abstracts/p51.html>
Abstracts From The 1997 Conference on Hazardous Waste Research

Don't forget the final talk in the series of "City Talks" organised by: S M O G B U S T E R S

Thursday 17 December: Speaker: Felix Laube, transport consultant

Swiss clockwork: lessons from Switzerland's cities and towns

\$7/\$5. Join us for wine and cheese after the talk.

6pm - 8pm, Room A, Level 2, Parramatta Civic Building (behind Parramatta Town Hall)

For more information: Christine Laurence, Smogbusters, Nature Conservation Council, ph: 9279 2944

[Also ask about the new Smogbusters Education Team. First meeting is Tuesday 15 December 1998.]

Green Accounting and Car-free Planning

Extracts from a speech called "The Implications of the Environmental Agenda for the Future Development of Australian Human Settlements" by Peter Newman Professor of City Policy, Institute for Science and Technology Policy, Murdoch University, WA 6150 Australia. Reproduced with kind permission.

Green Accounting

There is an international move to try and build in a more sensitive and sustainable way of accounting. Thus there are now an Index of Sustainable Economic Welfare and a Genuine Progress Indicator to replace GNP [Gross National Product] (see Hamilton 1998).

These are not much use to planners at local level but the City of Alberslund in Denmark has pioneered a process of green accounting that is beginning to spread. The city makes available every year on a neighbourhood basis (~100 homes) a series of parameters that measure electricity, gas, water, CO₂ (calculated), transport fuel (more macro level) and solid waste. The neighbourhoods then get together with assistance from the Agenda 21 Centre (a local ecology centre) and discuss how they can reduce these. Every year for 5 years there has been a large majority of the neighbourhood groups who have shown a reduction in the parameters.

Car Free Housing and City Design

When I wrote my paper in 1983 the concept of car free housing would have been laughed at. Now it is becoming a new planning phenomenon in Europe (Scheurer, 1998).

The car free city movement began in European

medieval city centres where it made much economic and environmental sense to keep cars out. It has spread, based on the success of such places as Copenhagen (Gehl and Gensoe, 1996, Newman et al 1997) into other parts of cities. Now it is becoming part of some new suburbs.

The idea is that people sign up for housing in a new development on the basis that they will never own a car, though access to car-sharing is available through the rapidly developing co-ops (in Europe and North America). The design of their housing / neighbourhood is then considerably freed up with no parking requirement and complete traffic free public spaces. The appeal to families with young children is immediate, but the appeal to developers has become also clear as more compact land use with generous public spaces can become much easier to design.

There are real questions about whether such an approach could work in Australia. The problems of visitors, of so many 'unbiblical cords still attached to petrol pumps', mean that few developers will jump at the idea. But some will and will be surprised how well it will work. There are after all about 30% of households already with no cars in Australian cities.

They need only be small demonstrations at first but the SUSTAINABILITY advantages would seem to warrant a serious effort by some innovative councils. ♦

Macquarie Uni Lead Paint Management Course

The Centre for Open Education, Macquarie University in conjunction with CTI Consultants presented the Lead Paint Management course from Tuesday 6 October to 8 October 1998. Presenters included two members of The LEAD Group's Technical Advisory Board – Prof Brian Gulson and Fred Salome.

The course was well supported, with a total of 27 attendees for the three separate courses.

Lead Paint Management – The Key Issues. 5 signed up to attend the introductory half day course, presented as a stand-alone overview of the key issues involved. This unit also formed the foundation of the longer courses.

Lead Paint Management in Residential and Commercial Buildings. The 2 day course had 10 attendees who underwent detailed training in lead

paint management, including OH&S issues, lead paint identification, assessment of paint condition, debris containment, waste handling and basic paint removal methods. The hands-on workshops proved useful to demonstrate the procedures being taught.

Industrial Lead Paint Management. The 3 day course (an extension of the 2 day course), dealt with matters relevant to industrial Lead Paint Management, covering maintenance strategies, simplified risk assessment, emission control levels, large scale containment considerations and environmental monitoring. The final day was based on a "real-life" project, and attracted 12 attendees, generally those requiring the level of training for "Responsible Person for Industrial Lead Paint Management," as defined in AS 4361.1, and to meet the corresponding training requirements under the PCCP (Painting Contractors Certification Program) scheme.

