



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 edition of the newsletter of the Australian and New Zealand Biosolids Partnership. It's been some months since the last email went out so this is a bumper edition with plenty of news. For a number of subscribers this will be your first ANZBP newsletter, and we trust you find the information valuable, however if you wish to be removed from the distribution list, please respond to this email noting your request. Likewise, if you would like to include other colleagues on the list simply send through a request with contact details.

Please note the call for papers for the **AWA Biosolids and Source Management National Conference**, to be held in June 2012 on the Gold Coast, has been released. Additional details are included under *Events* below.

Update on ANZBP Activities

ANZBP Advisory Board Update

The most recent meeting of the ANZBP Advisory Board in Canberra was one of mixed emotions due to a changing of the guard, with the committee farewelling longstanding members Dr Mike Mclaughlin (CSIRO) and Mr Mike Makestas (SA Water). As foundation committee members, their contribution during the establishment of the ANZBP and their ongoing support and advice over the past four years is greatly appreciated. The meeting was pleased to welcome incoming representatives Dr Bill Barber (AECOM) and Dr Rai Kookana (CSIRO), each of whom have extensive experience both locally and internationally, in a variety of biosolids managements fields (it should be noted a PhD is *not* required to be a Board member!).

ANZBP Roadshows

Over the last few months the ANZBP has held two workshops, the first in Canberra in early October and more recently, in Darwin at the beginning of November.

The Canberra event was very well attended by both members and non-members, with the group being privileged to hear from new Board member Bill Barber. Bill's background in the water sector in the UK provided for some fascinating contrasts and his knowledge of wastewater management and climate change impacts made for topical discussion. Tung Nguyen of Sydney Water also presented on the biosolids management strategy for Sydney and the surrounding area, providing the group with insight to the multi-layered issues that need to be addressed in such a strategy and the detail in managing risk effectively.

The group also heard from local Chris Hepplewhite, who described the biosolids management process for the Canberra, region, explaining how thermal destruction (incineration and soil application of ash product) is, despite general perception, the best method for ACTEW Corporation to treat and reuse Canberra's biosolids. The Department of Sustainability, Environment, Water, Population and Communities was strongly represented at the Canberra event, which is an excellent result considering the ANZBP's desire to bring industry and regulators together.

The Darwin event was similarly well attended, with Power and Water Corporation employees from both Darwin and Regional areas making up the majority of attendees. With the Northern Territory predominantly relying on lagoon systems to treat and manage biosolids, the session focused on efficient management of lagoons and presented potential alternative biosolids management methods for the future. Lead by ANZBP Board Member Paul Darvodelsky, the relaxed event generated much discussion and provided the opportunity for all to learn from other attendees.

Thank you to all those who assisted with, presented at, or attended these events. Venues for roadshows in 2012 will include Geelong, the Gold Coast and Wellington (NZ). If you would like to engage your colleagues, regulators, community and consultants in a discussion on biosolids management, consider the opportunity to have the ANZBP run a roadshow in your location. Please contact the Project Manager to discuss this further.

ANZBP collaboration with WERF - Gathering Unpublished Trace Organics data in Land Applied Biosolids

The Water Environment Research Foundation (WERF) has awarded Toxicology Excellence for Risk Assessment (TERA) a

contract to identify, assemble, and summarize all available unpublished data on a list of about 60 pharmaceutical and personal care products (PPCP). This research is a part of an overall effort to assess the environmental and human health risks of chemicals that could find their way into soils following land application of biosolids. The ANZBP has committed to contribute to the long term activities of this project and the ANZBP Administration Team may be in touch with members to seek input.

A reminder that the following resources are available online or from the Project Manager:

- **WERF State of the Science:** This report was published in 2010 as a review of the existing literature available on trace organic chemicals in soils. This report provides an examination of risk assessment methodology used in the United States and Europe and explores the occurrence and physical, chemical and biological processes affecting biosolids-borne trace organic chemicals in soils.
- **Community Attitudinal Survey:** The Community Attitudinal Survey Report has been published and is currently being sent out to subscribers in hard copy. This report analyses the outcomes of a community survey process, which identified general community attitudes towards biosolids/ biosolids use.
- **Biosolids Production and End Use Statistics:** This project was undertaken to develop an accurate and comprehensive data-set of Biosolids Production and End Use for Australia and New Zealand. The data provided by WWTPs has been summarised in a report which is now available on the ANZBP Subscribers' website.
- **Biosolids Literature Compendium:** The Literature Compendium documents progress in biosolids management practices and research developments in Australia and New Zealand from the past five years, as well as planned research. The Compendium has proved to be a valuable asset for researchers with technical matters to address, as well as a tool for policy and communications officers.

