

22 December 2022

Committee Secretary  
Standing Committee on Climate Change, Energy, Environment and Water  
PO Box 6021  
Canberra ACT 2600

## **Inquiry into plastic pollution in Australia's oceans and waterways.**

### **Preamble**

1. Chemistry Australia welcomes the opportunity to provide this submission. Due to the complex nature of pollution generally and plastic pollution specifically, this submission should be considered indicative, rather than exhaustive. Chemistry Australia will be pleased to provide the Senate Standing Committee with any other information by way of follow up that would be helpful to its Inquiry.
2. Plastics play an important role as well-designed products within properly functioning circular economies, not as pollution damaging the environment, including Australia's oceans and waterways.
3. In this way they are best placed to continue their contribution to sustainable development, including helping communities, industries and governments achieve the ambitions of the United Nations Sustainable Development Goals.
4. Chemistry Australia and its members are committed to the transition from a linear to a circular economy for plastic materials and products including nine key requirements to support the required shift. The attached policy position sets these out in more detail.
5. Chemistry Australia is the peak national body representing the Australian chemistry industry, including the Australian plastics industry. Chemistry Australia members include plastics raw materials manufacturers, importers and distributors, logistics and supply chain partners, plastics fabricators and compounders, recyclers, service providers to the sector, as well as leading research organisations and the chemistry and chemical engineering schools of leading Australian universities.
6. The chemistry industry is the third largest manufacturing sector in Australia. The industry directly employs more than 61,500 people (FTE) and supports approximately 212,000 FTE jobs across the economy. The industry directly contributes \$11 billion to gross domestic product (or \$38 billion including indirect contributions), supplying inputs to 108 of Australia's 114 industries.
7. Chemistry Australia and its members are actively involved in a range of partnerships and collaborations with a focus on plastic material and product stewardship with supply chain partners, government agencies and NGOs both nationally and internationally including:
  - a. Foundation signatory to the Australian Packaging Covenant Organisation
  - b. Joint licensee with the Tangaroa Blue Foundation for Operation Clean Sweep Australia

- c. Foundation Partner with CSIRO on their Mission to Eliminate Plastic Waste
- d. Foundation partner to the ARC Training Centre for Green Chemistry in Manufacturing
- e. Foundation partner to the ARC Training Centre for the Chemical Industries
- f. Foundation partner on the International Council of Chemistry Association's Plastics Leadership Group
- g. Member of the World Plastics Council
- h. Member of the Alliance to End Plastics Waste
- i. Engaged with Federal and State Governments on a range of policy and program initiatives including inputs to the United Nations Treaty to end Plastic Pollution

### **Recommendations:**

1. Improve the categorization of plastic pollution in oceans and waterways that disaggregates the current conflation of issues and terminologies and is better able to focus on and drive solutions. This could include:
  - Australian terrestrial / river outflows (domestic)
  - Non-Australian terrestrial / river outflows (imported), and
  - Oceanic derived plastic pollution such as fishing gear and discharge from ships, etc.(imported).
2. Maintain the benefits and capabilities of the agreed and aligned National Plastics Plan that provides a strong foundation and investment environment, agreed to by industry, governments and NGOs.
3. Strengthen and leverage current work, and groupings, rather than replicating or adding more, that risks diluting outcomes and diverting resources already heavily committed and engaged subject matter experts.
4. Support the development of circular economies and coordinate the work required by the new groupings and alliances that will be required to shift from linear to circular.
5. Federal State and Local Government Regulatory Impact Statement must factor in national cost benefit factors, not just those of their own jurisdictions, to assist in a national operating environment for the circular plastics value-chain and consumers.
6. Provide clearer reporting on how current strategies, grants, programs and other initiatives are tracking in dealing with their target problems and where gaps still exist that need further support.
7. Review the outcomes of the 2020 National Plastics Summit to identify further work required by industry, governments, consumers and communities.
8. The United Nations Treaty to End Plastic Pollution needs to ensure that the pollution not generated by Australia, but impacts it, has workable and accountable systems in place.

### **Responses to the Terms of Reference:**

1. the environmental impacts of plastic pollution particularly in oceans and waterways

Chemistry Australia is committed to plastics in circular economies, not as pollution.

All forms of pollution are complex. They need to be properly understood by the best available science in order to focus the appropriate types of coordinated solutions, at suitable scale, to deliver the elimination outcomes sought.