The next set of courses will be run in July 1999. ♦

John Ralston Saul, Sydney Jan '99

Eminent Canadian environmental educator, John Ralston Saul is one of five keynote speakers at the International Conference on Environmental Education to be held at University of NSW in Sydney on 14-18th January 1999. The Conference will draw together environmental educators and decision-makers from around the world at a time when both the Australian and NSW Governments are developing either a legislative or policy frameworks on environmental education. Contact Peter Layton at NSW EPA for info on ph (02) 9325 5845, fax (02) 9325 5601 or email: laytonp@epa.nsw.gov.au ♦

Indian Lead Conference, Feb '99

Professor Brian Gulson's research has again been acknowledged internationally (why not more so in Australia?). Brian is the only Australian to be asked to speak at the Indian lead conference that promises to be "the largest ever held on the topic of lead poisoning". Brian will speak on several days (on two panels): the first panel will be on day 1 with the topic

"Investigating environmental lead sources and pathways". The second topic will be on his work with bone lead and pregnancy along with Dr. Morri Markowitz, with a working title "Assessing the lead in bone: the main reservoir for lead in the body". The date of the conference is Feb. 8,9 and 10th, 1999 and the venue is in Bangalore in Southern India.

This conference is being sponsored by the US Centers for Disease Control, US Environmental Protection Agency, The World Bank, and the host The George Foundation of India. Friends of Lead Free Children, along with Johns Hopkins University is a co-sponsor.

There will be over 72 speakers, so to find out who they are, send an email to stevenm@spacelab.net to request a copy of the conference invitation brochures, ie to Steve Null of Friends of Lead Free Children.

Kate Hayter, Coordinator of Hunter LEAD Group Branch is particularly keen to get to the conference in order to catch up with the US lead researchers she has been corresponding with and to set up a south east Asian network of parents of lead poisoned kids. Can anyone help Kate and a colleague to get there?

Talks by the *Lead Advisory Service* (NSW)

Sutherland GP Division

Dr Ben Balzer, Vice-President of the LEAD Group's Committee recently organised a Heavy Metals Information Evening for the Sutherland Shire Division of General Practice. Dr Balzer, Ann Carroll from the Lead Reference Centre (LRC) and Michelle Calvert of Lead Advisory Service (LAS) were the speakers. Dozens of doctors were in attendance and they were enthusiastic about the services provided by LAS and were encouraged to undertake more opportunistic blood lead testing of their young patients (ie when blood is being tested anyway for other reasons).

One of the attendees of the Heavy Metals Information Evening is the medical advisor for Sutherland Shire Council who will ensure that the parents of all preschool aged children in Sutherland Shire will have The LEAD Group's Lead Risk Factor Questionnaire administered to them by Early Childhood Centre Nurses. [See the article above titled "Medical Lead Awareness – LEAD Group Campaign".]

This is the first lead "specialised" doctor information evening and is a great first in our efforts

to increase awareness and encourage targeted screening among our medicos.

Many thanks to the efforts of Dr Ben Balzer!

Battery Factory

Together with LRC staff, Michelle Calvert, LAS Education Officer, spoke to three shifts of battery workers at GNB Technologies at Padstow, Sydney. More than 150 workers attended and it was wonderful to find members of the lead industry seeking us out to educate their staff about the dangers of lead and how to minimise risks.

Police Pistol Instructors

Michelle was also called in when it was discovered that a number of Police Pistol instructors had suffered elevated lead levels. Unlike the battery workers at GNB Technologies these men and women were not aware of the risk in their work environment and were not even being regularly blood tested. Some of their blood lead levels exceeded 70 µg/dL. It appears that the high lead levels were as a result of poor ventilation, the increased number of rounds being shot as a result of weapons training for the new Glock firearm being

introduced to the Service and the fact that the Glock ammunition is “dirtier” when fired compared to the old firearm. Fortunately new protocols are being developed to protect the instructors and we are

assured that all pistol instructors will now be regularly blood lead tested. WorkCover is now prosecuting the Police Service and the Police Association has also launched legal action. ♦

Tide Turns Toward Certification

Will Lead Specialists be Next?

