

Nordiko Quarantine Systems Pty Ltd

Level 2 403 Pacific Highway Artarmon NSW 2064 Australia

Tel: +61 2 9906 5552 Fax: +61 2 9906 1874 E-mail: info@nordiko.com.au Website: www.nordiko.com.au

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March/April 2008



Volume 2, Issue I

New Technology Demonstration, Suffolk, USA



Representatives from US and Australian government departments attended a demonstration of Nordiko and IQDS technology in the USA during October 2007.

This included new remote sensing technology whereby fumigation and residual gas readings can be measured remotely, improving operator safety and enhancing the security and reliability of results. In addition, Nordiko Consoles can reduce the amount of Methyl Bromide needed for an effective fumigation compared with the traditional under-tarp system, and when combined with recapture filters, further reduce emissions of this ozone depleting substance.

Port Botany Container Ventilation Project

During an eight-week period from October-November 2007, Nordiko conducted a trial at Port Botany that involved the testing and removal of residual gases from over 200 shipping con-

volved the testing and removal of residual gases from over 200 shipping containers. More than one in five containers had above the safe level of residual fumigant and required ventilation.

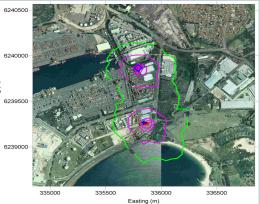
The containers tested were both 20' and 40', and were of standard height (8'6) as well as hi-cube height (9'6). Each container was analysed using the Syft Voice 100 and sampled through a PID. Containers with excess levels of gas were ventilated using Nordiko's Consoles.

Ventilation times averaged just 15 minutes to clear residual gas to below safe standards. Both Nordiko's Filter Model and MaxiFlow Ventilation Systems were used. Nordiko's filter captured all VOC's encountered. A range of gases were found inside the containers, including Methyl Bromide, Formaldehyde, Chloropicrin and Ethylene Dibromide.



The Project successfully demonstrated the effective performance of Nordiko equipment, and - unfortunately - the prevalence of residual gases inside shipping containers.

Gas Dispersions Around Port



This image shows the concentrations of Methyl Bromide after release from fumigations in a major Australian Port. The contours on this graph were created after readings were taken from live fumigations at the Port depots, and results incorporated into computer models showing gas dispersions. Present fumigation methods result in risks categorised as ranging up to Moderate and Extreme, risks which can exceed current and proposed regulatory criteria. Nordiko's systems reduce these risks by recapturing the highly toxic, colourless, odourless gases that are used in fumigation.



Newest Recruit: UNSW Industrial Chemistry Co-Op Program



Nordiko, in conjunction with the University of New South Wales, has established a 5-Year Scholarship Program for undergraduate students in the field of Industrial Chemistry.

Nordiko's newest recruit under the Program is Geoff Pillans-welcome Geoff!

Geoff joins the Nordiko team as our UNSW Co-Op Scholar and is undertaking a range of practical projects in conjunction with his studies.

The Scholarship is comprised of both educational and practical projects, and provides students with training and work experience, whilst helping them complete their qualifications.

Nordiko is proud to be associated with the University of New South Wales, with its reputation of providing high quality education, and is pleased to welcome Geoff to the team.



We wish him well with both his studies and work experience.

Nordiko Equipment in Italy and Malaysia

The Italian-based international appliance manufacturers and marketers Indesit) INDESIT have taken the initiative to be the first firm in Europe to adopt

Nordiko ventilation systems across all their import warehouse operations. They are to take delivery of 8 systems during May, for use in Italy, UK and Poland. Sidney Pinzani, Indesit's Logistics Director says: "Indesit is serious about health and safety of our workers, and is adopting this equipment as a standard measure in all of our factories which take in imported goods". (Map courtesy WorldAtlas.com)



LIFE SCIENCES

Through its local agent Life Sciences Biotech Sdn Bhd, Nordiko fumigation and

recapture and ventilation systems are to be launched in Malaysia during May 2008, to a broad audience including most of the country's fumigators and government department representatives. This follows the sale of two Methyl Bromide Recapture Systems to Malaysia earlier this year. Attendees will include visitors from Australia, India, China, USA and other nearby regions. Malaysia has already set high standards in quarantine compliance and is the hub of AFAS training in South East Asia. Broader uptake of recapture technology will keep Malaysia at the forefront of technical progress in the fumigation industry.



Meet the Team

This edition... the "Ant's Pants" of **Entomologists!**

Profile:

Ken Brash

Ken Brash, has been working with the Nordiko team since the company's inception (in 2001), and is one of its Directors.

Ken is the inventor of the patented equipment and has been active in product development and marketing.

Ken commenced his career as a

science teacher before serving several years with the military.

He boasts an extensive background in commodity trading and has held marketing management positions with a number of transport companies and container depots.

Ken is a qualified Entomologist, as well as being a Licensed Fumigator (AFAS accredited).

He has a passion for insects, particularly ants. You can read Ken's article on "Red Imported Fire Ants" on page 4 of this Newsletter.

Ken lives on the south coast of Sydney with his wife and daughter.





