

Synthetic statutes:

Unwrapping the new environmental duty within Victoria's plastics communities



Cite as: Miranda Aprile, Hayley Byrne, Brad Jessup, Alexander Laurence, Shuai Liu and L. M. Shirley, *Synthetic statutes: Unwrapping the new environmental duty within Victoria's plastics communities* (The University of Melbourne, December 2021)

Summary

There has been a governance gap on the topic of climate change over recent decades. Over the same time, plastics have been the subject matter of global, regional and local regulation.

Governments, particularly in Australia, have resisted calls by their citizens to take greater action to protect our shared climate. Yet, those same governments have responded to public expectations to ban plastics and deploy legal instruments to attend to plastic waste.¹ On plastic waste in the ocean, there is a shared desire on the part of policymakers and community members to explore ways of addressing this environmental problem.²

In Australia, the need to respond to a crisis in plastic waste was visually highlighted by the stockpiles of waste designated for recycling overseas.³ It has rejuvenated interest in regulating for a circular economy.⁴ Moreover, there is a rising awareness of the nexus between plastics and climate change, as demonstrated by the fires that burnt through stored plastics in Melbourne's western and northern suburbs. Smoke and carbon generated local environmental harms and contributed unnecessarily to greenhouse gas emissions.⁵

Alongside these multiple contexts, two things have been happening in Victorian environmental law and policy. First, the concept of environmental justice has entered our vocabulary. Environmental

justice is the idea that it is unfair for identifiable communities to confront more or greater environmental vulnerabilities than other communities. These identifiable communities should have rights to be involved in protecting their community from ongoing harms.⁶ Second, the Victorian Parliament has passed a revised *Environment Protection Act* ('EP Act'). This 2017 Act, which came into force in 2021,⁷ imposes a duty on industries to protect the environment, while empowering community groups to enforce that duty.⁸

This report is about imagining what the Victorian duty to protect the environment might look like in practice: What does it mean and how can it be used to arrest environmental injustices associated with plastics manufacture, waste storage and disposal? A co-benefit of the use of the duty with plastics forefront of mind might be broader climate change improvements. We ask these questions with what we have termed as Victoria's 'plastics communities': People who live in Melbourne suburbs nearby sites of plastics manufacture, plastic waste storage and incineration. We want these communities to be made more resilient through this research, and for people to start seeing our pollution laws through the lens of a community experiencing pollution. We think the duty achieves this, by entrenching environmental justice within Victorian law and policy. Rather

than view environmental law through the prism of regulated industry, we hope to draw common threads between community, industry and regulation, whilst making the case that climate change outcomes are improved when local air pollution is better regulated.

The report has been compiled by students as part of Melbourne Law School's contribution to the Global Clinical Day of Climate Action.⁹

Introduction

Plastics regulation at the international level

International law has addressed plastics pollution for longer than climate change.¹⁰ Older laws that dealt with plastics disposal¹¹ are now being redeployed to address new environmental harms, like microplastics.¹² International law also addresses the production of plastics and the trade in plastics material. In totality, we can see from international law a global concern about plastics and increasing regulation to reduce plastics production and require countries to manage its own plastics waste. There is a special concern in international law about plastics in the oceans.

Under the *Stockholm Convention*, countries have agreed to eliminate production of some pollutants used in manufacturing plastic.¹³ It is viewed as a law creating an obligation to reduce some types of plastic.¹⁴ The World Trade Organisation also regulates plastics production, but does so from a health and trade perspective.¹⁵

The *Basel Convention* contains provisions that address the trade in, and management of, plastics waste.¹⁶ Although the *Basel Convention* does not regulate all types of plastics,¹⁷ this international law is now restricting Australia from sending plastics to poorer countries. The *MARPOL Convention*

prohibits discharging plastics into the sea,¹⁸ and the *Convention on the Law of the Sea* requires countries to prevent, reduce and control plastics pollution¹⁹ of the marine environment.²⁰ The *London Convention* also prohibits the deliberate disposal of persistent plastics at sea.²¹

Between 2014 and 2017, the United Nations Environment Assembly adopted three resolutions addressing marine plastic litter.²² In 2018, it launched an ad-hoc working group on marine litter,²³ which remains active.²⁴ Plastics is an international concern and, perhaps owing to its visibility, countries are not bickering about laws as they have for decades around climate targets.