While on the one hand the Lead Reference Centre (part of the NSW EPA), NSW Workcover and Department of Fair Trading all seem to think that accreditation of ceiling dust removalists and lead remediation / abatement contractors and lead assessors / inspectors is not feasible, the tide is surely turning, as, on the other hand:-

1. the federal Department of Works and Services have approved ceiling dust removalists through the SANIP (Sydney Aircraft Noise Insulation Project);
2. the Painting Contractors Certification Program (PCCP) approves painters for industrial paint removal and is being extended to household paint removal contractors (see below);
3. the NSW Environment Protection Authority (EPA) accredits assessors / auditors for contaminated sites (see below);
4. the North Lake Macquarie Environmental Health Centre approves contractors for Boolaroo area zonal remediation including: soil removal, carpet removal, carpet cleaning, lead paint removal and ceiling dust removal
5. a similar approval system operates in Port Pirie
6. a similar approval system operates in Broken Hill
7. NSW WorkCover licenses asbestos removal contractors.

Painting Contractors Certification Program (PCCP)

Reference: APAS NEWS, Australian Paint Approval Scheme, Issue 10: July 1998.

The first applications for certification to Class 5, Lead Paint Management have been audited and interim certification has been granted to three contractors:

- McElligot and Partners, Victoria,
- Waldean Industries, NSW
- TPC Painting Contractors, Tasmania.

Full certification has been deferred until the Blast Cleaners & Coating Association (BCCA) has ratified lead paint management courses for contract staff.

Development of the PCCP [Painting Contractor's Certification Program] to encompass decorative and architectural painting moved a step closer at the May [1998] meeting of the PCCP Management Board with

the BCCA, Master Painters Association (MPA) and Scientific Services Laboratory (SSL) agreeing in principle to a new Memorandum of Understanding.

The MPA's training officer and the PCCP Manager have been developing the ground rules for certification of contractors. The scheme will focus on certifying contractors working on commercial buildings. However, it is envisaged that the scheme will be extended to "Lead Paint Management" and eventually to "Domestic" painting.

NSW Appoints Accredited Contaminated Site Auditors

Clayton Utz – dynamic law firm - sent us the following media release on 30th July 1998.

The Environment Protection Authority (EPA) in NSW has accredited 21 of an estimated 40 site auditors which it hopes to have in place before the end of 1998.

Mr Bateman, a senior associate with national law firm Clayton Utz, said the appointments were of auditors who are registered in Victoria as accredited site auditors under Victorian environmental legislation and whose qualifications have been accepted in NSW under 'mutual recognition' legislation.

"These appointments will now mean that audits of contaminated land – or land suspected of being contaminated – required for a statutory purpose, can be carried out, as the Contaminated Land Act requires, by accredited site auditors, Mr Bateman said.

[Ed: are domestic contaminated sites included?]

New Products & Services

Beef Jerky – a Good Way to get Iron into Kids & Adults

A caller to the Lead Advisory Service told us about Australian made beef jerky which is of interest to anyone concerned about iron deficiency. Iron deficiency is both a risk factor for lead poisoning and a symptom of lead poisoning. It is particularly difficult to find foods with a high iron content that babies like to eat. As well as its high iron content, beef jerky is an ideal source of Vitamin B12, niacin, riboflavin, zinc and thiamine for adults and children. Babies can use it like a teething rusk. The maker advises that you put a piece in your mouth and let

your saliva soften it before you start chewing. Like chewing gum, it lasts 15 minutes or more. [Whole page order form follows:]

Brackaflash – an Environmentally Friendly Lead-Free Roof Flashing System

AT LAST - An innovative flashing system for stepped and horizontal brickwork has been winning markets in Australia and overseas.

Its inventor, Ross Bracher is a veteran builder and understands the problems with lead as a flashing. So it is understandable why **Brackaflash** is gaining greater acceptance as builders come to recognise its many advantages. Foremost among them is the elimination of lead currently in universal use as roof flashings.

The existing type of lead flashing is used between brickwork and roofs to stop the ingress of water into the building, but lead has several unsatisfactory features relating to efficiency and of course environmental damage. Lead as a roof flashing, due to continuous exposure to the elements, deteriorates with age and eventually cracks (and if 15kg lead is used, this could be only a few years). Subsequent replacement involves expensive removal of brickwork if done correctly.

The **Brackaflash** system is a breakthrough as the building and construction industry still uses tons and tons of lead each year with the run off going into lakes, rivers, stormwater and also drinking water (especially in country areas). The State and Federal Governments are spending \$7 million (source Lead Advisory Service) on advising the building industry and public of the associated dangers of lead, but there has not been an alternative until the environmentally friendly **Brackaflash**.

