



INDUSTRY PROGRAMS



## Australian and New Zealand Biosolids Partnership E-News

### The Australian and New Zealand Biosolids Partnership (ANZBP) supporting sustainable management of biosolids in Australia and New Zealand

Dear ANZBP members and colleagues,

Welcome to the latest newsletter of the ANZBP. This month the newsletter provides an update on research projects recently released, some industry news and notice of coming events, including our next workshop in Launceston in November and the call for abstracts for the next AWA Biosolids Conference.

For those of you who are yet to see the ANZBP Business Plan for 2013/14, I encourage you to download it from the ANZBP member website. The business plan lays out the key activities and projects for this financial year. If you would like to assist with any of the projects please contact us.

Following on from last month's newsletter we have included brief biographies of the members of the ANZBP Advisory Board. The Board consists of ten individuals from across Australia and New Zealand who have a wide ranges of skills and backgrounds. These volunteers are instrumental in guiding the strategic direction of the ANZBP, but also act as technical advisors for ANZBP research projects.

#### *Bill Barber - AECOM*

Bill is a Technical Director within AECOM's Water business line based in Sydney, and is an industry leader in biosolids treatment and processes. With biosolids, Bill has a successful track record in research and development; technology supply, engineering consultancy, and working within a Water Utilities company. Bill's recognized skills involve; development of holistic biosolids strategies and integrated biosolids solutions; critical technology evaluation; leading research initiatives; communicating complex issues; and progressing technical knowledge. Bill is a chartered chemical engineer and environmentalist and has a PhD in anaerobic digestion.

#### *Karen Campisano - Mackay Regional Council*

Karen holds an MBA with an economics specialisation, a chemical engineering and a science degree. She has more than 10 years of experience in planning, investigation, research and development, business case development, policy development, project implementation, operation and optimisation of water/wastewater systems especially in processes related to resource recovery. Karen currently manages the operation of water and wastewater treatment plants across Mackay Regional Council. Prior to this she led the Strategy Development Team at Melbourne Water, developing and implementing strategic plans and projects including biosolids strategies and projects developing alternative beneficial uses of biosolids. She has also participated in a number of Victorian, national and international programs.

I hope you find this newsletter informative.

Michael Naughton  
Chair ANZBP Advisory Board

---

### ANZBP Activities & Tools

#### **NEW ANZBP RESEARCH PRODUCTS: [Biosolids Production and End Use Survey](#) & [Industrial Contaminants Database](#)**

##### **ANZBP Biosolids Production and End Use Survey**

The ANZBP commissioned a national survey to identify the main features of biosolids management in 2010 and again in 2013. The results of the 2013 survey are presented on a national and state basis, with some discussion provided on significant differences to the 2010 survey results. The 2013 survey catalogues the following key parameters:

- Biosolids production
- Biosolids stabilisation grade
- Biosolids primary stabilisation process
- Biosolids end use
- Biosolids contamination grade
- Biosolids dewatering process

The project has already contributed headline data to the Australian Commonwealth Government's *National Waste Review 2013*, and has been quoted in numerous reports. Many thanks to all those in New Zealand and Australia who helped provide information for this research product.

### **ANZBP Industrial Contaminants Database**

When surveyed in 2011, ANZBP members expressed the desire for a list of contaminants that may be present in biosolids. This project has now been completed, documenting 778 unique chemicals found in the environment. The primary goal of this project was to identify if there are chemicals that may be present in biosolids that pose a risk to human health/environment and consider if there are legislative drivers that may be applied for the protection of public health and/or the environment. A systematic review of regulations for various environmental media from Australia and internationally was completed and compared to the research output reported in peer-reviewed scientific journal between the years 2008 and 2012. A searchable database has been created in each space - regulations and research. A priority list of chemicals was developed by cross referencing the two lists and the top twenty chemicals are listed in the summary sheet.