These international laws are supported by international policy. Sustainable Development Goal 14 contains the target of preventing and significantly reducing marine pollution by 2025,²⁵ and Sustainable Development Goal 12 includes the target to substantially reduce waste generation by 2030.²⁶ There is a United Nations sanctioned Honolulu Strategy, co-created by UNEP, on preventing and managing marine debris, including plastics.²⁷

There are gaps in international law. The much-lauded 'circular economy'²⁸ approach to plastics is not at all recognised.²⁹ There is little legal acknowledgement of the link between plastics and climate: though the

connections between plastic and climate are well-recognised,³⁰ and there are currently no UNFCCC decisions or other documents with legal force that address plastics pollution.³¹ Further, existing frameworks fail to acknowledge the dimensions of inequality and human rights embedded in plastics waste issues.³²

Global movements to reduce plastics use

Because less plastics means more environmental justice and fewer carbon emissions in the atmosphere, beyond the law, there are a multiplicity of global movements and organisations aiming to reduce plastics use and therefore demand for manufacture. These are groups that see partnership models and community effort as essential to achieve change.

The New Plastics Economy Global Commitment is a multi-sector initiative³³ that aims to create a circular economy of plastic.³⁴ Though non-binding, it includes periodic reporting mechanisms and quantifiable targets.³⁵ There are over 450 signatories to the Global Commitment, comprising companies, governments and other organisations.³⁶ Similarly, the Global Partnership on Marine Litter is a multi-stakeholder partnership that brings together over 400 actors³⁷ working on marine plastic pollution,³⁸ and enables knowledge sharing and collaboration between them.³⁹

Other movements are more grassroots in nature. 5 Gyres is a non-profit organisation that combats plastic pollution through research expeditions, community outreach and citizen science.⁴⁰ #breakfreefromplastic is an organisation focused on plastics pollution that brings together over 500 NGOs; their work includes pushing for corporate accountability and promoting systemic solutions.⁴¹ The Global Alliance For Incinerator Alternatives is a worldwide alliance of over 800 NGOs, grassroots groups and individuals⁴² that fights the practice of burning waste,⁴³ promotes zero waste models,⁴⁴ supports wastepicker and recycle worker rights,⁴⁵ and advocates for an end to 'waste colonialism'.⁴⁶ This suite of initiatives and burgeoning civil society and corporate movements against plastics indicates that the time is right for local communities to question whether plastics are a part of our environmental future.

The impacts of plastics: locally and globally

By one UN estimate, the amount of plastic waste in the ocean will exceed the number of fish by 2050.⁴⁷ This astonishing factoid reinforces the need for laws and policy to intervene and support communities in their efforts to reduce plastics production and associated environmental harms.

Durability and longevity are the key characteristics of plastics that make them useful. This is due to the presence of

chemicals that are resistant to physical degradation.⁴⁸ Local communities are the first to experience negative health impacts from these chemicals, which can leach out into their environments if not stored or handled properly. Not only do chemicals affect the air we breathe and smell, but spills and toxic ash from fire can ruin riverways, parks and soils that communities and animals depend on for food and recreation. This can reduce the 'look and feel' of a neighbourhood, detach local residents' connection to place, drive businesses out of the area and impact those that rely on tourism; all before we consider the economic cost of clean-up operations borne by these communities.

The World Wildlife Fund is the leading global advocacy on plastics and climate change, and draws this connection most crisply: 'The world's growing production of plastics – about 100 million tons annually – is not just clogging landfill sites and threatening our oceans and marine life; it's accelerating climate change'.⁴⁹

At every stage of its lifecycle, including its use, decomposing and disposal stages, plastics emit greenhouse gases. The manufacture of plastics is derived from fossil fuels. The World Wildlife Fund also states that 'the process of extracting and transporting those fuels, then manufacturing plastic creates billions of tonnes of greenhouse gases. For example, 4% of the world's annual petroleum

production is diverted to making plastic, and another 4% gets burned in the refining process.'⁵⁰

