



Intreso Group
International Treatment Solutions



CASE STUDY
PORTLAND, AUSTRALIA

SHIPHOLD TIMBER FUMIGATION

PORTLAND, AUSTRALIA CONTROL



EDN™

In late 2020, Intreso conducted a successful application of Ethanedinitrile (EDN™) for the export phytosanitary treatment of logs at Portland Port, VIC, in cooperation with timber export and distribution company, Wood Based Products Pty Ltd.

Fumigation has become the accepted practice to treat timber and wooden structures (ISPM, 2009). Fumigants can reach the surface and penetrate into the timber and logs that other pesticides do not easily reach.

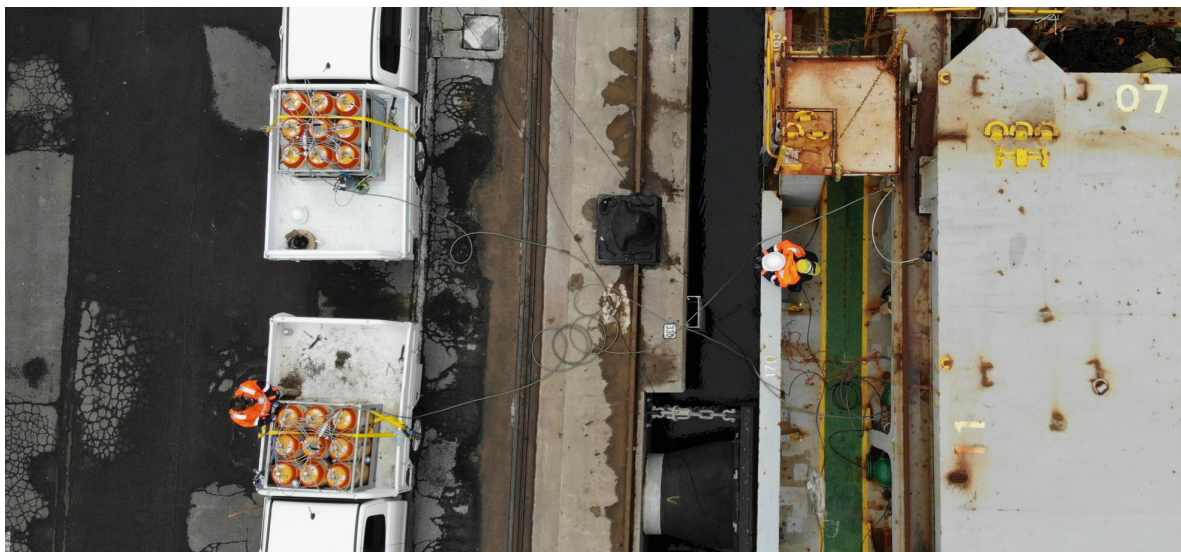
Methyl Bromide, an ozone-depleting substance and greenhouse gas, has been used for the phytosanitary treatment of export/import timber and logs for decades.

There is very limited efficacy data available to support the continued use of Methyl Bromide. Several control failures have been reported recently by the trading partners, which resulted in a suspension of timber exports from Australia.

Methyl Bromide also causes irreversible damage to users' central nervous system and the general public who are chronically exposed (Park et al., 2020) to this substance even at low concentrations.

“The Intreso Team were timely in communication and in a manner that ensured technical matters were clear to understand”

–Andrew Wye, Wood Based Products.



Potential alternative fumigants such as phosphine and sulfuryl fluoride are available. Phosphine is least effective on the most wanted quarantine pests such as pinewood nematode (Seabright, Davila-Flores, Myers & Taylor, 2019) hence it is not suited for biosecurity treatment.

Sulfuryl Fluoride (SF) also has a long history for the control of wood-destroying termites in structures but is not as useful in biosecurity/quarantine settings as it has lower toxicity to the egg stage of insects. Sulfuryl Fluoride is least effective in controlling the Pinewood nematode (Seabright et al., 2019).