The **Brackaflash** system consists of two parts, a preformed tray which crosses the cavity and extends down the face of the brickwork to which soft zinc flashing is attached. **Brackaflash** not only eliminates lead but provides a waterproof seal between the brickwork and roof and if ever required the exposed soft zinc flashing can be easily replaced by a few pop rivets.

Metal Roofs are no problems for **Brackaflash** as the preformed trays can be purchased without the zinc flashing attached so that you can attach the Colorbond colour flashing of your choice and never worry again if there is a need to replace damaged flashings.

Project builders such as Charleston, Wincrest,

Clarendon, Michael Hull and North Coast Homes have embraced the opportunity to use the **Brackaflash** system for its environmental benefits – and the ease to install. It's lighter and easier to handle and there are considerable savings to be made not only in the area of maintenance but also with the theft of lead on site.

According to *Building Industry Connection*:

"...temperature variations can cause a 2m length of lead [flashing] to expand by more than 3mm. If this expansion and contraction cannot occur freely, lead may lift and buckle.

"Further movement will then cause bending about the buckle until, ultimately, fatigue occurs and the lead sheet cracks. The thicker the lead, the greater its stiffness and its resistance to buckling."

Being a builder with 43 years experience, Ross Bracher confirms the statement made in *Building Industry Connection*, that although the Australian standard requires lead sheeting with a 20 kg rating, most builders are using 15 kg, making breakdown and consequent replacement more likely. The Building Code of Australia also requires 20 kg lead flashing, yet builders will continue to use 15 kg while Councils are not policing the requirements. When Ross has asked Council inspectors why it is not policed, the answer is "What do you expect us to do? Carry weights and measures?"

As Ross points out, "Just think how many builders are handling lead then sit down to their lunch and then home to the family with lead dust on their hands and clothing."

Building Industry Connection concludes:

"Soft zinc is a preferred material when flashings need to be dressed reasonably close to the profile of a Colorbond or Zinalume steel roof. Soft zinc, although not as malleable as lead, can be used in most applications where lead might be considered".

For further information call...

BRACKAFLASH PTY. LTD.

PO Box 5, Warners Bay NSW 2282

Phone: (02) 4941 1113 Fax: (02) 4965 8137

Mobile: 0418 269 991

Good or New Policies

US Toy Manufacturers Agree To Rid Products Of Lead

The Toy Manufacturers of America (TMA) has pledged that its members will help reduce children's exposure to hazardous lead levels. They will go beyond what the law requires by eliminating lead from their products. This follows a request by the US Consumer Product Safety Commission (CPSC) that asked all manufacturers to eliminate the use of lead in products used in or around households, schools or in recreation. It is estimated that approximately 930,000 US children between the ages of 1 and 5 have blood lead levels that are of concern. ♦

Pasminco Ends Ocean Dumping

Reference: Mining Monitor, April 1998

Protests led to a ban on ocean dumping

Environmentalists have succeeded in forcing an end to the ocean dumping of zinc wastes created at Pasminco's Tasmanian Risdon smelter. After 24 years of ocean dumping Pasminco has implemented a process of co-treatment which involves modifying the waste product and sending it to Pasminco's Port Pirie lead smelter for treatment.

Throughout the late 1980s Pasminco resisted ending its ocean dumping program, claiming that it would make the zinc smelter uneconomic and that it was environmentally preferable to dump the waste in the ocean rather than in landfill.

Water-based protests by Greenpeace forced the issue into the public arena while the Tasmanian Conservation Trust maintained constant lobbying pressure.

Following the international adoption of the London Dumping Convention in 1990, which prohibited the sea dumping of wastes after the end of 1995, Pasminco successfully lobbied the Australian Government to obtain exemption from the convention until end 1997. ♦

Australia Sets National Air Quality Standards

Media Release From National Environment Protection Council (NEPC) for Ambient Air Quality, June 1998

For the first time Australia has an agreed set of national air quality standards to apply in all States and Territories.

The National Environment Protection Council (NEPC) of Environment Ministers meeting in Adelaide has set

uniform standards for ambient air quality (ambient air does not include indoor air). These standards are contained in the National Environment Protection Measure (NEPM) for ambient air quality.

NEPC Chairman and Federal Environment Minister Robert Hill says that NEPC has recognised that Australians rank air pollution as a major environmental concern.