Nordiko Products



Lightweight Fumigation Console



Maxi Flow Ventilation Console (without filter)



Ventilation Console (with filter)



Under-Tarp Fumigation/ Recapture System

News from New Zealand

» MAF Biosecurity Meeting

Twenty eight possible alternatives to the ozone depleting gas methyl bromide came under scrutiny in NZ on 27 February 2008, as over 90 Government and industry representatives met in Wellington to review the alternatives to methyl bromide use at New Zealand borders. Advice was also provided by experts from the USA and Australia. Amongst the alternatives considered was methyl bromide recapture.

MAF Biosecurity New Zealand Import Standards Group Manager Clive Gower-Collins said, "Today represented a step forward in identifying a replacement - one that would be acceptable to New Zealand's trading partners while meeting our own biosecurity needs. Keeping in mind that any treatment, used as an alternative to methyl bromide, is likely to give rise to either economic, health and safety, biosecurity or other environmental issues today's meeting was extremely useful in deciding where to from here." (Courtesy: MAF NZ 2008)

» Growing Concern over Methyl Bromide Emissions

Concerns over Methyl Bromide emissions are growing across the globe. Authorities in Belgium, Germany and New Zealand appear to be at the forefront of a movement to reduce emissions associated with Methyl Bromide use.

Methyl bromide remains an important tool for biosecurity and a replacement has yet to be discovered that can fulfil the broad range of applications for which Methyl Bromide is used. Any replacement fumigant (if and when introduced) would also need to be highly toxic in order to be effective. Whether it is Methyl Bromide or another toxic fumigant that is being used, the control of emissions through the use of recapture technology, is clearly beneficial.

New Zealand has made headlines recently on a number of fronts. On the 8th of October 2007, "60 Minutes" New Zealand aired a story under the headline "Fuming", which highlighted the dangers of methyl bromide and the plight of workers who have been exposed to high doses of the fumigant. Reporters interviewed port workers and fumigators who claimed to have been exposed to methyl bromide and are now suffering the effects of the gas.

Methyl bromide continues to be under the spotlight in New Zealand, where the Greens' Party is pressuring the Government for tighter restrictions on fumigators. Sue Kedgley (Greens' Party MP and Health Spokesperson) pointed out that methyl bromide is a highly toxic gas, especially to the lungs and nervous system. It can be fatal, and chronic exposure through the air has been associated with a range of neurological effects. "There is no monitoring to ensure that the amount of methyl bromide being released into the atmosphere is at a level that is allegedly safe", Ms Kedgley pointed out. (Courtesy: The Green Party of Aotearoa New Zealand)

Log stacks fumigated with methyl bromide at Wellington's CentrePort in February 2008, came under

the spotlight, after toxic gas plumes were released to the atmosphere. Stefan Browning, Soil & Health Association spokesman said, "Capture and destruction' technology that filters out methyl bromide gas from fumigation and other alternatives for phytosanitory fumigation such as heat treatment, are urgently required". (Courtesy: Scoop Independent News)

(Photo courtesy: Stored Grain Research Laboratory, CSIRO.)





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Awards

12th Annual Lloyd's List DCN Shipping Awards

Nordiko is proud to announce that it has won the "Achievement in Safety and Environmental Protection Award" at the 12th Annual Lloyd's List DCN Australian Shipping & Transport Awards, held on Thursday, 29 November 2007, in Sydney.



Nordiko won the Award for its work in developing and marketing innovative technology for fumigation and ventilation applications, which result in better environmental and health and safety outcomes.

Nordiko's systems have been adopted in Australia by organisations such as Australian Customs, who ventilate shipping containers, ren-

dering them safe for inspection, and overseas markets such as Belgium—where it is now mandatory to recapture the main quarantine fumigant methyl bromide, which is a potentozone depleting substance.



Red Imported Fire Ant

(Solenopsis Invicta)

Invicta is one of about 280 species of the genus Solenopsis and one of the most aggressive ants. In the absence of any controls, it can become readily established.



Australia experienced an incursion of Red Imported Fire Ant in 1999/2000 in the Brisbane urban area and Fishermans' Island, the container port servicing Brisbane.

Once alerted to the fact that these ants were present, DPI Queensland immediately began planning a strategy to eradicate them. They have been very successful in their efforts and in the space of six years managed to eradicate approximately 95% of the established colonies. This came at a cost of A\$179,000,000.

Research by the CSIRO has shown that fire ants have the potential to inhabit most of the major coastal areas of Australia, and extensive areas of the tropical north. While fire ants have not yet been found in Australia's agricultural areas, they have had a significant impact on agriculture in the USA and cost the US agricultural industry US\$1.2 billion per year.



As the picture (left) illustrates, the effects on humans can be very painful. When you disturb a fire ant nest, they swarm out in large numbers. They can crawl onto your body in tens or even hundreds without you being immediately aware. They then tend to sting all at once, with each ant stinging several times. In very rare cases these stings can be fatal. This occurs if someone has an allergic reaction

(anaphylaxis), which unfortunately cannot be ascertained until you receive your first sting.

(Article: Ken Brash)

Asiaworld Shipping Services

Established in 1983, Asiaworld Shipping Services is a wholly Australian owned company, specialising in providing clients with a complete shipping service. Nordiko Quarantine Systems is a wholly-owned subsidiary of Asiaworld.

With offices in Sydney, Brisbane, Melbourne, Adelaide and Fremantle, Nordiko has full access to a wide range of multi-skilled staff and resources.

Check out Asiaworld's website: www.asiaworld.com.au

