



# newsletter

July 2021

**As Australia grows increasingly accustomed to the new normal of Covid-19, PVC recycling in healthcare has been able to return to almost full swing with record participation and increasing collection numbers. We extend our thanks to everyone for their continued involvement and passion for the program and look forward to seeing what can be achieved for the remainder of 2021.**

## Recycling during a pandemic

The Covid-19 pandemic has adversely impacted both healthcare waste generation and recycling efforts. We are pleased to report that the PVC Recycling in Hospitals program has been able to continue throughout the pandemic in every state bar Tasmania, which halted collections for a period but has recently re-commenced.

Collections depended on the policies of each healthcare authority and facility as to how plastic waste would be managed during the pandemic. There continues to be an expectation that infectious waste protocols will be implemented, nevertheless non-infectious, source-separated PVC waste can still be collected and sent for recycling.

A reminder that under government protocols, it is particularly essential that your hospital's waste streams are properly segregated, packaged, labelled, handled and transported to minimise risk to waste handlers and the community of the transmission of infectious diseases. All sharps and other waste containers should meet the specific Australian Standards requirements, and recycling should be stored in a dedicated storage area to ensure there are no environmental impacts.

**In 2020:**  
**129 tonnes**  
**6.45 million IV bags**  
**31 new hospitals**

## Collections bouncing back!

Despite the impact of the pandemic and program suspensions in Tasmania, the program collected 129 tonnes of PVC recycling across Australia during 2020, which was 11% down on the 145 tonnes collected in 2019. Positively, there was a 14% growth in facility participation numbers with 31 new hospitals joining across the year, taking the total number to 248 Australia-wide at the end of 2020. Seven more hospitals have since joined the program so far this year (2021), increasing participation numbers to stand at 255 currently.

Six states have seen an increase in hospital involvement in the program, with both Victoria and NSW having over 10 new facilities join. Despite some ongoing contamination issues, as hospitals around the country return to a level of normality, the program looks set to continue growing through the remainder of 2021 with several

new hospitals expressing interest in joining the scheme!

Waste management collection and disposal company, Cleanaway Daniels, has been appointed by our program partner, Baxter Healthcare, as the new collection manager of the program across South Australia, New South Wales and Queensland. Aces Medical Waste continues to oversee program collections in Victoria, Stateline in Tasmania and Suez in Western Australia.



*A typical PVC recycling bin.*

## New target: 50 Million IV bags!

Following the continued growth and success of the PVC Recycling in Hospitals scheme, during the second half of 2020 the VCA, Welvic and Baxter Healthcare agreed to a new long-term target for the program. Over a five-year period until 2025, the program aims to recycle the equivalent of 50 million IV bags within Australia, with recovered volumes measured annually at calendar year end.

While 2020 volumes were down on the previous year due to the Covid-19 pandemic, the 129 tonnes collected is equivalent to 6.45 million IV bags. The continued increase in hospital participation and collection efforts into this year has ensured that the 50 million target remains in reach with recycling volumes steadily increasing back up to pre-Covid levels again through the early stages of 2021.

In order to achieve the target, the focus will be on increasing collection at existing hospitals by ensuring all relevant departments within facilities are implementing the program, and importantly reducing contamination.

## Who can join the program?

If your facility is interested in joining the program, please contact Vinyl Council Australia to obtain the relevant information on how to become involved. Please note, in order to join the program participating facilities must be able to supply at least 2 full 240L bins of PVC per month – any less than this amount is not economic to transport and results in material sitting for too long in bins leading to potential contamination.

## Dealing with contamination

Contamination continues to be an issue in collections, with an overall contamination rate of 12% recorded through the latter half of 2020. High amounts of contamination by non-PVC items and foreign matter leads to collections having to be disposed of as contaminated medical waste, rather

## Recycling PVC: which products?

Oxygen masks and tubing and Baxter IV fluid bags from theatres, recovery wards, intensive care units, dialysis and day procedure units.