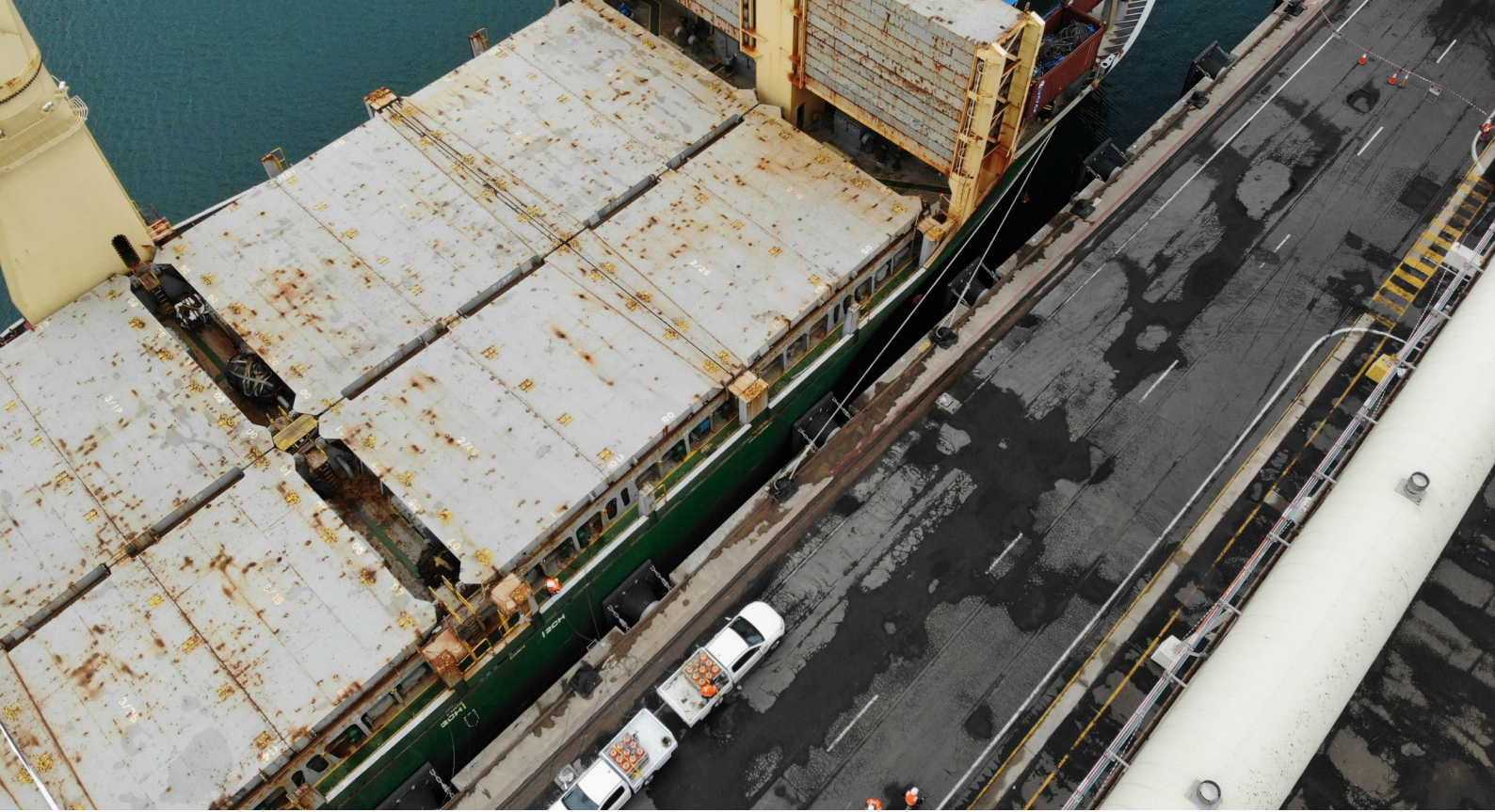
“Fast, accurate, smooth, and well organised = professional”

–Andrew Wye, Wood Based Products.

EDN™ is a rapid-acting, broad-spectrum, highly effective alternative to Methyl Bromide for control of insect pests, diseases and nematodes in timber products ranging from fresh logs to sawn timber.

The benefits of EDN™ include better penetration characteristics, a net-zero environmental impact, and a superior health and safety profile. EDN™ has been considered a suitable alternative by CSIRO Australia, the United States Department of Agriculture (USDA) and New Zealand Plant and Food.

EDN™ has been awarded the Solar Impulse Sustainability Award in 2020 as a sustainable solution aimed at improving environmental health and safety.



EDN™ application is simple and straightforward, using the same equipment and methodology as current treatments, except it doesn't require a heating apparatus used for Methyl Bromide.

EDN™ is highly efficacious against the most wanted quarantine pests around the world like Pinewood nematode (*Bursaphelenchus xylophilus*), Asian longhorn beetle (*Anoplophora glabripennis*) European house borer (EHB) *Hylotrupes bajulus*, Sudden oak death *Phytophthora ramorum* Oak wilt - *Ceratocystis fagacearum*.

“WBP is happy to recommend Intreso to be considered as a part of any fumigation solution”

–Andrew Wye, Wood Based Products.

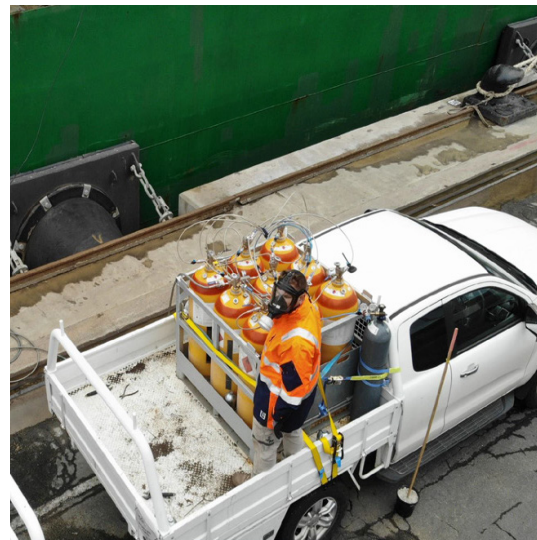
In order to generate data for registration purposes to allow for the large-scale commercial treatment of in-hold timber and logs bound for export from Australia, Intreso – under Australian Pesticide and Veterinary Medicine Authority (APVMA) trial permit (PER88433) - worked with a reputable forestry exporter, the Local Port Authorities, and State Emergency Service providers to undertake treatment of in-hold export timber and logs from Portland in South Eastern Australia.



“Highly professional team who helped WBP and its stakeholders understand EDN™”

–Andrew Wye, Wood Based Products.

Treating timber bound for Malaysia, the treatment was undertaken at 100 grams per cubic metre for a 24-hour treatment period, alongside that of Methyl Bromide which was being used in other holds of the vessel as a comparison.



Not only was the time of application reduced, but the ventilation time was also decreased – saving time and subsequently port fees for the duration the ship would need to be anchored at port.

EDN™ treatment was successful, and a clearance certificate was issued by the Department of Agriculture and Water Resources to export the treated timber to Malaysia.



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The Intreso Group provides global trial support, application and product development consulting, as well as registration and business and commercialisation development support for suppliers, distributors, and customers.

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