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Four wins for PVC recycling in hospitals in 2016!

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The early adopter hospitals, and news on overseas trials.

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Clear pointers on what to recycle and what to discard for good collections, patient privacy and worker health.



newsletter

January 2017

Winning the Victorian Premier's Sustainability Awards 2016 in Healthcare

['Reducing Waste One Dialysis Patient at a Time'](#)

Congratulations to Melbourne Health for its winning entry that included PVC Recycling in Hospitals! Click the link above to read about their inspiring achievements.

The Vinyl Council of Australia - a finalist too!

'From Local to Global', our entry in the Victorian Premier's Sustainability Awards 2016 traced the trials and joys of securing the future of this recycling program with partners at Western Health, Baxter Australia and Welvic Australia.

We were delighted to share being finalists with recycling champions at Western Health as well as the ultimate winners at Melbourne Health.

International PVC Sustainability Award goes to RecoMed

Continuing the winning streak, UK-based Axion Consulting won the 2016 [INOVYN Sustainability Awards](#) for its RecoMed PVC take-back scheme. This program is an adaptation of our ANZ program (see next page). Congratulations again!

Grant for reprocessing equipment

Welvic Australia has been awarded a \$100,000 grant from the Australian Packaging Covenant and Sustainability Victoria to upgrade plant for more efficient reprocessing of PVC medical waste and improved capacity. It will allow the PVC Recycling in Hospitals program to continue to grow!

“ This is a great example of what we can achieve – with this grant, Welvic can take what was once 'waste' and turn it into something valuable and new.”

Stan Krpan, CEO, Sustainability Victoria

90 local and going global

Western Health Anaesthetist, Forbes McGain is a great champion for innovation and sustainability. It was his idea in 2009 for Western Health to partner with the Vinyl Council of Australia to see if any PVC could be recycled from hospitals. A team was formed with reprocessors and manufacturers to start the first trials of recycling PVC medical products in the world.

‘We all worked together to make this recycling program a success’ said McGain.

Now 90 hospitals across Australia and New Zealand recycle their PVC, engaging five collectors, three reprocessors, and numerous manufacturers.

The early adopters (pre-2014) include:

- Western Health (4 sites)
- Liverpool Hospital
- Auckland City Hospital
- Auckland Green Lane
- Frankston Hospital
- Monash – Dandenong
- The Bays Mornington
- DHHS Bacchus Marsh
- Warringal Private
- Rosebud Surgicentre
- Ramsay Linacre Private
- Heidelberg Repatriation
- Melbourne Eastern Angliss Health
- Yarra Ranges Health
- Brunswick Dialysis
- Coburg Dialysis
- Royal Melbourne
- Dunedin Hospital

A full list of participating hospitals is published on the VCA website.



“ If correctly separated in hospitals, this PVC is so good it can be easily made into quality product and given a new long life. ”

Now recycling in UK Hospitals

After learning about the PVC Recycling in Hospitals program in Australia/New Zealand, the PVC industry in the UK worked with recycling experts to develop a trial in the UK.

Today, seven National Health Service hospitals are running PVC RecoMed trials coordinated by the British Plastics Foundation in conjunction with Axion Consulting and funded by VinylPlus, a voluntary initiative of the European PVC industry.

The average UK hospital uses 12,000 oxygen masks per year. It is estimated 2,250 tonnes of these masks, oxygen tubing and anaesthetic masks alone could be recycled each year.



There are around 1,500 hospitals in the UK, performing some 8 million anaesthetics each year. Many of those use single use items that could be recycled. RecoMed is just the beginning.

Frequently asked questions



Why a separate collection for PVC medwaste?

Unlike household kerbside-collected, comingled recycling bins, the bins of hospital separated PVC go direct to a specific PVC reprocessor, not to a third-party sorter. By separating the waste at source – in the hospital – we can maintain higher quality collections of PVC, with little contamination by other materials and remove the need for more expensive sorting systems that often result in material being shipped offshore for recycling. We want to recycle the material here in Australia and New Zealand.

What happens to our PVC material?

The PVC medical waste collected from hospitals is checked for contamination (bottles, elastic straps, paper, non-PVC plastics etc). Such contamination either has to be removed, or the entire bag of waste is returned to the hospital or sent to landfill as it unable to be reprocessed. Suitable PVC waste is shredded and rinsed. The flakes are then dried and granulated finely. It may be pelletised as PVC compound, with colours added if required, and is sold to Australian manufacturers. It is used in durable gumboots, industrial hose, and playmats for playgrounds.

Why are there price variations for collections?

The cost of collecting and transporting PVC medical material may differ depending on hospital location, collectable volumes from the hospital and in the vicinity, distance to recycler, existing arrangements with waste contractors etc. In some cases, PVC product take-back is included as part of the contract for supply of product into hospitals, to provide incentive for hospitals to recycle PVC.