The national air quality standards cover six major pollutants: nitrogen dioxide, particles, carbon monoxide, ozone, sulfur dioxide and lead. State and Territory governments have committed to adopting these standards as goals for air quality management.

NEPC examined the latest health-related air pollution research which showed that these six pollutants can have adverse effects on the respiratory system ranging from minor symptoms such as coughing, through to more serious chest congestion and asthma, to chronic illness and possibly death.

Although these pollutants can have other effects, including damage to vegetation, buildings and materials, and reduction in visibility, the standards have been based on the need to protect human health.

The standard for lead, as measured at each performance monitoring station is **0.5 µg/m³** (micrograms per cubic metre) averaged over a one year period, reported as a fraction of TSP (total suspended particulates) with no exceedences allowed [**The Goal being to meet the standard within 10 years**]. ♦

Easter Show Proves Willingness to Forego Cars

Reproduced from Green Games Watch: Newsletter for an environmentally responsible Olympic Games: Issue 7 Autumn 1998

The results of the Green Games Watch 2000 trial of Easter show transport indicated that the Olympic transport strategy is on track and travellers are more than willing to travel to Homebush without their cars.

Around 30 people travelled to the Easter Show on April 12 as part of the GGW2000 trial which found:

- 90% of participants found it easy to get information on travel to the Show (although information on connecting buses proved difficult);
- all participants found Easter Show transport staff polite and helpful;
- 81% of participants felt safe travelling to the

Easter Show. (Some felt unsafe cycling on dangerous parts of cycle routes and some were concerned about the safety of children in crowded trains) and

- 89% of participants felt that they arrived at the Easter Show “in a timely manner”. ♦

Lead Shot Banned in NT Duck Hunt

Only steel shot is allowed as lead shot has been banned for duck shooting since 1996 in all reserves managed by the Parks and Wildlife Commission of the Northern Territory, though lead can be used on Crown or private land. As more waterfowl die from swallowing lead shot than from being shot, why don't all states ban lead? ♦

New Information

“Hazards in Petrol” on ABC Website

Elizabeth O'Brien has written an 85 page website for ABC on Leaded Petrol, Unleaded Petrol and Benzene. The article is currently being legalised by the ABC prior to publication on Karl Kruszelnicki's section of the ABC's website. ♦

New Web Addresses - LEAD Group

The LEAD Group will soon have a new website address (with greater capacity) and e-mail address. Our new internet server, Zip World, have kindly donated the set-up costs of our own domain. **Website:** www.lead.org.au & **E-mail:** lead@lead.org.au are the new addresses. ♦

Lead and Cadmium on OECD Website

The OECD (Organisation for Economic Cooperation and Development) website has information on the 5 priority chemicals, the top priority chemical being lead, second priority being cadmium and fifth being mercury. See <http://www.oecd.fr/ehs/risk.htm> on the website. ♦

National Pollutant Inventory Website

Log on to www.environment.gov.au/net/npi.html for information about the toxic substances being emitted into the Australian environment and where the sources of emissions are. The site is designed so that you can search by geographic region, by the name of the substance or by the name of the source eg Pasmenco – Cockle Creek smelter (though you can only search for one substance at a time from a particular source, eg cadmium, then mercury, etc.). The site includes links

to similar inventories overseas, and info on publications. ♦

Deleading News in LEAD Gp Library

The publishers of *Deleading* Magazine have kindly agreed to barter their magazine for *LEAD Action News*. In addition, Tim Gooden of Blastmaster in South Australia, has kindly donated several years worth of previous issues of *Deleading* Magazine, so The LEAD Group's library will have a valuable addition with ongoing issues of this US magazine, which focuses on lead abatement and removal. ♦

New “Renovator’s Guide” by Lead Reference Centre

The following media release was written by the Lead Advisory Service (NSW) in response to a request to do so by the Lead Reference Centre (LRC). LRC funding to write media releases has been withdrawn.

There are over 3.5 million pre-1970 Australian homes which contain lead paint. Many renovators of these homes will be parents of young children or expectant couples getting the nursery ready.

A new booklet was released in September 1998 by the Lead Reference Centre. *'A Renovator's Guide to the Dangers of Lead'* will provide people with the knowledge to conduct renovations in a safe manner and hopefully prevent many of the lead poisoning cases that we see resulting from unsafe work practices.

