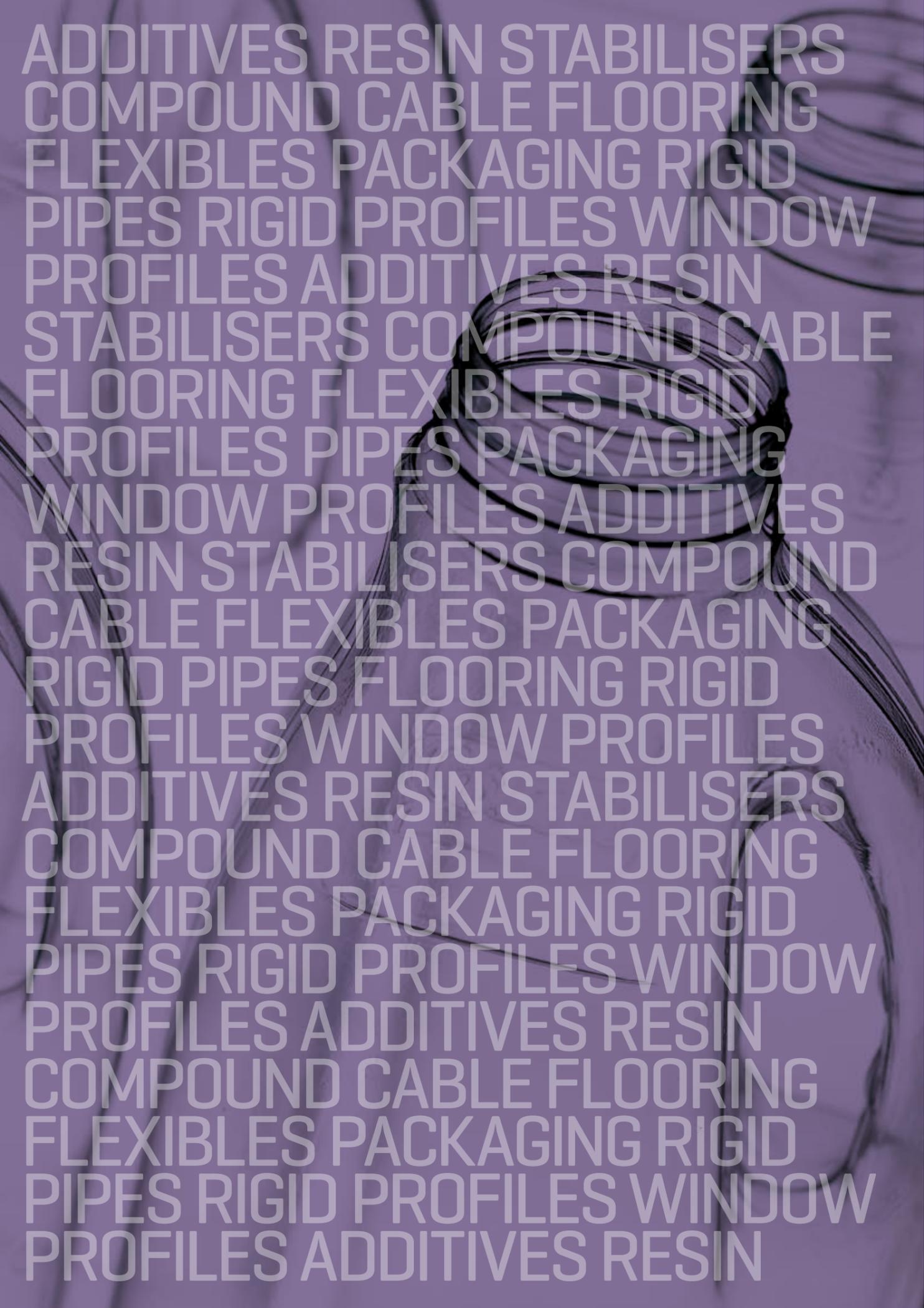


PVC PRODUCT STEWARDSHIP PROGRAM

The annual progress report for the Australian PVC industry's
Product Stewardship Program

2013





PVC
PRODUCT
STEWARDSHIP
PROGRAM
2013
ANNUAL
PROGRESS
REPORT

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Current Signatory Status	A total of 35 Signatory companies reported their performance against the Program. Eight met all relevant commitments in 2013. The Program welcomed three new Signatories in 2013.
Notable compliance improvement	<ul style="list-style-type: none"> > Compliance to commitments on E-PVC Production has significantly improved from 2012. > Compliance requirements under the Energy and Greenhouse Gas Emissions charter expanded in 2013 following its introduction in 2012; however, these have proven difficult to fully address by Signatories within the year.
PVC recycling	A PVC medical waste recovery program was launched in 2013. It has grown from one hospital to over 19 healthcare facilities by end of 2013 and interest continues to grow.
PSP Excellence	Awards were introduced for Signatories fully compliant with the Program for the previous reporting year.
Program milestones	Program milestones were set to measure the progress of the Program as a whole. The target is for 80% Signatories to be 80% compliant, or above. In 2013, 63% of Signatories were >80% compliant [see Figure 1 opposite].
5-year review	A review of the effectiveness of the Product Stewardship Program over the past five years was published in December 2013. It identified future challenges for the Product Stewardship Program and proposed recommendations for on-going Program development. You can find the report and its recommendations at http://www.vinyl.org.au/resource-centre/product-stewardship-progress-reports .
New / Updated commitments	Complete revision of the 'waste management' commitment is underway. It will now be referred to as the 'resource efficiency' commitment, and will include mandatory reporting and formal targets for the coming years.