Currently the terminology, reporting and policy views relating to plastic pollution, including in oceans and waterways, appear to be more singular and conflated rather than specific to the sources and or types. This is likely to limit the ability to identify sources of pollution and help deliver the coordinated solutions required. This includes mobilising the investment capital for plant, equipment, infrastructure, professional development, reporting and the like to drive practical reductions.

To better focus on strategies and solutions, plastic pollution might be better categorised by at least sources, including:

- Australian terrestrial / river outflows (domestic)
- Non-Australian terrestrial / river outflows (imported), and
- Oceanic derived plastic pollution such as fishing gear and discharge from ships, etc.(imported)

It is also important to recognise that all materials invariably shed or fragment, glass will shatter and erode, metals wear liberating smaller metallic particles or in depending on the metal oxidise, paper or cardboard shed fibres. In these examples the substances. Plastics can fragment to smaller plastic particles (microplastics) in similar ways.

The effects of microplastics on the environment and ecology, including human health, needs to be understood by verifiable scientific evaluation. The effect of microplastics on the environment and human health needs to be better understood. Governments, NGOs and industry are all involved with multiple programs to contribute learnings.

## 2. the effectiveness of Australia's plastics management framework under the National Plastics Plan and related policies to reduce plastic pollution particularly in oceans and waterways

Well structured programs based on science, engagement, consultation and collaboration are the best ways to drive solutions that are beneficially enduring, adaptive and at the required scale to shift the needle of problem to desired outcomes, while minimising unintended outcomes.

Broadly, two thirds of the plastics consumed by Australians are imported finished goods. The remaining one third is manufactured by the Australian domestic economy. Fortunately, Australia still retains its domestic plastic resin manufacturing capability as well as using imported resins. This is critical for the introduction of advanced / chemical recycling needed to make the quantum shift in recycling rates beyond the threshold able to be achieved by mechanical recycling alone.

To create a truly Australian Plastics Circular Economy, and help eliminate plastic pollution, significant investment is required by the industry that is currently meeting just one third of domestic consumption, including its circular value-chain partners, to be able to expand and manage 100% of plastics consumed.

Given Australia is a very small economy by global standards, approximately 1% of global scale, this then requires national policy certainty including harmonized and coordinated systems of operation.

The National Plastics Plan (NPP) provides a beneficial, consulted, agreed, comprehensive and structured approach that has enabled unprecedented investment into progress the shift to an Australian plastics circular economy. This needs to be retained and strengthened to enable the required expansion of systems and investment to deliver the type and scale of change needed.

This also includes the investments required to manage the three earlier identified categories of ocean and waterway pollution. While NPP Section 4 (Plastics in our Oceans and Waterways) details initiatives specific to these environments, all 5 sections are highly relevant as part of prevention and mitigation strategies.

It will be similarly important that with Australia having signed onto the High Ambition Coalition to End Plastic Pollution, that its 3 goals and 7 deliverables are aligned to the NPP, rather than establishing new structures that risk moving the goal posts.

As part of the NPP, Chemistry Australia and the Tangaroa Blue Foundation advocated for Operation Clean Sweep's successful inclusion. We continue to encourage all in the plastic supply chain to subscribe to the prevention of plastic pellet loss. Chemistry Australia would be grateful for any consideration on how governments could further support this global initiative to continue driving outcomes in Australia.

A perennial issue is changing consumer behaviours to littering, supported by focused education campaigns and suitable enforcement regimes. This is in addition to community awareness of where to place used goods, and the effect of rubbish on the environment.

3. the effectiveness of the Australian Government's engagement with states, territories, industry and non-government organisations to reduce plastic pollution particularly in oceans and waterways

Strong national alignment of policies and programs will benefit companies needing to invest. Currently more work is needed on harmonised and aligned approaches that are more efficient and impose less overall cost burden on industry.

Industry has responded well to aligned policies and programs that provide the required level of certainty for a return on investment. These include, but not limited to:

- j. APCO and predecessors
- k. National Plastics Summit and its outcomes
- l. National Plastics Plan
- m. CSIRO mission to end plastic waste
- n. Alliance to End Plastic Waste
- o. ANZPAC Plastics Pact
- p. The shift from linear to circular economies
- q. Significant increases in product stewardship programs as part of the NPP. Currently there are some 29 programs managing plastic materials and products as well as the PS Centre of Excellence in its coordinating and supporting role.