Renovating pre-1970 homes is well recognised by experts to be one of the most significant risk factors for lead poisoning. It is a past-time that doesn't mix well with young children or pregnancy though. “It can be done safely, but people need to be aware of the dangers and take a bit more care” says Michelle Calvert, of the Lead Advisory Service NSW.

Lead laden dust from lead-based paint or ceiling spaces and wall cavities have resulted in the health of too many children being damaged. Unfortunately, professional and do-it-yourself (DIY) renovators, working unsafely, have been responsible for lead poisoning cases. Recently, two young children were poisoned during renovations and the problem was only identified when the family dog died from lead poisoning.

“One important message that we would like to send to renovators,” said Ms Calvert “is that if you have been renovating a pre-1970 home and dust has been created that could be lead contaminated - you should speak to your doctor about a simple blood test. Damage is happening long before symptoms are present. Health effects for children include learning and behavioural problems, IQ loss, hearing and

kidney damage. Adults can suffer joint and muscle pain, high blood pressure and infertility. The blood test will determine if your blood lead levels are too high and if there is a problem we can take positive steps to minimise the health impacts.”

“Australia is a nation of renovators” she added “If you are not renovating you are sure to know someone who is. So the other important message is to get a copy of this free booklet (phone 131 555) and do the job right in the first place to ensure the best possible outcome for your children and yourself.” ♦

Lead Miner Releases Inaugural Environmental Performance Report

RGC sent its inaugural Environmental Performance Report to shareholders on 28th October 1998, in order to comply with its commitment as a founding signatory of the Australian Minerals Industry Code for Environmental Management and to “promote transparency of our operations”. This compares with the promised date for Pasminco’s first report, of August 1999, following the August 1997 signing of the Industry Code by Pasminco. Why the delay?

According to the report, RGC has a 100% interest in the Thalanga (North QLD) zinc/copper/lead mine which produced 14,029 tonnes of lead concentrate, in the year before it ceased underground operations on 30 June 1998. RGC also has a 69% interest in the nearby Reward mine which commenced production on 13 July 1998. By comparison, Pasminco owns and operates one open-cut mine (Potosi, at Broken Hill, NSW), and three major underground zinc/lead/silver mines at Broken Hill, Elura and Rosebery, which produced respectively 165,749 tonnes of lead concentrate (Broken Hill including Potosi), 72,444 (Elura) and 19,646 tonnes (Rosebery). [Ref. Pasminco Annual Report 1998]

One of the “Environmental Challenges” reported by RGC is an “unresolved legal action against [RGC] Thalanga [Pty Ltd]” in which a neighbouring pastoral land-holder alleged there had been ground water contamination “as a result of wind dispersal of sulphates from the tailings dam surface and acid mine drainage.” ♦

Asbestos Info in Six Languages

National Asbestos Awareness Day, November 27 1998, was marked as a day of remembrance for the hundreds of victims of asbestos diseases in Australia. With the number of sufferers rising daily, especially among migrant workers, the Asbestos Diseases Foundation has decided to make available information in Turkish, Spanish, Greek, Italian and Arabic as well as English. For further information phone (02) 9637

8759. ♦

Good News for Some

Lead Smelters Move from Developed to Developing Countries

Reference: The following extract is from <http://www.greenpeace.org/home/gopher/campaigns/toxics/1996/leadacid.txt> (the Greenpeace Website).

Through the years, there has been a noticeable movement by secondary lead smelters out of industrialized countries. Correspondingly, there has been a dramatic increase in lead acid battery recycling in developing countries. According to the Journal of Metals in 1987, “the inability to economically install emission controls and purchase liability insurance (has) forced the closure of over half of the secondary lead smelters (lead recycling facilities) in North America”.

China Goes for Mines in Tibet

Reprinted here and in Mining Monitor, April 1998

Reference: “Tibet to speed development of its mining industry”, Asia Pulse, 6 January 1998.

The Chinese Government is promoting the development of an expanded mining industry in Tibet. The Chinese have announced that they intend to expand the production of electrolytic copper, chromium, gold, lead, zinc and silver by the end of the century. They hope to expand the value of output by 20% per annum over the next three years with the assistance of domestic and foreign investments.

Recycling News

Mobile Phone Industry Launches Battery Recycling Scheme

The Australian Mobile Telecommunications Association (AMTA) has announced that the mobile phone industry will be undertaking a recycling scheme for mobile phone batteries.