### **WERF Trace Organic Compounds Research Reports**

Now published on the ANZBP website are a number of reports coming from the Water Environment Research Foundation's (WERF) *Evaluation of Fate and Exposure for Trace Organics in Biosolids-Amended Soils* research initiative. The recent research findings provide empirical data to assess environmental and health risks of trace organic compounds in biosolids applied to land. A substantial volume of unpublished (or recently published) experimental data was collected and is reviewed in the report.

### **Water Corporation/Curtin University Odour Management Project online**

Throughout 2011 and 2012 the Water Corporation of Western Australia and Curtin University Water Quality Research Centre undertook detailed research into the sources of, and ability to control, odour generated while treating and storing biosolids. To date the project has focused on identifying and documenting the various chemical causes of odour via small scale lab trials, and exploring the impact of chemical addition at differing steps of the treatment process to mitigate odour production. The next phase, is to expand the lab trials to include sludge and biosolids from other wastewater treatment processes. This project phase will also provide qualitative data on odour reduction resulting from the chemical addition trials. It is anticipated further project phases will result in on site pilot scale trials.

***These resources can be found by logging on to the members section of the ANZBP website.  
If you require a website password please contact the Project Manager.***

---

## **Industry News & Media**

### **Guidelines for the beneficial use of organic waste in New Zealand**

Despite having science-based regulations or guidelines to facilitate beneficial reuse of many organic wastes progress has been slow towards achieving the NZ Waste Strategy target of improving the efficiency of resource use and diversion of organic wastes from landfill. In part this is because there is no nationwide consistency of approach in New Zealand. Some guidelines are out-dated and in need of review, new science is now available on quality criteria such as contaminant limits.

Four key Waste Sector partners, Water New Zealand, WasteMINZ, the Centre for Integrated Biowaste Research (CIBR) and the New Zealand Land Treatment Collective (NZLTC) are driving the development of a framework for dealing consistently with organic wastes. This approach aims to recognise commonalities of organic waste; describe quality criteria for beneficial reuse, increasing knowledge and streamlining regulatory processes. This proposed guideline will supersede, update or reference to existing guidelines and standards e.g. NZ Biosolids Guidelines, NZS4454 Composting Standard etc.

This innovative approach to sustainable waste management is not without its challenges and as such, the initial phase of the programme will include a scoping exercise to determine range, key characteristics and quantities of wastes produced in New Zealand that fit the criteria of the proposed guideline, as well as consultation and discussion with industry and regulators. For more information please contact: Project coordinator Nick Walmsley ([technical@waternz.org.nz](mailto:technical@waternz.org.nz)) or Jacqui Horswell, Programme Leader and Manager CIBR ([jacqui.horswell@esr.cri.nz](mailto:jacqui.horswell@esr.cri.nz)).

### **Harden Shire Council's biosolids plan concerns aired**

THE Harden Shire Council was told at its meeting last week that it would be taken to the Land and Environment Court if it approved an expansion of a biosolids waste recycling operation in the Galong area. Transpacific Industries Group - Technical Services Gerroa, under contract to Sydney Water, has been taking biosolids to Danny Flanery's property Boorowa Flats since 2007 and has been spreading the spreading the biosolids on Boorowa Flats since 2011. [Harden Express](#).

### **CRC for Contamination Assessment and Remediation of the Environment: Using Poo to Combat Climate Change**

Human waste could be the next weapon in the fight against climate change. Australia produces almost a third of a million tonnes of 'biosolids' – the solid waste left over after sewage treatment – per year. Large heaps are stockpiled round Australia's cities when they could be helping to lock up our carbon emissions as well as building more fertile soils, Professor Nanthi Bolan of CRC for Contamination Assessment and Remediation of the Environment and University of South Australia will tell CleanUp 2013. [Full media release](#) and [ABC Media report](#). (*Please note CRC CARE, with the support of the ANZBP, sought revision of the article to correct significant inaccuracies in the original article*).