Figure 1: Signatory compliance performance: percentage of relevant commitments fully complied with by Signatory company

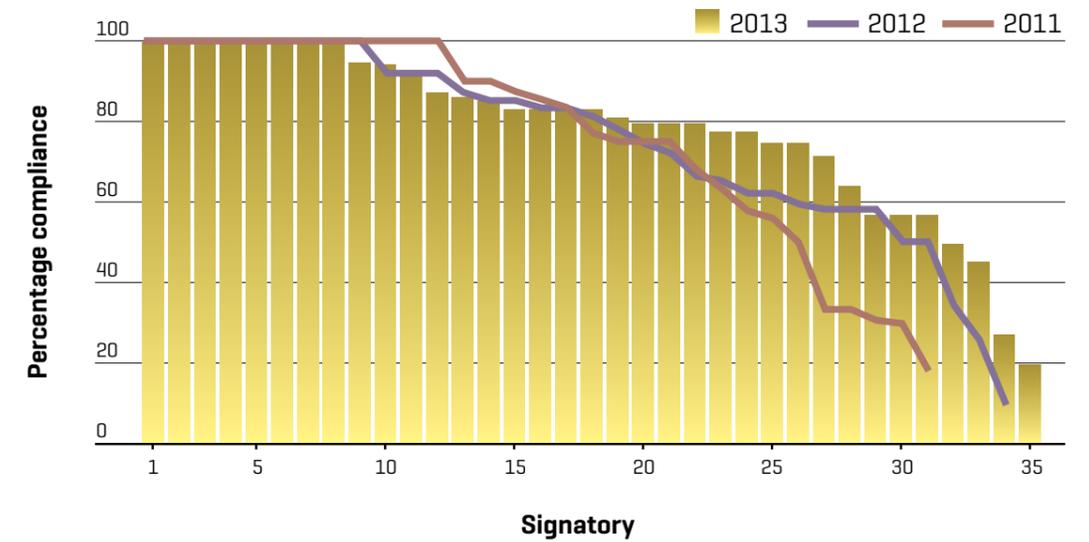
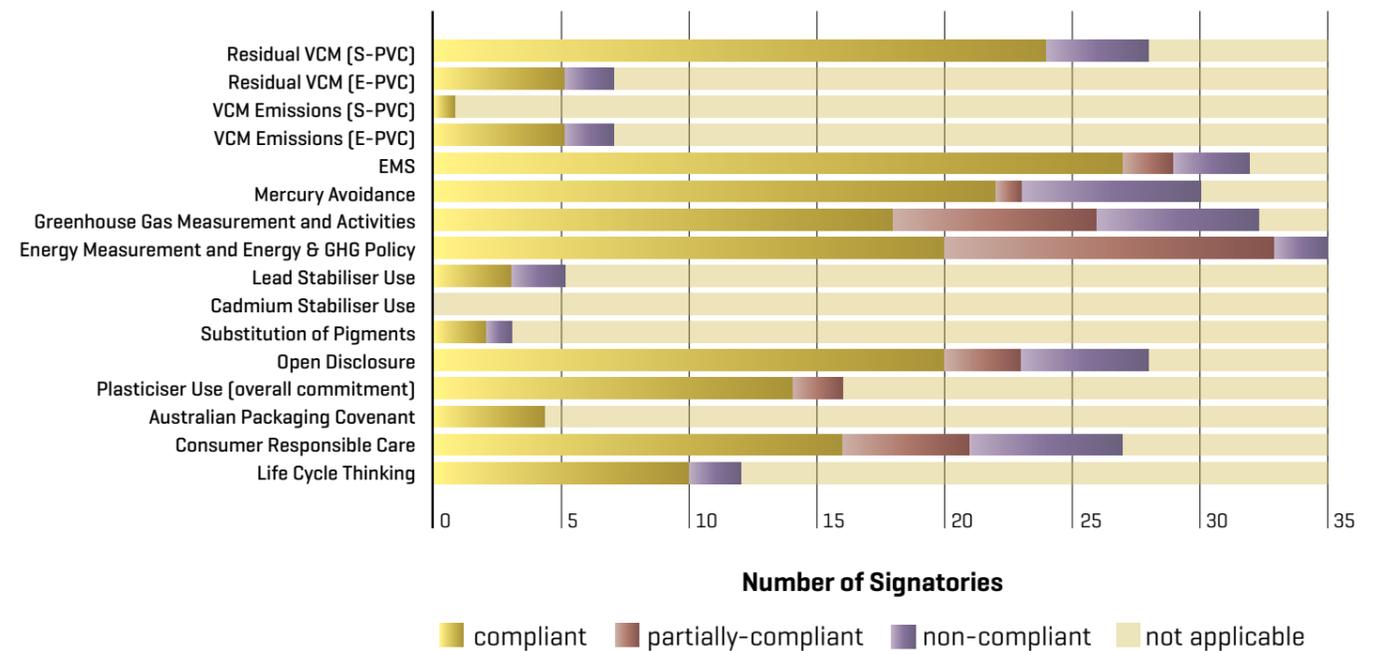