Please feel free to contact AWA should you have any questions regarding the above, or any other queries regarding the ANZBP.

Please visit the Subscribers section of the ANZBP website for access to the increasing range of ANZBP research reports.

Industry News

DSEWPaC Markets Research and Opportunities

The *National Waste Policy: Less waste, more resources* endorsed by the Council of Australian Governments, sets Australia's waste management and resource recovery direction to 2020. The policy aims to reduce the amount of waste for disposal and improve the use of waste as a resource to achieve broader environmental, social and economic benefits. Biosolids have been identified as a resource of interest under the National Waste Policy. The *Department of Sustainability, Environment, Water, Population and Communities*, an ANZBP member, recently initiated a project to develop a snapshot of biosolids management activities, collate a common data set and provide an evidence base for future decision making. This report will assist with several National Waste Policy strategies, including establishing markets and standards, greenhouse gas avoidance and improved management of waste and recycling streams.

Beneficial re-use of biosolids - Feasibility Study

The Victorian Department of Business and Innovation is funding Australian SME, Earth Systems, to complete a feasibility study (and potentially a proof of concept project) on beneficial use of biosolids for Melbourne Water. Earth Systems will work with Melbourne Water to investigate sustainable and beneficial uses of biosolids including recovery of valuable products, reduced volumes of waste, reduced operational costs through on-site energy generation and reduced greenhouse gas emissions. Earth Systems were selected via a competitive tender process and are exploring beneficial reuse via energy recovery.

Draft Australian Standard AS4454: Composts, soil conditioners and mulches

The Draft AS4454 for Composts was recently released for consultation and is now in the final stages of preparation. It is expected that the final document will be made available in December 2012. It has been noted that the 'Appendix A: Method for Determination of Maturity Index' would be of interest to biosolids managers. This Appendix sets out the operational and testing requirements to determine the maturity of compost products.

Contaminants of Emerging Concern Profile: Triclosan

The San Francisco Estuary Institute has released a *Triclosan Fact Sheet* that provides an overview on triclosan's uses, pathways to waterways, risks, effectiveness and timeline. Triclosan was introduced as an anti-microbial chemical for use in hand soaps, mouthwashes, toothpaste, deodorants and a host of other products.

Events

Hold the date: Enviro 12 Conference & Exhibition - 24-26 July 2012, Adelaide

AWA Biosolids and Source Management National Conference "Source to Resource: The Input Influences The End Use" 18-20 June 2012, Gold Coast

The AWA combined Biosolids and Source Management Conference allows for knowledge of the treatment process as a whole and influent contaminants that may reduce the outlets for this reuse. This is essential in understanding the whole life cycle of the system and the potential issues that can arise, not only in treatment but disposal. Source management and biosolids go hand in hand to achieve an integrated solution and this conference will explore both areas and link them together. The [Call for Abstracts](#) is now open and closes Wednesday, 30 November 2011.

16th European Biosolids & Organic Resources Conference & Exhibition

This event continues to attract the most authoritative experts in the area of biosolids and organic resource handling, treatment and recycling. With the recovery of energy and resources from organic wastes rising on the waste agenda, the programme will include

discussion on issues in handling, treatment and reuse of wastewater derived from biosolids. Co-digestion, enhancing gas production and assessing carbon footprints are also included on the agenda.

Technical Sessions include:

- Recovery of Energy and Resources from Organic Wastes
- Biosolids and Digestate Recycling Opportunities
- Advanced Digestion
- Treatment of Return Liquors
- Process Design, Control and Optimisation

Further details and registration [here](#).

NBP Webcast: Renewable Green Energy from Biosolids: Case Studies to Achieve Net Energy Production

Renewable green energy potential from wastewater treatment facilities has spurred a tremendous amount of interest in an economy that faces ever increasing costs for energy. This webinar will present case studies from wastewater facilities to achieve zero net energy utilization to becoming a net energy producer and learn about biosolids energy recovery methods that are proven, available and emerging. NBP webinars are approximately midnight Australian time, however Power Point PDF files for the webcasts are available for downloading from their [website](#).