Methane is a greenhouse gas with stronger warming power than carbon dioxide.⁵¹ Recycling aims to reduce the amount of methane generated by reducing the waste that is sent to landfill. But recycling also consumes energy, with carbon involved in the collection, transport and processing of waste.⁵² What about incinerating plastics? Often viewed as a green method of disposal, under the pretence of 'waste-to-energy', incineration also creates harmful dioxins, especially if the machines are old and inefficient.⁵³ It is expensive to build and manage new incinerators, which require continuous flows of waste to stay running. This perpetuates emissions by producing plastics to replace those which are burned.⁵⁴

Collectively, this leads to a clear conclusion that without plastics, or without a significant reduction of them, the world would not be warming at such a dangerous rate. It makes the law that regulates plastics especially pertinent, and arguments for reducing plastics relevant to respond to the climate crisis.

Environmental justice and plastics communities

Since at least the 1990s, plastic pollution has been identified as an issue of global inequality. Like much waste, plastics are generally consumed in wealthy countries and have long been exported as waste to poorer countries,⁵⁵ including those with relatively unregulated waste management practices⁵⁶ and with fewer resources to address the health and environmental risks associated with plastics waste.⁵⁷ At the same time, many of these countries are also navigating domestic increases in the production and consumption of plastics,⁵⁸ thus creating a 'double burden'.⁵⁹ Furthermore, moving away from certain production or uses of plastic is likely to negatively affect workers whose livelihoods centre around managing plastics waste.⁶⁰

Seen through this global experience, ideas of environmental fairness, or what is called environmental justice, are particularly pertinent to the plastic life cycle. Both globally, and as we will show, locally, in Victoria too.

Environmental justice was introduced into the Victorian policy lexicon in a 2011 review of the Environment Protection

Authority ('EPA').⁶¹ That review criticised the EPA for how it approached its core function of regulating to protect the environment, and for failing to be responsive to community concerns about environmental harms. The review suggested that the EPA consider an environmental justice regulatory approach, with the Victorian government later committing to environmental justice as an organising principle for the EP Act's reform.⁶² Along with the new duty of environmental protection, that Act created more meaningful ways for communities to be involved in upholding the law.⁶³ These include third party appeals and enforcement: forms of participatory justice that legal experts have long campaigned for in Victoria.⁶⁴

Environmental justice is a multi-faceted idea⁶⁵ that people should not be unequally burdened with environmental harms, that potentially or currently affected communities should have a say over the approval or regulation of neighbouring polluting industry, that they should be treated in a dignified, respectful and empowered way in their engagement

with government, and on a level footing with developers when they encounter the law.⁶⁶ There should be some benefit for those communities that do host potentially harmful developments. Just like there should be a social licence for facilities before they set up, there should be a community pay-back for facilities that are approved. This form of recompense, through grants, activities or green space, acknowledges the time involved in community oversight and the gratitude of the wider public for the contribution the host community gives to the state through the economic development that industry provides.

Victoria witnessed a failure of the government to achieve environmental justice in 2017. The Hazelwood mine fire caused severe local environmental and health impacts on the people of Morwell, the town that hosted the former coal mine and electricity generator owned by an overseas company. There was, in that case, an unequal burden of harm experienced by locals and a state government that did not treat a community respectfully nor acknowledge the extent of their weeks of suffering. While the operator of the facilities was fined under environment and health and safety laws, the community continues to await their own compensatory justice.

Morwell is a part of the Latrobe Valley, a place which is called a 'coal community' in both media and academic writing. This is a description, and not intended to be pejorative. For environmental justice ideas, it is a helpful description. If a place

is known for a particular industry, then governments should be put on notice about the potential of unequal environmental harms and the relevance of environmental justice in governing and regulating that area. There is academic scholarship of nuclear communities too; those places that host nuclear facilities or whose landscapes are affected by past nuclear activities. Again, the recognition of a community of people associated with an industry activity becomes useful in working out whether those communities should continue to bear the potential risk associated with industrial development.⁶⁷

We think there are communities in Melbourne's north and west that are bearing the brunt of environmental harms associated with the lifecycle of plastics – from manufacture through to disposal. These communities should be afforded environmental justice. For them, we see avenues to environmental justice in the newly reformed EP Act.