Figure 2: Number of Signatories compliant with key commitments





RECYCLING IV BAGS AT WESTERN HOSPITAL

2013 Summary of Commitments

1. Production and Storage

Suspension PVC [S-PVC]	Residual VCM in finished S-PVC < 1 ppm in 99% of batches tested. VCM emissions from resin manufacturing < 30g/t S-PVC.
Emulsion PVC [E-PVC]	Residual VCM in supplied E-PVC resin < 1 ppm. VCM emissions from resin manufacturing < 1000g/t E-PVC.
Environmental management systems [EMS]	Comply with or exceed the industry minimum acceptable standard. Embed Program commitments into companies' Business Management Systems (BMS).
Mercury avoidance	Ensure mercury avoidance in PVC supply chain, for products marketed in Australia.
Energy efficiency and greenhouse gas [GHG] emissions*	Policy addressing energy and GHG management and energy usage in place. Activities undertaken related to energy and greenhouse gas emissions management.

2. Use of Lead and Cadmium

Code of Practice	Adhere to PVC industry Code of Practice.
Cadmium and lead stabiliser use	Avoidance of use.
Pigment	Substitute lead, cadmium & hexavalent chrome pigments, where technically feasible alternatives are commercially available.
Other additives	Monitor any pertinent overseas developments.
Open disclosure	Provide a list of additives used in PVC products or components to stakeholders upon request.

3. Use of Plasticisers

Phthalate plasticisers	Implement the industry Policy on Plasticiser Use. Report plasticiser used. Share relevant information with NICNAS.
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4. Waste Management

Australian Packaging Covenant [APC]	All relevant** Signatories to submit waste management Action Plans under the APC and maintain compliance with APC obligations.
Recycling	Monitor overseas developments.
Consumer responsible care	Provide information to end consumers on management options for end-of-life PVC.
Life cycle thinking	Consider whole-of-life environmental impacts in the development of new products.
Waste management reporting	Optional reporting encouraged.

5. Research

Research	Monitor national and international scientific research and share pertinent information with Signatories and stakeholders.
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6. Public Reporting

Performance against commitments	Publish annual performance report by 30 April following year.
PVC life cycle impacts	Publish annual product stewardship issues review.
Review implementation and effectiveness of the Product Stewardship Program.	Publication of a 5 year progress review in 2013.

* Compliance requirements expanded in 2013 following its introduction in 2012.

** Defined as companies operating directly in the PVC packaging production supply chain.

Commitment 1: Production and Storage

Addressing environmental, health and safety issues from the manufacture and storage of PVC products, including emissions management, Environmental Management Systems implementation, and accounting for the upstream supply chain and its potential impacts.

Residual Vinyl Chloride Monomer

Two of the non-compliant Signatories who obtained the correct data reported that their supply of resin exceeded the 1 ppm requirement.

Difficulties in collecting the relevant data from suppliers of E-PVC in particular, and therefore being unable to report, accounted for the remaining non-compliance. To assist Signatories with European supply chains, the VCA collected European industry data from the European Council for Vinyl Manufacturers (ECVM). A solution is yet to be found for Signatories with non-European suppliers.



Manufacturing Emissions

VCM emissions from Australian produced S-PVC were 24.6 g/t PVC for the period covering financial year 2013–14.

A key challenge for Signatories importing finished products to demonstrate compliance continues to be in securing the information from their upstream supplier in often complex value chains. The VCA collected European E-PVC manufacturing data from ECVM, to assist Signatories. A solution is yet to be found for Signatories with non-European suppliers.

LOCAL DEVELOPMENTS

- > The Green Building Council of Australia (GBCA) has recently updated its Best Practice guidelines for manufacturing PVC, to include a target for VCM emissions during E-PVC production of less than 500g/t of E-PVC measured on a 12 months basis (1).
- > Australia's industrial chemicals regulator, NICNAS, completed a Human Health Tier II Assessment for vinyl chloride (VCM) in 2013. The findings note that Australia's current exposure standard of 5ppm over 8 hours' time weighted average is higher than other jurisdictions, and recommends completion of a Tier III assessment examining the adequacy of the current exposure standard. The local resin manufacturer Australian Vinyls operates to an internal standard of 1ppm (2).

ACTION 2014

Explore ways of facilitating data collection from the supply chain.

Review and distribute EMS risk matrix and explore interest for an EMS workshop.

Release a greenhouse gas emissions calculation tool.