Website Updates - Subscribers pages

These resources can be found by logging onto the subscribers section of the website and navigating to the relevant area.

New Case Study - Research

A new case study has been developed to provide information on the Barwon Water Short Term Biosolids Management Project at Connewarre in Victoria. Providing a brief rundown of the biosolids management practices of that organisation, this case study is likely to be of interest to those undertaking planning now or in the near future.

Biosolids Experts & Spokespersons Directory

The ANZBP maintains an up-to-date list of independent biosolids spokespersons, technical experts and biosolids contacts. Much of this information can be found on the members website and further details can be sought from the Project Manager. The objective is to expand this list with both member and non-members details in order to assist in identifying and contacting professionals for advice. If you would like to place your contact details on this page please contact the Project Manager.

Case Studies - Technologies

A number of Technology providers have contributed brochures and technical information for publication on the ANZBP. These are available on the members website. The ANZBP is also seeking Case Studies from members. Case Studies are an ideal way to raise the profile of a business's activities, with the objective to publish completed case studies on the ANZBP website. If your organisation is planning, or implementing strategies or activities to manage biosolids issues and you would like to contribute a case study, please email your interest to the Project Manager. A Case Study template has been developed and is available upon request.

Biosolids and Microbial Safety

The ANZBP believes it is important to demonstrate that the water industry takes microbial safety of biosolids seriously. A new page has therefore been developed (on the members website) which provides a number of resources that have kindly been provided by members. Current resources on the page include:

- Summary of Potential Pathogens in Wastewater or Sludge (June 2011)
- Pathogen risk and nutrient status of air-dried and stored biosolids + Appendices
- Numerous conference papers and presentation

National Biosolids Partnership Biosolids EMS Audit Report - City of Los Angeles

The City of Los Angeles Biosolids audit confirmed that the City's biosolids management program continues to meet and exceed regulatory compliance and environmental performance. The nationally recognized program was found to have exceptional oversight of a wastewater facility and biosolids management operations that successfully protect public health, safety, and the environment. Management continued to demonstrate a strong commitment to the best management practices in the industry, which included maintaining interested party involvement and public participation. The Audit findings indicate that the City's biosolids management program meets the expectation and requirements of the NBP EMS Elements and the City's procedures.

New Paper - Municipal biosolids: What is the best option for the climate?

In 2007, Québec's government added new measures and funds to its already existing climate change action plan. This plan aims at eight sectors, including waste management and energy recovery from biomass. The government objective is to reduce GHG emissions by 20% (from the levels of 1990) by the year 2020. In 2011, in addition to the PACC, Québec set other GHG reduction objectives in its new policy on residual material which entails the complete ban of organic matter (including municipal sludge) from landfills or incineration by the year 2020; and 60% used beneficially by 2015, either by biogas generation, composting or the spreading of fertilizing residual materials.

Appeal for Research/Information

The ANZBP has been gathering articles from members to publish on the website and invites members to share their research with fellow Partnership members. Members have expressed interest in accessing information on the following topics:

- Processing Technologies (esp.co-digestion and emergent technologies)
- Bio-leaching Procedures
- Physical Impact of Land Application of Biosolids (mineralisation and bio-availability)
- Toxicity Thresholds
- Antibiotic Resistant Bacteria and Viruses
- Biochar and Soil Properties
- Emissions from Land applied Biosolids

If you wish to place an appeal for information in this Newsletter, please direct your topics to the Project Manager.

Seeking Images

Effort is being made to improve the visual appeal of the ANZBP website to increase the retention rate of visitors to the site. As a technical website it currently contains large amounts of text, which could be broken up with images illustrating relevant topics. If you have any clear, interesting images you are willing to contribute to the website please contact the Project Manager. ANZBP will be happy to acknowledge sources.

As specialists working in biosolids management, you are invited to share information on biosolids developments within your locality, as well as resources and activities that may be valuable to other ANZBP subscribers. These contributions, plus your comments on this E-news or the ANZBP website (www.biosolids.com.au) can be forwarded to the ANZBP Project Team - admin@biosolids.com.au

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