Mr Peter Russell, Executive Director of AMTA, said “this scheme, which is jointly funded by AMTA and the NSW Government, is an important and innovative initiative for the mobiles industry. Once the scheme is operational customers will know that they are doing their bit for the environment through returning their used batteries for recycling”.

“With this scheme, the mobiles industry is demonstrating a commitment to its product beyond the expiry of the warranty card, and is also

supporting the development of innovative Australian technology for recycling”, Mr Russell added.

AMTA on behalf of some of Australia’s largest mobile telecommunications companies will begin a six month trial scheme in metropolitan Sydney in November 1998 with over 100 retail outlets participating in the scheme. AMTA intends to implement a national scheme as soon as possible after the completion of the trial scheme.

The Scheme will allow users of Ericsson, Motorola, NEC, Nokia and Siemens mobile phones to return their batteries to any participating retail outlet including those of Telstra, Optus or Vodafone.

“This is a great opportunity for customers of our participating companies to dispose of their unwanted phone batteries. It will be as easy as walking into one of the many participating stores and depositing the batteries into a specially marked collection box”, Mr Russell said.

The Scheme will be funded by manufacturers contributing a recycling levy on all batteries that they place into the market. The program will be promoted to the public by retailers and carriers through their advertising campaigns.

The boxes will be collected by Melbourne based recycler, MRI (Aust) Pty Ltd. MRI holds contracts for the management of waste streams including hazardous materials, the recycling of redundant computer, office and telecommunications equipment as well as engaging in the recovery of components and precious and base metals. MRI will sort, store and transport the collected mobile phone batteries to Ausmelt Limited.

The Ausmelt bath smelting technology, a technology which was developed in Australia, will provide the basis for the recycling of the spent nickel batteries. The process is expected to produce three marketable streams, including a nickel containing product, a cadmium containing fume and a lower value ‘slag’. All these products will be used in various commercial applications.

For Further Information:

Peter Russell, AMTA Executive Director
(02) 6230 6055 or 0412 229 999

Michael Milligan, AMTA Project Manager
(02) 6230 6055 or 0414 200 888

Will Le Messurier, MRI (Aust) Pty Ltd (03) 9305 4611

Paul Abbott, Ausmelt Limited (03) 9787 6170

[Editor’s Note: When asked which heavy metals will be recovered, Peter Russell replied that nickel, cadmium and lower value slag will be recovered. He doesn’t know where the slag will go but the nickel and cadmium will be recycled into stainless steel products. There will be 7.7 million batteries from analogue

phones – the US achieved a 15% return rate after 5 years so the Australian target is 15% per annum and hopefully they’ll exceed that.] ♦

New Hunter Recycling Centre

Australia’s first centre to market recycled products is being funded to the tune of \$850,000 by the federal Natural Heritage Trust, with a similar amount from NSW Government. The centre, which was opened in Newcastle on 13 November 1998, “will help businesses to start to look at recyclables as valuable resources, rather than simply waste material”. Hopefully some control will also stop companies selling toxic substances such as smelter slag for fill. ♦

Green Awards

Audi Plastics Recycling Prize

Audi has won the first prize for innovative recycling concepts and products in a competition held by the Research Institute for Plastics and Recycling, based in Germany. Audi uses recycled plastics for 18.5% of the plastic componentry of the Audi A4. Hopefully, plastics from scrapped vehicles can be recycled using the same process. Using substitutes for lead stabilisers in plastics, ensures safer, more recyclable products. ♦

Vermitech wins Innovation Award

Vermitech has won the \$50,000 first prize in the 1998 Australian Yellow Pages Business Ideas Grants, for turning sewage sludge and green waste into vermicast (worm poo), which can then be applied to crops or for the rehabilitation of mine sites and degraded soils. As part of their research Vermitech is looking at the bio-accumulation by worms of lead and other heavy metals (and other toxics). For instance, worms can reduce the selenium in sewage by 50%. Worms could be used to take up toxics from soil at contaminated sites but the dead bodies would need to be disposed of. ♦

BHP Cannington Lead Mine Award

BHP Cannington has won the 1998 Australian Minerals and Energy Environment Foundation’s Environmental Excellence Award for the environmental management at all stages of the planning, development and operation of the Cannington silver/lead/zinc mine, 300 km from Mt Isa in Queensland. Construction of the underground mine began in 1996 and was completed in July 1998. The mine began producing lead concentrate in

October 1997 and will reach full production (1.5 million tonnes of ore per annum) in early 1999.