Explore potential interest for additional workshops to be delivered on energy efficiency and GHG management.



Environmental Management Systems (EMS)

In 2013, 64% of Signatories had compliant EMS's in place. The commitment is still seen as an issue for small organisations such as trading companies to meet. An EMS risk matrix tool was developed in 2013 to assist these Signatories move forward in 2014. It is aimed at helping them to complete an appropriate streamlined EMS for their Australian operations.

Mercury Avoidance

Based on the information reported by Signatories, it is estimated that half of the non-compliant Signatories were unable to collect information on the use of mercury-based processes from their upstream supplier, while the other half was able to provide an estimate of the percentage of their supply chain that is using mercury-free processes. VCA provided relevant international information allowing Signatories to identify compliant production sites more easily.

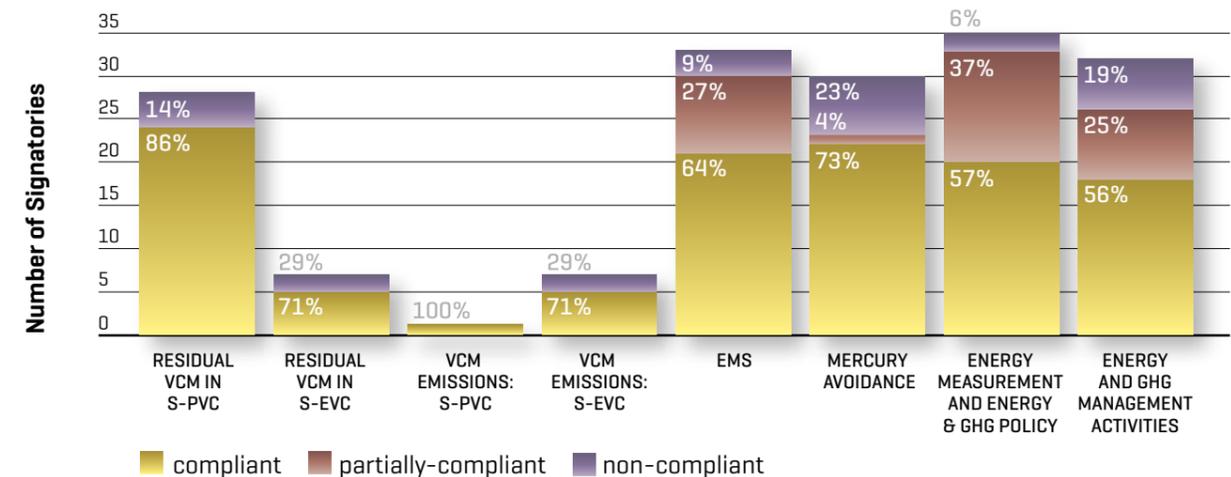
Energy Efficiency and Greenhouse Gas Charter

Now in its second year of implementation, Signatories are gradually moving towards compliance with 57% of Signatories reporting having both a policy in place and measuring their energy consumption, while a further 37% have either one or the other in place.

In 2013, 71% of the Signatories have commenced putting actions in place to improve energy efficiency and reduce greenhouse gas emissions, such as measuring emissions, setting targets, etc.

To support Signatories develop internal systems and policies, two webinars were organized in 2013 related to calculating GHG emissions, performing energy audits and identifying efficiency opportunities. Eight Signatory companies participated, and found the webinars useful.

Figure 3: Signatory Compliance for Commitment One



Commitment 2: The Use of Lead and Cadmium

Maintaining the avoidance of lead and cadmium metal and hexavalent chrome pigment used as additives during PVC manufacturing and openly disclosing additives used for products manufactured or marketed in Australia upon stakeholder request.

Stabilisers

Avoidance of cadmium in 2013 has been maintained.

One Signatory reported it was still using an historical stockpile of lead-based stabiliser, originally purchased in 2012 in order to fulfill a specific customer contract. The Signatory has now found a calcium-zinc based substitute, and is planning to completely phase out lead stabiliser use by end of 2014. One new Signatory to the Program reported its products contained lead stabilisers; the company has committed to phase out their use by end 2014. The total quantity of lead stabiliser (metal content) used in 2013 was 53.15 tonnes. This increase from the past two years is due to the inclusion of a new Signatory to the Program.

Pigments

One Signatory still reported the use of lead pigment, and plans to phase out its use by end of 2015.

The total quantity of lead pigment (metal content) used in 2013 was 62 kilograms, a similar figure to the 2012 results. Avoidance of cadmium and hexavalent chrome pigment was maintained, and none of the new Signatories reported their use.

Open Disclosure

71% of relevant Signatories reported having a disclosure system in place, and 46% reported receiving and complying with disclosure requests from stakeholders. A very small proportion of Signatories are still reluctant to put disclosure systems in place for confidentiality reasons, which will need to be addressed in 2014.