Policy and program harmonisation is critical for scale and operational efficiency. We reiterate that Australia is a very small economy that needs at-scale solutions. Creating a patchwork of localised regulations dilutes effectiveness of solutions, damages the scale required to mobilise capital investments to improve outcome and increases costs.

However, poor national alignment of Federal, State and Local Government initiatives have a tendency to focus on their own jurisdictional factors, rather than the national operating environment of companies that need to operate and help deliver solutions.

There has been observed a level of disconnect between some areas of the Australian Federal Government's support for sovereign manufacturing and some State Government activities in banning some (not all) single use plastics. Some of the raw materials for single use plastic constitute a large proportion of the indigenous sovereign polymer manufacturing portfolio. As a result, potential bans of such single use plastics can also have the potential for unintended consequences of undermining the ongoing viability of local manufacturing capability, including investing in the circular economy and produce recycled plastics. Better balance is required.

Federal, State and LGA Regulatory Impact Statement processes should ensure national net benefit that coordinate efforts, rather than limit them.

4. the effectiveness of community campaigns to reduce plastic pollution particularly in oceans and waterways and encourage the use of alternative materials

Communities and consumer need access to good information that is reliable and actionable.

For example, alternative materials to plastics would need to be available, having been thoroughly assessed as having a better environmental outcome (life cycle assessment), are fit for purpose without significant unintended consequences (e.g. food packaging alternative is problematic if food wastage increases) and have available and viable end of life management systems in place.

We also reiterate the importance of changing consumer behaviours to littering, supported by focused education campaigns and suitable enforcement regimes. This is in addition to community awareness of where to place used goods, and the effect of rubbish on the environment.

5. global initiatives underway to reduce plastic pollution particularly in oceans and waterways

Chemistry Australia lists here a range of global initiatives and partnerships in place that are operating to reduce plastic pollution in oceans and waterways. More information can be provided, given the specific nature of the work involved. These are all connected in with the important work of supporting the United Nations Treaty to End Plastic Pollution:

- International Council of Chemistry Association's Plastics Leadership Group
- World Plastics Council
- The Alliance to End Plastics Waste
- Operation Clean Sweep
- The CSIRO Mission to End Plastic Waste
- Federal Government consultation processes to negotiate the United Nations Treaty to end Plastic Pollution

6. any other relevant matter.

It is important to note that there are great many programs and partnerships already in place and working with committed resources, including subject matter experts, focused on eliminating plastic pollution. Certainly more work could be done, and should be done, to better connect some of the work, including transferring valuable learnings. Efforts that further strengthen and leverage current work will yield improvement. However, establishing new, additional groupings risks diluting and diverting resources already heavily committed and engaged. Whilst there are new people moving into the areas of policy and program management, there is an essential core of capability already stretched over current programs.

Chemistry Australia has also been actively engaged with AMSA in the ACTION PLAN to reduce the environmental risk associated with the maritime transport of plastic pellets, through the International Maritime Organisation. The discharge of plastic pellets into the oceans is unacceptable and must be prevented. We consider that the mitigation of risks could be reduced through new international controls through improved identification of plastic pellets in the supply chain and changes to shipping stowage of containers.”

The creation of a circular economy to assist reducing plastic pollution will require further increases of recycling rates, recycled content rates and similar objectives. Recycling rates have to some degree plateaued over the last three years. A range of stakeholders are now considering the role of further policy development that may play a role in mobilizing the capital needed to create the next level of performance shift.

It may also be valuable to review the outcomes of the 2020 National Plastics Summit. This identified a number of high-level objectives important to creating circularity leading to less pollution generation. A number of these related to nationally aligned operating systems for waste management.

Chemistry Australia recognises that the bulk of this submission has focused on policies, programs and initiatives in the first of the three categories: Australian terrestrial / river outflows (domestic). It will be important that the UN Treaty process ensures a wholistic systems approach that also manages the Non-Australian terrestrial / river outflows (imported), and Oceanic derived plastic pollution such as fishing gear and discharge from ships, etc.(imported)

Chemistry Australia would be pleased to provide any further information or clarification in relation to this submission.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Peter Bury', with a long horizontal flourish extending to the right.

**Peter Bury**  
**Director – Strategy, Energy and Research**