According to the company, progress at Cannington has been uninterrupted since 1990 "due to the trust and respect which from the beginning has been developed through a continuing policy of complete openness" with stakeholders, including landholders and

Aboriginal communities. Contractors' tenders were assessed on the basis of their Environmental Management Plans (as well as cost considerations). As BHP says: "It is a concept that can be readily adopted by other mining and exploration companies" [Ed: not to mention smelting companies]. ♦

The LEAD Group's Wish List

Good News that we are Looking Forward to Hearing

Let us know if you hear it first!! eg:

- ❖ Hunter LEAD Group Branch obtains funding to run a community based information, advisory and education service in the Hunter region of NSW which helps to achieve the NHMRC target for blood lead levels around the Pasmafinco smelter at Cockle Creek;
- ❖ NSW State Government restores 27% funding cut to the Lead Advisory Service (LAS) NSW. With LAS fully functional and more doctors asking parents about lead risk factors, the NHMRC blood lead targets are achieved in Sydney, Port Kembla and Broken Hill in NSW;
- ❖ NSW State Government signs five-year contract for ongoing LAS work and expansion to other heavy metals and asbestos;
- ❖ Car-use in Sydney, as measured by VKT (average vehicle kilometres travelled per annum per car) and the number of cars registered, starts to reduce (instead of constantly rising as it currently does) by the time of the Sydney Olympics. Other cities follow suit;
- ❖ NSW is the first Australian state to introduce licensing of lead assessors and lead abatement contractors. Other states follow suit;
- ❖ NSW is the first state to implement the WorkSafe *Code of Practice for Lead at Work* and achieves zero workers with blood lead levels above the NHMRC target for all Australians, by the year 2002. Other states follow suit;
- ❖ Federal Cradle to Grave Legislation requires that all mining and smelting companies take responsibility for their toxic minerals from mining to final disposal;
- ❖ Large car dependent multi-national companies (like Macdonalds) devise a car-use reduction policy and protect workers and children from vehicle emissions in drive-thru restaurants and other consumer services;
- ❖ NSW introduces Californian Proposition 65-type legislation which requires labelling of all products which are associated with cancer or birth defects eg petrol pumps are required to be labelled "WARNING – exposure to petrol is associated with cancer". Other states follow suit;
- ❖ NSW introduces legislation to require warning labels on all products that can be used to create lead contamination eg heatguns, orbital sanders eg "WARNING – if used on leaded paint this tool can cause lead poisoning – PROTECT THE WORKERS AND RESIDENTS – and this tool can cause lead contamination – PROTECT YOUR ENVIRONMENT!" Other states follow;
- ❖ All government agencies in Australia become good role models for lead-use reduction (including car-use reduction) and lead-safe work practices (eg non-lead bullets for police shooting ranges). Councils ensure childcare centres and early childhood centres in Council-owned premises, are lead-safe and renovated (when required) in a lead-safe manner;
- ❖ The Federal Government has decided to put the leaded petrol tax money (now 2.2 cents per litre) back into lead, including:-
 1. Funding for The LEAD Group's national LEADLINE telephone advisory service;
 2. Introducing national universal child lead risk questionnaire screening;
 3. Giving adequate funding to expert Australian lead researchers like Professor Brian Gulson;
 4. Banning the following consumer products:-
 - leaded petrol, lead shot, lead bullets, lead flashing, lead fishing sinkers, industrial / automotive leaded paint, leaded PVC products (domestic and imported), imported leaded mirror backing paints, lead pellets for stuffing teddy bears, leaded brass and bronze especially in water filters, leaded plastic cling-wrap for food, toys and children's cups with lead weights,

leaded curtain weights and diving weights. Other nations in South East Asia follow suit;

- ❖ OECD countries will implement the *Declaration on Risk Reduction for Lead*” adopted by the OECD Council at its 869th Session on 20/2/96; Non-OECD countries follow suit;

- ❖ The World Bank, OECD and United Nations Environment Program fund The LEAD Group to run a lead clearinghouse and advisory service for the whole of South East Asia;
- ❖ The service is expanded to include other heavy metals and asbestos;
- ❖ The South East Asian service becomes global...