Overseas initiatives and trends

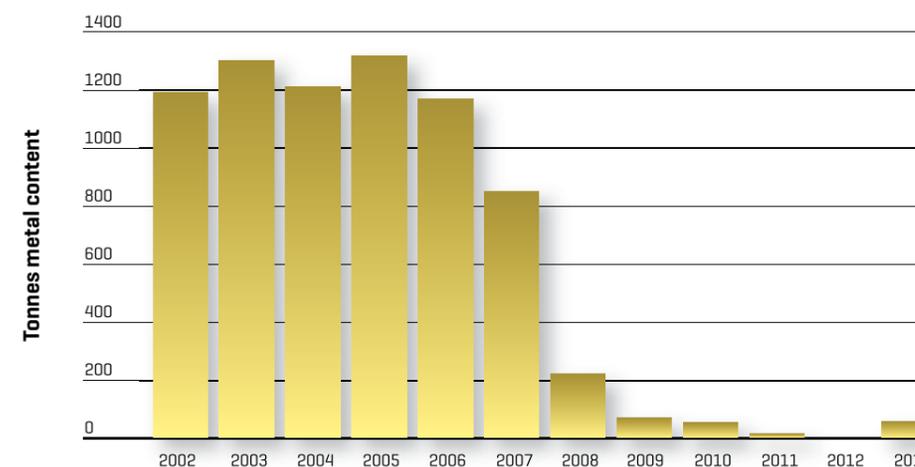
- > Under VinylPlus, the European PVC industry is still targeting lead replacement in EU-27 by end of 2015. In the 2007–2013 period, lead stabiliser consumption in EU-27 has decreased by 81% (3). VinylPlus is engaged with the European Stabiliser Producers Association (ESPA) to complete a study modelling the evolution of lead content in recycled PVC over the next decades (4).
- > The South African Vinyl Association (SAVA) Product Stewardship Program, signed in early 2012, includes a commitment to use lead free stabilisers and pigments in all PVC products by January 2015. A compliance date of January 2013 was set for the use of cadmium free additives (including pigments). SAVA reports they are still facing difficulties in achieving the phase out of cadmium but the industry remains committed to do so (5).
- > The Beijing based China Plastics Piping Association (CPPA) has adopted a policy to encourage companies to eliminate lead by 2015, mirroring the European industry voluntary commitment. No information has yet been reported on progress (6).

ACTION 2014

Finalise the new 'Safe and sustainable use of additives' commitment.

Address the non-compliance by Signatories to the Open Disclosure commitment.

Figure 4: **Lead stabiliser use by Program Signatories** [tonnes lead metal content]



Commitment 3: The Use of Plasticisers

Ensuring safe use of plasticisers in flexible PVC products in Australia, reporting the type of phthalate plasticisers used across the industry, and monitoring scientific and regulatory developments locally and overseas.

Plasticiser Commitment

One Signatory reported not adhering to the Plasticiser Use Policy. However, all relevant Signatories included data on the types of plasticisers used and the end-product applications in their reporting.

The use of low molecular weight phthalate plasticisers was reported by six Signatories. Use of high molecular weight phthalates plasticisers is more common. Specialty plasticisers are also now more widely used, including adipate esters, DINCH (di-isononyl-cyclohexane dicarboxylate), ESBO (epoxidised soybean oil) and bio-based plasticisers as Signatories investigate phthalate alternatives.

Overseas Development

- > California's Office of Environmental Health Hazard Assessment (OEHHA) Carcinogen Identification Committee has added DINP to the Proposition 65 list of chemicals. Proposition 65 requires California to maintain a list of chemicals known to cause cancer, birth defects or reproductive toxicity (7). Under Proposition 65, businesses must provide clear product labelling whenever a listed substance is used. In Europe, DINP is not considered a carcinogenic, mutagenic or reproductive toxicant.
- > In 2013, the European Commission published its conclusion on the re-evaluation of DINP and DIDP restrictions. The European Chemical Agency (ECHA) report found the absence of any further risks for all current uses of these two high molecular weight phthalates, however it supported maintaining existing restrictions on their use in toys and childcare articles which can be placed in the mouth (8).
- > Low molecular weight phthalates, classified as Substances of Very High Concern under the REACH regulation, are subject to phase out by 21st February 2015, unless granted authorisation for specific use. The use of low molecular weight phthalates is decreasing rapidly in Europe, with 85% of plasticisers used being high molecular weight phthalates. However DEHP still represents 50% of all phthalates used worldwide (9).
- > In 2013 China notified restrictions in toys for six phthalates including DINP and DIDP to the World Trade Organisation (WTO) (10).

Local Development

- > NICNAS published a risk assessment of low molecular weight phthalate DBP, recommending the restriction of DBP in Australia in cosmetics and personal care products, to limit the potential exposure of the public, including young children, from its use. The report does not indicate concern for children exposed to DBP via handling/mouthing of toys and childcare articles. However, concern would arise if DBP was used as a sole plasticiser, rather than being a secondary-plasticiser in toys. DBP is not known to be used by the PVC sector in Australia (11).