**Place these items in dedicated, clearly marked PVC recycling bins.**

Separating PVC products from non-PVC products at the source of waste generation leads to a higher volume of waste being diverted from landfill and produces a higher quality of PVC recycle by minimising contamination from other materials.



*Only these items are acceptable in the PVC recycling bin.*

than recycled, which is expensive. In some instances, bins may be returned to the healthcare facility. It is therefore crucial that avoiding this issue is seen as a major focus for participating facilities and hospital staff involved in the program. The above graphic can remind staff which items belong in the PVC recycling bins in order to avoid contamination from the general waste stream.

Facilities using both PVC and non-PVC IV bags have previously been found to have higher contamination rates, as non-PVC bags tended to be added to the PVC recycling bins. Reminding the staff with a focus on recognising different bag types and the importance of clearly labelling collection bin lids with the PVC recycling sticker, will help to counter ongoing contamination issues.

### Top Tips to avoid contamination:

- ★ Full bins could be taped closed when awaiting collection to prevent general rubbish from being added to them
- ★ Remove elastic straps and metal clips from oxygen masks before recycling them
- ★ Implement a 'spot checker' who can monitor bins and remove any obvious contamination

## Recycling reminders

The VCA has developed an educational 'tent card' booklet which can be provided to hospital staff rooms. This sets out simple reminders on how to implement the program properly and avoid contamination in the bins. Please contact the Vinyl Council if your facility wishes to enquire about receiving these handy tent card booklets. We also welcome any feedback on additional resources for further education on the program that you think might be beneficial!



*'Tent' card to help educate and reinforce correct collection methods of PVC products.*



### Recognition of Participation

..... Hospital

The Vinyl Council of Australia would like to thank ..... Hospital and your Operating Theatre / Dayroom / ICU or ..... Ward for the recycling of PVC medical devices.

These products - oxygen masks, oxygen tubing and Baxter's IV bags - are made from quality PVC.

The PVC Recycling in Hospitals program is aimed at collecting used PVC medical products for recycling into locally made, useful, new products such as garden and industrial hoses and flooring.

Recycling PVC diverts waste and resources from landfill and reduces the consumption of energy feedstocks in the production of new products.

Your support for this initiative is very much appreciated.



Vinyl Council of Australia

Name: ..... Hospital & Health

Date: .....

100 BULLOCK STREET, SYDNEY NSW 2000 AUSTRALIA

## Setting the pace

Despite average recycling numbers being down due to the impact of Covid-19, in 2020 Southern Highlands Private Hospital in NSW recovered an amazing 303 kilograms of PVC waste as part of their involvement in the program. This is enough to make around 2.5km of 100% recycled garden hose!

Their 25% annual increase in recycling volume was amongst the highest in NSW, and the hospital was presented a sustainability leadership award for their efforts by the General Manager for Baxter Australia and New Zealand, Steven Flynn. The hospital plans to further expand their PVC recycling to more wards this year and is also beginning to recycle some aluminium gas bottles with Baxter Healthcare.



The team at Southern Highlands Hospital receive recognition from Steven Flynn.

Operating Theatres Nurse Unit Manager Annie Dean said the whole team at Southern Highlands Private Hospital had embraced the PVC recycling program. "We have little recycling bins that are specific for each theatre and we have had education sessions to teach staff what to do," Ms Dean said (Ramsay Health Care).

## From healthcare to gumboots!

Collecting waste is one thing; ensuring the recovered material is used productively in new products is another. One company who is now supporting the PVC Recycling in Hospitals program is Bata Australia, who have been using some of the recovered PVC waste from the program in their new gumboot ranges. Bata says they have made a conscious effort to reduce waste generation through embracing the use of recycled PVC content in their gumboot production process to make brand new Bata gumboots.

In their organisation-wide commitment to supporting a circular economy, Bata has also aimed to have zero used or worn PVC gumboots being disposed of to landfill. In collaboration with distributors, they are working to set up recycling disposal bins nation-wide for consumers to easily recycle their Bata gumboots at the end of their life cycle for re-use in new boots and other PVC materials.