Management – financial, social and environmental benefits

Financial: Traditionally healthcare facilities pay for every kilo of waste collected and sent to landfill. They may also pay for hire of waste bins and per 'bin lift'. By implementing PVC Recycling in Hospitals, hospitals can cut the weight and the number of bins heading to landfill, reducing landfill disposal costs and gaining financially.

Social: Countless surveys show that recycling is the most popular of all sustainability actions, and people feel better about their workplace when they can recycle. For many hospitals, introducing the PVC Recycling in Hospitals program is their first sustainability step, and for most it injects a positive team spirit. Management also appreciates being able to report on recycling in annual reports.

Environmental: Many things in hospitals are designed for single use. This means they have a short life. Recycling reduces the environmental impact because the material gets a second life, replacing virgin material that would otherwise be used. Recycled PVC's primary energy demand is up to 90% lower than virgin PVC production, reducing the carbon footprint of new products, as well as cutting waste to landfill.

Recycling provides more jobs than does landfilling. All PVC collected from hospitals through this program stays in Australia and New Zealand providing employment opportunities and strong futures for collectors, reprocessors and manufacturers.

>> READ MORE ONLINE AT WWW.VINYL.ORG.AU

TIPs for success

Getting management on board

Options include:

- Competition – show them the list of hospitals already recycling their PVC!
- Financial – show them the comparative cost of waste to landfill and PVC recycling
- Easy viewing – show the short video '[An Australian and NZ Innovation](#)' featuring experienced managers who advocate the program
- Q&A with a peer – contact the VCA to arrange a conversation with a PVC Recycling in Hospitals champion in another hospital.



Alex Cockram, CEO Western Hospital

Run training videos for staff before and immediately after starting the program

Seeing is believing. Free online videos have been developed to help educate and train staff on an ongoing basis. They are a great tool to share at in-service briefings on how to set up recycling and handle the material.

Keep scissors handy in the sluice area

Make it is easy to cut off the ports and other hard plastic bits from the IV bags and masks by keeping a pair of scissors and pliers (for the nose clip) over the sink next to the PVC recycling bin.

Reward good behaviour

Designate a few people as 'bin champions' for the first few months and give them a dinner voucher in thanks. Rotate the roles and discuss at staff meetings what works and why.



FAST FACTS

- Australian Hospitals produce 260,000 tonnes of waste per annum, and it is estimated that PVC medical products account for 5-10% of that.
- 50 million IV bags are used per year in Australia.
- Our target is to recycle around 2,000 tonnes per annum in Australia through this program.
- A 300-bed hospital generates 2,500 kg of recyclable PVC per year.

Advance sustainability while controlling costs



Forthcoming Events:

[PVC 2017, 25-27 April, Brighton UK](#)

The VCA CEO Sophi MacMillan will present at the tri-annual global PVC conference on the Australian industry's PVC recycling projects and to a British Plastics Federation recycling conference, specifically on PVC Recycling in Hospitals.

[Health and Environmental Sustainability Conference, 28 April, Melbourne](#)

Australian Nursing & Midwifery Federation, Melb Convention Centre.

['How Green is your Theatre'](#) Join VCA's Helen Millicer, Western Health's Forbes McGain and Brisbane Princess Alexandra's Stephen Fung, for a Masterclass 12 May, Brisbane. Annual Scientific Meeting, Aust & NZ College of Anaesthetists.

The Good, the Bad and the Ugly! What goes in your recycling bins

GOOD = three PVC-made items only: **IV bags, face masks and oxygen tubing.**

Hospitals use a lot of these items. Attachments like the IV port, nasal clips, elastic straps must be detached so we are left with a good quantity of transparent flexible PVC material. That is all that should be put in the PVC recycling bin.

BAD = hard or coloured plastics, metals, elastic, bottles, take-away cups do not put these in the PVC Recycling bin. Also remove anything from the three PVC items that you cannot see through. This means cutting away the elastic, ports, clamps, nose clips. If you don't have time (that's understandable), please just throw the whole item into the general waste bin.

UGLY = blood lines, blood bags, syringes, sharps, patient ID labels. Follow stringent clinical or infectious waste guidelines — anything with blood, tissue or cytotoxic drug contamination must be placed in **infectious waste** bins not recycling. Otherwise it endangers our collectors and manufacturing staff. Patient labels should be removed or effaced to avoid compromising patient privacy.

All recycling bins of good PVC that contain any item of clinical waste, must be sent away for clinical waste disposal. This requires more transport and is a waste of effort, opportunity and good PVC materials. Please recycle PVC right.



To contribute useful Fast Facts or Top Tips to help others and share stories, contact us at the Vinyl Council. To find out more about this product stewardship program or to get involved, contact us:

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Thanks to all who recycle in hospitals. Great work.

A special thanks to our wonderful partners in our suppliers, reprocessors and collectors, in particular VCA members Baxter Healthcare and Welvic Australia.

Recycling would be impossible without all participants working to ensure this material goes to a better place than landfill.