Where are Victoria's plastics communities located?

In 2018, the EPA identified dangerous stockpiles of recycling waste across the state, including in Melbourne's western suburbs.⁶⁸ Accustomed to fighting for environmental justice, an earlier report has detailed the experiences of residents in Melbourne's west dealing with nearby rubbish tips and waste dumps.⁶⁹ But plastic stockpiles also exist in the city's north where, in 2017, residents of Dallas were evacuated following a fire that broke out at a paper and plastic recycling factory in Coolaroo. The fire, which lasted for 20 days, came after a number of fires at the same plant.⁷⁰ The EPA deemed that the air quality near the plant was 'very poor'.⁷¹ In May 2021, a brick warehouse storing plastics in South Melbourne was engulfed in flames, leading to the closure of a school and the EPA advising residents to stay indoors.⁷²

Plastics manufacturing occurs in the northern suburbs of Campbellfield, Dallas and Coolaroo, and in the south-eastern suburb of Dandenong; some of Melbourne's least socially and economically advantaged neighbourhoods. Manufacturing plants

are also in close proximity to residential areas, schools, retail, hospitality zones and protected grasslands.

Incinerators are in development in Laverton North and Dandenong.⁷³ Medical publications and community groups have raised concern for communities residing near plastic incinerators, as close proximity may lead to an increased risk of acquiring health conditions (see Table 1).

Risks of harm to human health and the environment in the plastics cycle

The plastics cycle (manufacturing, storage, incineration) poses a range of risks to the environment and human health. Given the EP Act's focus on human health, it is important that plastics communities are aware of the potential health implications associated with the plastics life cycle.

The manufacturing stage involves a range of chemical processes that can have adverse impacts on the human body and the environment. In addition to this, plastic refining and manufacture is one of the most greenhouse-gas-intensive industries in the manufacturing sector, causing widespread damage to the environment.⁷⁴

Toxic fumes emitted from plastics storage and incineration have also been linked to a range of cancers and various health conditions related to the endocrine and nervous system with human exposure occurring through: inhalation (air); ingestion (water and soils); and skin/contact (air, water and soils).⁷⁵

Emissions from plastics	Related health risks	Related environmental risks
<ul style="list-style-type: none"> • Benzene • Polycyclic aromatic hydrocarbons (PAHs) • Styrene • Acetone • Dioxins and furans • Carbon dioxide • Methane • Heavy metals 	<ul style="list-style-type: none"> • Neurological damage • Neoplasia risk, including non-Hodgkin lymphoma, soft tissue sarcoma and other cancers • Congenital abnormalities • Damage to immune system • Damage to nervous system • Damage to endocrine system • Eye and skin irritation 	<ul style="list-style-type: none"> • Air pollution can negatively impact wildlife. • Soil/air pollution and fumes can destroy native vegetation. • Toxic fumes contribute more broadly to the climate change.

Table 1: Plastic-related health conditions

The general environmental duty in Victoria

The general environmental duty ('GED') is intended to be a flexible tool, aiming to capture more harmful activities than the previous, more reactive environmental protection regime.⁷⁶ A benefit of the GED is that the EPA is no longer required to wait for pollution to occur before it can act.⁷⁷ Faced with risks, like those outlined in Table 1, arising from and potentially affecting plastics communities, the EPA must now act pre-emptively. If the EPA does not act, then the community can.

The GED shifts the focus so that businesses understand their key pollution and waste risks and ensure that practical controls are in place to prevent environmental disasters. The GED's purpose is to provide a strong deterrent for non-compliance and poor operators and fill gaps in the regulatory framework that currently result in an unequal playing field for businesses.⁷⁸

The GED is found in section 25(1) of the EP Act, which states:

'A person who is engaging in an activity that may give rise to risks of harm to human health or the

environment from pollution or waste must minimise those risks, so far as reasonably practicable'.