## Show off your efforts!

The Vinyl Council has produced a 'Participation Certificate', which can be publicly displayed on noticeboards or prominent viewing points to recognise a facility's engagement in the program. Once your facility has collected at least a tonne or been consistently participating for one year, let us know if you would be interested in having a certificate issued with the hospital and department details to signify your involvement in the program.

## PVC in the pandemic

PVC has been playing a particularly key role in healthcare throughout the ongoing Covid-19 pandemic, and perhaps no more so than in the development of a personal ventilation hood used for hospital beds to help contain the droplet spread of Covid in intensive care units. The transparent, movable personal ventilation hood sucks air away from the patient while effectively creating a droplet containment barrier, and has been a collaborative design by the University of Melbourne and Western Health.

The excellent transparency of the PVC in the hood allows healthcare workers to interact with their patients and get a visual sense of their condition while importantly reducing the risk of infection, while PVC's low cost and durability has made it readily accessible and suitable for low to middle income countries. The hoods are so far proving to meet a need, and have recently been exported to the UK for use in Covid wards in their busy hospitals.



The PVC ventilation hood in action (Credit: Penny Stephens).



## Overseas Initiatives

### RecoMed update

Having been particularly hard hit by Covid-19, UK's equivalent program, RecoMed, made the decision to put collections on hold through the majority of 2020. During that time, they were hard at work redesigning the scheme to ensure that it could be expanded in a manner that limits climate impact and enables more hospitals to be serviced.

Now in the process of fully re-opening the program to participating hospitals, RecoMed have asked hospitals to engage with their waste management service providers to investigate how to utilise existing transport movements to collect the PVC materials and consolidate it into larger loads.

RecoMed has also partnered with the New Futures Network to provide sorting and recycling facilities closer to the highest producing hospitals, minimising transport distances and associated carbon emissions while also condensing program resources to most efficiently service the scheme.



VinylPlus Med will recycle medical waste in Belgium (Credit: Plasteurope).

### VinylPlus Med launch

In February of this year a new collaborative project *VinylPlus Med* was launched in Europe, which aims to grow sustainability in healthcare through the recycling of discarded PVC medical devices across the continent. This initiative will bring together hospitals, waste managers, recyclers and the broader PVC industry in combatting the wastage of single-use PVC plastics in European healthcare.

While plastic medical devices such as the personal ventilation hood have played an important role during the pandemic, the surge of single-use plastic devices in the prevention and control of Covid-19 in hospitals has clearly spotlighted the challenges of properly managing and discarding items after use. Efficiently sorting and recycling the non-infectious plastic waste should significantly reduce the environmental impact and operational costs of participating European hospitals. While the program plans to expand more broadly across Europe over time, Belgium has been chosen as the pilot project for the scheme, partnering with *Renewi* as the waste manager and *Raff Plastics* as the major recycler. All Belgian *VinylPlus Med* partners are located within a radius of 120km from each other in order to minimise transport distances and mitigate carbon footprint.

Please contact the Vinyl Council Australia if you need any further details or assistance with PVC Recycling in Hospitals. And don't forget there are videos that may be of help in your education and training sessions, including the useful 'Tips and Tricks'.



Thanks to all who recycle PVC in hospitals. Great work!

A special thanks to our wonderful partners in our suppliers, reprocessors and collectors, in particular VCA members Baxter Healthcare, Welvic Australia, Aces Medical Waste, Cleanaway Daniels, Suez and Stateline. The program would be impossible without all participants working together to ensure the value of PVC can be retained in a circular economy.



To contribute useful Fast Facts or Top Tips to help others and share stories, or to find out more about this product stewardship program and how to get involved, contact us: **Vinyl Council of Australia ACN: 083 012 533, 1.02 Junction Business Centre, 22 St Kilda Rd, St Kilda, Victoria, Australia, 3182, T: +61 3 9510 1711 E: info@vinyl.org.au W:www.vinyl.org.au**