### **Organic Recycled Fertilisers Could Provide the Solution to Bangladesh's Fertiliser Challenges**

Bangladesh relies heavily upon fertiliser to meet its food production demands. Around 50 to 60 per cent of food crops are attributable to fertiliser use. Bangladesh experiences high rates of illness and food safety concerns, because of the overuse of chemical fertilisers and pesticides. Organic fertiliser converted from waste-activated sludge is currently being investigated as an

alternative source of fertiliser for farmers. [Future Directions](#)

### **GCM Fodder & Compost**

Agricultural solutions organisation, Grow Green Agri has recently been renamed *GCM Fodder & Compost*, and a new website released [www.gcmonline.com.au](http://www.gcmonline.com.au). Enquiries can be directed to [Michelle Griffies](#).

### **WERF Open Access Reports**

WERF has released a select number of reports as open access documents. These reports can be downloaded in PDF format at no cost. Printed copies of reports can still be purchased. Research Products include:

- A Strategic Risk Communications Process for Outreach and Dialogue on Biosolids Land Application
- Conducting Effective Community Outreach and Dialogue on Biosolids Land Application: A Primer for Biosolids Professionals
- Developing Better Indicators for Pathogen Presence in Sewage Sludge

Available to download [here](#)

---

## **Coming Events**

### **ANZBP Tasmanian Roadshow - Wednesday, 13th November 2013, 10am –3pm, Launceston**

Hosted by Taswater, the Australian and New Zealand Biosolids Partnership (ANZBP) is holding a free workshop for interested parties to learn about the activities of the Partnership, meet with current members and generally network with peers in an informal environment. Presentations will be provided on recent ANZBP research outcomes, as well as updates on local biosolids management activities, however these events are also interactive sessions that encourage discussion and networking. More details on the [ANZBP website](#).

### **RMIT Biosolids Workshop - Linking Industry & Research, 14<sup>th</sup> November, Melbourne**

At the RMIT Biosolids Workshop in 2012 the Victorian biosolids sector discussed the contemporary activities of both industry and research, considering connections and opportunities. This year the workshop will aim to consolidate upon the effort of that first event, continuing the theme of linking industry and research. Anyone wishing to present at the event can contact [Brad Clarke](#). Further details available in coming weeks.

### **National Biochar Workshop, 16 December 2013, Sydney**

This workshop will present findings from recent work and formulate the future direction for biochar research in Australia. While primarily research focused, this workshop will also encourage participation from government and private agencies, biochar producers and users, providing an opportunity for their input in the discussion, especially for future priorities. [Australian and New Zealand Biochar Researchers Network](#)

### **Water New Zealand's 55th Annual Conference & Expo – Hamilton, 16-18 October 2013.**

The Annual Conference & Expo is the largest and broadest Conference & Expo of its kind in New Zealand covering all aspects of water and its management. Online registration will be closing on Thursday 10 October. If you wish to attend the Conference have not already registered, please [register here](#)

### **AWA Biosolids and Source Management Conference - Call for Papers now open!**

The Biosolids and Source Management Conferences will be held concurrently on **25-27 June 2014** at the Bayview Eden Hotel in Melbourne. The conference will explore both fields of interest and link them together to provide an understanding to the whole life cycle of the wastewater production and management system. Abstract submissions are due **Friday, 15th November 2013**. Additional dates, details, opportunities and the abstract submission guidelines can be found on the AWA website at <http://www.awa.asn.au/bsmconference>

---

**Please share this email with your colleagues, or encourage your colleagues to place their name on this email list by contacting the Program Manager. Many reports are accessible only by ANZBP members and will require a password to enter the members portion of the website. If you and your colleagues are employees of an ANZBP member organisation and require access to the members website, please email the [Project Manager](#).**

**From the ANZBP Team**

---

The email has been sent on behalf of the Australian and New Zealand Biosolids Partnership by:

AUSTRALIAN WATER ASSOCIATION  
ABN: 78 096 035 773  
Level 6, 655 Pacific Highway, St Leonards, NSW, 2065  
+61 2 9436 0055, Fax +61 2 9436 0155  
[www.awa.asn.au](http://www.awa.asn.au)