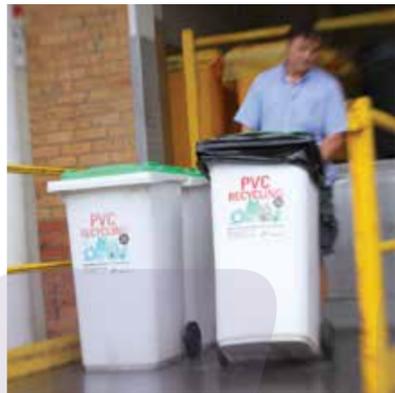
ACTION 2014

Finalise the new 'Safe and sustainable use of additives' commitment.

Continue liaison with NICNAS and scientific monitoring.



Addressing potential issues arising at the end-of-life of PVC products, managing responsibly waste at the Signatories' facility level, implementing the Vinyl Industry Recycling (VIR) strategy, and adopting Life Cycle Thinking during new product development.



Consumer Responsible Care

Sixteen Signatories provide relevant information to end consumers on the safe recycling or waste management options for their product(s). Eleven relevant Signatories have still not shared this information with end consumers.

Life Cycle Thinking

Twelve Signatories developed or introduced new products in 2013, of which ten implemented life cycle thinking requirements, including product durability, raw material sustainability, recycled content and manufacturing waste management.

VCA is planning to submit a Life Cycle Inventory (LCI) for Australian PVC resin to the National LCI database and/or Building Products database, so that it will be available for any LCA work conducted on Australian PVC products or for eco-labels or rating tools.

VCA commented on the LCA discussion paper circulated by the Green Building Council of Australia. The Council supports the use of LCA in the Green Star rating tools where a robust objective methodology is applied.

Packaging

All Signatories involved in the PVC packaging supply chain are signatories to the Australian Packaging Covenant (APC) and have current action plans lodged.

Waste Management Performance

Waste management information voluntarily reported by Signatories for aggregated publication is given in the table below. The reporting is therefore not entirely representative of the activities undertaken by all Signatories. Initiatives reported include the purchase of a compactor bundler, setting up recycling stations throughout production sites and avoidance of manufacturing waste generation to improve production yield.

	PVC					Non-PVC	
N° companies	8	7	1	4	2	5	1
Source of waste	Own PVC factory waste recycled	Own PVC product post-installation (offcuts) waste recycled	Own product post-consumer waste recycled on-site	Externally sourced post-industrial PVC waste recycled	Externally sourced post-consumer PVC waste recycled	Own non-PVC waste sent to recycling	External non-PVC waste recycled on-site
Mass [t]	3217	37	0.373	24	84.5	221	126

The Vinyl Industry Recycling Strategy (VIR)

The aim of the VIR strategy is to develop a viable and sustainable PVC recycling practice in Australia. To achieve this requires meeting some key objectives:

- > Developing self-sustaining, cost-neutral PVC recycling models that improve productivity and competitiveness;
- > Identifying marketable, recycle-tolerant products;
- > Developing agreed industry standards for recycled materials.

Implementation of the strategy has continued throughout the year including:

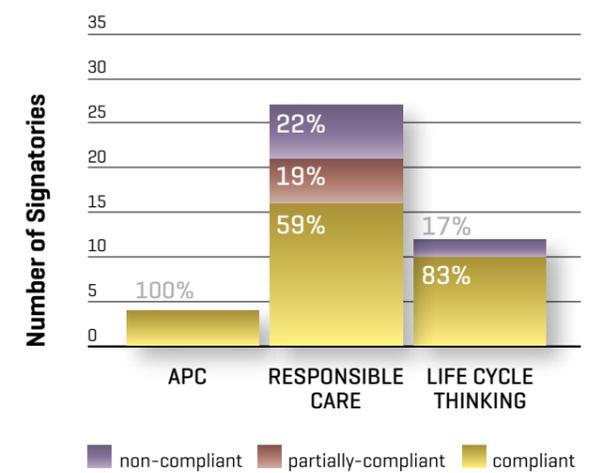
- > Launching the PVC Recovery in Hospitals Program in March 2013, to recover and recycle waste PVC medical products. By year end, a total of 19 healthcare facilities had commenced the program and an estimated 13 tonnes of PVC had been recycled. Interest is growing steadily through an on-line registration system. A target of 15% of IV bags by end of 2015 (equiv 300 tonnes) has been set. Visit www.vinyl.org.au/PVCRecovery for more information.
- > Web-based information about PVC recyclers is provided and an on-line inquiry form has been developed to assist parties connect in sourcing recycled PVC or offering material for recycling.
- > Trials have been undertaken and a business case has been developed for the recycling of PVC-coated fabrics (billboards, signage, truck tarps etc). Review of technologies to recover and recycle this material is underway.
- > Arrangements have been put in place to recycle PVC gift cards from a major national retailer.



The Five Year Review of the PSP highlighted waste management as a significant aspect of the Program and a number of recommendations were made to strengthen this section of the Program. The current waste management commitment is now being revised to include mandatory reporting, packaging waste commitments equivalent or superior to those required by the APC, and targets for Signatories to meet in terms of post-industrial waste and product recycling.

It is intended to release the new Resource Efficiency Commitment in 2014.