The GED applies to those persons engaging in activity that might cause harm arising from 'pollution' or 'waste'. This includes the emissions, including carbon and methane, from the plastics cycle and plastics waste.⁷⁹

GEDs in other Australian jurisdictions

GEDs exist in Queensland, South Australia, Tasmania, the Northern Territory and the Australian Capital Territory.⁸⁰ All of these GEDs use language like 'reasonable' and 'practicable'; however, the key difference with Victoria's GED is that it is concerned with activities that pose a risk to the environment *and* human health. This differs from other GEDs, which refer only to the environment. The Victorian GED uses the wording '*...an activity which may give rise to risks of harm to human health or the environment*'. The other GEDs, aside from SA, refer to activities which '*...already cause or will likely cause harm*'.

The Victorian GED does not refer to the probability of the risk. Unlike the other GEDs which refer to an activity 'likely' causing harm, the Victorian GED provides no qualification on how likely or unlikely the risk must be.

This means that the Victorian GED will capture a broader scope of activities compared to the other GEDs, including environmental risks which are relatively insignificant. This may mean that businesses in Victoria are expected to do more to minimise risks. It also means the GED can be used more by communities against polluting or potentially polluting businesses, including by Victoria's plastics communities against nearby industry.

Avenues for communities to enforce the GED

A claim in court can be brought against a business or individual that has breached the GED. This will be a civil claim, not a criminal claim, so the court may order a financial penalty or make directions for a change of practice. The EPA may bring a civil claim but so may an 'eligible person'.⁸¹ An eligible person is a person whose interests are affected by the contravention or non-compliance.

Based on past legal determinations, and given the proximity of communities in areas such as Dallas, Broadmeadows, Dandenong and Campbellfield to plastics manufacturing, storage and incineration, we consider it highly likely that communities may, from time to time, have their interests impacted by the

plastics cycle. Considering the focus on human health in the EP Act, and specifically in the GED, interests may include potential impacts to human health, not only environmental interests.

A person who is not eligible because of their interests, perhaps a city-based environment group, will have to convince the court that they should be able to bring a civil claim against a business for a breach of the GED. The court must be satisfied that:

- it would be in the public interest to allow the civil claim to proceed;
- the person has requested that the EPA take enforcement action or compliance action in relation to the contravention; and
- the EPA has not, within a reasonable time, taken enforcement or compliance actions.

Plastics manufacturing, storage and incineration plants may also be close to protected grasslands and parklands. For example, plastics related plants in Campbellfield and surrounding suburbs are close to the Bababi Marning Grassland Nature Reserve (Cooper St), an important part of the larger Merri Creek Marran Baba Parklands which is a critical biodiversity corridor.⁸² Environmental groups, particularly those co-located with impacted plastics communities, may therefore also be considered an eligible person for the purposes of the EP Act. The GED empowers such groups to hold those businesses accountable that are not taking positive steps to minimise risks to

nearby ecological communities and the broader environment.

Triggering the GED

Next, we consider the arguments that could be successful in establishing a contravention of the GED.

First, there needs to be a risk, which means 'the likelihood of injury or illness arising from exposure to a hazard'.⁸³ This is an objective inquiry.⁸⁴ We know from other areas of the law that it is not necessary for the risk to have eventuated for a duty-holder to breach their duty; the purpose of the duty is to prevent harms or injury.

As highlighted in Table 1 above, risks to health and the environment caused by exposure to the plastics cycle are well-documented and may be imminent in Victoria, given the two forthcoming incineration plants. Establishing that there is a risk will therefore be relatively easy for community members.

In explaining the GED to business, the EPA states that common risks to manage in fulfilment of the GED could arise from:⁸⁵

- business activities that produce noise, odour or runoff to stormwater;
- the storage, use and disposal of liquids and chemicals; and
- management and transport of wastes.

Once a risk is established, the community member or group will need to show that the duty-holder has failed to minimise a

risk so far as reasonably practicable. This may include if a business has failed to adopt and maintain processes that can identify and minimise risks. The GED may still be imposed on businesses who are struggling financially if it can be shown that it was reasonably practicable to minimise the risks human health or the environment.