Figure 5: Signatories compliance for Commitment Four



ACTION 2014

- Finalise the new 'Resource Efficiency' commitment.
- Continue implementing the Vinyl Industry Recycling Strategy.
- Continue encouraging communication to end-consumers on PVC product recycling and provide template to Signatories.
- Finalise the release of an updated LCI for Australian manufactured PVC.

Commitment 5: Research

Monitoring and sharing with relevant stakeholders the latest scientific development on potential health and environmental impacts of PVC product life cycle.

There are a number of forums of communication providing the opportunity to monitor national and international developments in scientific research relevant to the potential health and environmental impacts of the PVC product life cycle, including the TSG meetings, VCA member meetings and events, conferences and seminars, stakeholder meetings, website etc. These were used to advise members of scientific developments in phthalates plasticisers, REACH, endocrine disruptive chemicals, Bisphenol A and regulatory developments.

In 2013, the Council held an 'Excellence in Product Stewardship' seminar in Sydney at which a range of Australian PVC industry representatives, both members and non-members of the VCA, and stakeholders participated and shared information and experiences in implementing product stewardship.



Commitment 6: Reporting

Reporting Signatories' progress over time with independent third party verification.

Annual Progress Report

Last year's report was published in May 2013 following verification audits conducted by an independent third party. The timeline for producing the report was significantly improved from previous years in an effort to ensure the information is more timely.

This year's annual report was to be published by 30 April 2014.

Program and Report Verification

This 2013 report has been independently verified by the NetBalance Foundation. The purpose of the verification process is to provide an independent opinion on the accuracy of the data and statements made in the report. The verification of this report involved the audit of eight Signatories to examine data sources and confirm data and statements. A copy of NetBalance's Verification Statement is shown in Appendix A.

Five Year Review

The latest five year review of the Program was published in December 2013 and covered the period 2007–2012 (12). The review found that Signatories have made effective and measurable progress over the past five years, which provides a strong foundation for the future. It also identifies future challenges for the Product Stewardship Program, and proposes recommendations for on-going Program development. Examples of recommendations include the following:

- > Revise the Program structure around five key areas: Production & Storage; Energy Efficiency & Greenhouse Gas Management; Safe and Sustainable use of Additives; Resource Efficiency, and Transparency and Engagement, as shown on the diagram below.
- > Streamline the annual progress reporting.
- > Strengthen the waste management commitment to better meet stakeholder expectations and measure progress.

Figure 6: **The five key areas of the Program**



All reports can be found at <http://www.vinyl.org.au/resource-centre/product-stewardship-progress-reports>

Verification Statement



To the Signatories and Management of the Vinyl Council of Australia:

The Vinyl Council of Australia (VCA) commissioned Net Balance Foundation Limited (Net Balance) to provide independent verification of the information presented within the 2013 PVC Product Stewardship Program Progress Report (the 'PSP Report').

The PSP Report presents the performance of the Product Stewardship Program Signatories (the 'Signatories') against the commitments of the VCA Product Stewardship Program (PSP) over the period 1 January 2013 to 31 December 2013. The VCA was responsible for the preparation of the PSP Report and this verification statement represents Net Balance's independent opinion on the reliability of information presented within it. Net Balance's responsibility as an independent verification provider is to the VCA alone and in accordance with the agreed terms of reference. Other stakeholders should perform their own due diligence before taking any action as a result of this statement.

Verification objective

The verification objective is to provide VCA and its stakeholders with an independent opinion on the accuracy of the information presented within the PSP Report. This is achieved through verification of information provided in a sample of data surveys completed by PSP Signatories and review of the PSP Report prepared by VCA.

Verification methodology and limitations

The verification process was undertaken from February 2014 to May 2014. The verification engagement covered the complete PSP Report and focused specifically on the systems and activities of a selection of eight Signatories during the reporting period. For a detailed description of our methodology and limitations refer to the detailed verification statement available [here](#) and report presented to the VCA.

Our independence

Net Balance was not responsible for preparation of any part of the PSP Report. This project was determined by the VCA and Net Balance to be complementary to the assurance role according to Net Balance's independence policy. Net Balance therefore confirms that it is not aware of any issue that could impair objectivity in relation to this verification engagement.

Our competency

The verification team has collectively undertaken over 150 verification or assurance engagements in Australia over the past 10 years and is led by a Lead Sustainability Assurance Practitioner (Lead CSAP) accredited by AccountAbility UK.

Findings and conclusions

Overall, it is Net Balance's opinion that the information presented within the PSP Report is fair and accurate and that the PSP Report is a reliable account of the Signatories' and the VCA's performance against the PSP commitments during the reporting period.

VCA has developed a sound process for collecting and reporting Signatory performance against the commitments of the PSP. Public and transparent reporting against commitments helps to raise the standard of environmental performance in the vinyl industry in Australia.

Recommendations for improvements in environmental performance and reporting amongst Signatories have been outlined in a more detailed verification statement available [here](#) and in a report presented to the VCA.

On behalf of the verification team,
27 May 2014, Melbourne, Australia

Terence Jeyaretnam, FIEAust
Director, Net Balance & Lead CSAP (AccountAbility UK)

2013 Signatory List

Three Signatories joined the Program during 2013:

- > CMS Electracom Pty Ltd
- > Rehau Pty Ltd
- > Stormtech Pty Ltd

Pacific Plastics Pty Ltd, Specialty Polymers & Chemicals Pty Ltd and Australasian Solvents and Chemicals Company Pty Ltd left the Program during 2013. At the end of 2013 the following companies were Product Stewardship Program Signatories:

Armstrong World Industries Pty Ltd
Australian Resilient Flooring Association
Altro APAC Pty Ltd
Karndean International Pty Ltd
Kenbrock Flooring (Aust) Pty Ltd
Pegulan Floor Coverings Pty Ltd
Polyflor Australia Pty Ltd
Signature Floorcoverings Pty Ltd
Tarkett Australia Pty Ltd
Australian Vinyls Corporation Pty Ltd
Berry Plastics (Australia) Pty Ltd
Chemson Pacific Pty Ltd
CMS Electracom
Deceuninck Pty Ltd
Envorinex
Gerflor Australasia Pty Ltd
Innova International Pty Ltd
Integrated Packaging Australia Pty Ltd
Pentair Water Solutions Pty Ltd
Plaspak Peteron Pty Ltd
Plastics Industry Pipe Association of Australia Ltd
Australian Plastic Profiles Pty Ltd
Iplex Pipelines Australia Pty Ltd
Pipemakers Pty Ltd
Vinindex Pty Ltd
Plastral Pty Ltd
Plustec Pty Ltd
Primaplas Pty Ltd
Profine International Profile Group
Rehau Pty Ltd
Rojo Pacific Pty Ltd
Stormtech Pty Ltd
Sun Ace Australia Pty Ltd
TechPlas Extrusions Pty Ltd
Terminals Pty Ltd
Ubique Polymers Pty Ltd
Welvic Australia Pty Ltd

NOTES:

Integrated Packaging reported in previous years as Aperio Group.

Pentair Water Solutions previously reported as Pentair Water and Environmental Systems and Tyco Water.

Technical Steering Group

The technical steering group consisted of representatives from the Australian PVC industry, alongside representatives of the Green Building Council of Australia (GBCA), Sustainability Victoria and the Department of Sustainability, Environment, Water, Population and Communities.

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Glossary

APC	Australian Packaging Covenant
CPPA	China Plastic Piping Association
ECHA	European Chemical Agency
ECVM	European Council of Vinyl Manufacturers
EMS	Environmental Management System
ESPA	European Stabiliser Producers Association
GHG emissions	Greenhouse Gas emissions
LCI / LCA	Life Cycle Inventory / Life Cycle Assessment
Plasticisers	Substances added to vinyl to make it resilient, soft and flexible. Phthalate compounds are commonly used for this purpose. Non-phthalate plasticisers include DINCH (Di-isononyl-cyclohexane dicarboxylate), ESBO (epoxidised soybean oil), etc.
Phthalates	Higher molecular weight phthalates, with more than 6 carbon atoms in their backbones. They include products such as DINP (diisononyl phthalate) or DIDP (diisodecyl phthalate). Lower molecular weight phthalates, with 3 to 6 carbon atoms in their backbones. They include products such as DBP (di-n-butyl phthalate), DEP (diethyl phthalate), DMP (dimethyl phthalate), DEHP (Diethylhexyl phthalate), etc.
NICNAS	National Industrial Chemicals Notification and Assessment Scheme. The Australian Government regulator of industrial chemicals.
OEHHA	Office of Environmental Health Hazard Assessment
The Program	The Product Stewardship Program, signed by members of the Australian PVC industry.
PSP	Product Stewardship Program
PVC (vinyl)	Polyvinyl chloride
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Signatories	The members of the Australian PVC industry who have signed the Program as an indication of their commitment to product stewardship.
Stabiliser	A compound used to improve the thermal stability during processing and the heat and/or UV stability of the end-use product.
Stakeholders	The PVC industry, its employees, suppliers and customers, the local and wider communities, consumers, government and regulators, and any other groups significantly impacted by the industry.
TSG	Technical Steering Group
VCA	Vinyl Council of Australia
VCM	Vinyl Chloride Monomer
VIRS	Vinyl Industry Recycling Strategy
WTO	World Trade Organisation



Vinyl Council Australia

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PROFILES ADDITIVES RESIN
STABILISERS COMPOUND CABLE
FLOORING FLEXIBLES RIGID
PROFILES PIPES PACKAGING
WINDOW PROFILES ADDITIVES
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ADDITIVES RESIN STABILISERS
COMPOUND CABLE FLOORING
FLEXIBLES PACKAGING RIGID
PIPES RIGID PROFILES WINDOW
PROFILES ADDITIVES RESIN
COMPOUND CABLE FLOORING
FLEXIBLES PACKAGING RIGID
PIPES RIGID PROFILES WINDOW
PROFILES ADDITIVES RESIN