Section 25(4) provides a non-exhaustive list of activities which will contravene the GED.⁸⁶ That is, if the EPA or the community observe these things then they can hold the polluter to account, for instance by accessing the court system. A person or company breaches the GED if a business fails to:

- use and maintain plant, equipment, processes and systems in a manner that minimises risks of harm to human health and the environment from pollution and waste;
- use and maintain systems for identification, assessment and control of risks of harm to human health and the environment from pollution and waste;
- use and maintain adequate systems to ensure that if a risk of harm to human health or the environment from pollution or waste were to eventuate, its harmful effects would be minimised;
- ensure that all substances are handled, stored, used or transported in a manner that minimises risks of harm to human health and the environment from pollution and waste;

- provide information, instruction, supervision and training to any person engaging in the activity to enable those persons to comply with the duty.

So, if there is some actual, threatened or possible harm to human health or the environment – a risk – arising from business activities or failures, then the GED becomes relevant. The next question is whether the business confronted with the possibility or actuality of harm did everything that was or is reasonably practicable. Remember, the GED only requires businesses to ‘minimise’ risks ‘so far as reasonably practicable’.

The next step – what is reasonably practicable?

So, a business has engaged in an activity and that activity presents a risk of harm to human or environmental health. For a community group to succeed in enforcing the GED against that business, it will need to prove that the business did not minimise risks so far as reasonably practicable.

To determine what is reasonably practicable in relation to the minimisation of risks to human health and the environment, regard must be had to:⁸⁷

- the likelihood of those risks eventuating;
- the degree of harm that would result if those risks eventuated;
- what the person concerned knows, or ought reasonably to know, about

the harm or risks of harm and any ways of eliminating or reducing those risks;

- the availability and suitability of ways to eliminate or reduce those risks;
- the cost of eliminating or reducing those risks.

The EPA has released guidance notes on how to interpret the GED, with a specific focus on what ‘reasonably practicable’ means.⁸⁸ The guidance notes explain that taking reasonably practicable action means putting in place proportionate controls to eliminate or minimise the risks of the harm.

The discussion regarding reasonable precautions in other areas of the law, including in negligence, is helpful in determining the ‘reasonably practicable’ steps a person must take to minimise risks to the environment and human health.⁸⁹

The leading interpretation of the wording ‘reasonably practicable’ comes from the High Court in *Baiada Poultry Pty Ltd v R*.⁹⁰ The Court stated that reasonable practicability does not require a duty holder to take ‘every possible step that could be taken’.⁹¹ However, the Victorian Supreme Court recently rejected that reasonable practicability involves a concept of necessity. It was opined that “‘practicable’ means ‘capable of being done’, not ‘needing to be done’”.⁹²

Determining whether an action to minimise a risk is ‘reasonably practicable’ as something capable of being done, requires weighing up the risk and how likely the risk is against considerations of time, cost and trouble.⁹³ A severe gravity

or high likelihood of the risk will make precautions more reasonably practicable. As well, the time, cost and trouble required by an act to minimise a risk may render combatting a risk impracticable. Determining reasonable practicability is, therefore, a factually specific inquiry.

Graham Barclay Oysters highlights that in certain situations – where a ‘very rare event’ occurs, a lack of statutory power exists or where a business needs to cease operation indefinitely – a person may not need to take certain steps to fulfil their duty of care.⁹⁴ That case also tells us that, where a business has considered precautions that were reasonable in response to a potential risk, the realisation of the risk does not require more. The High Court held that the steps taken were reasonable responses to the low risk of harm and in accordance with industry practice.⁹⁵ The Court further confirmed that a business should not be required to do things that it does not have the power to do (eg. offsite testing).⁹⁶ Given s 24(4)(b) of the EP Act explicitly requires a person use systems for identification, assessment and control of risks, steps taken to fulfil this subsection need only be commensurate to the degree of risk.

We think the counterfactual is true for the purpose of the GED, however. That is, in circumstances of well-known risks that fall within the ambit of the EP Act, and where the business has not put in place a comprehensive risk regime, reasonable precautions will be all those things that a business can do that will decrease harms while still operating, even if those

precautions will decrease business profits. The more severe or likely the risk, the more expensive precautions become reasonable. If the risk has been realised – that is, environmental or human health harm is proven – then we think that would require a business to do everything to ameliorate the risk that would not send the business broke.

Lessons from OHS legislation

The GED was modelled on the general duty imposed on employers under the *Occupational Health and Safety Act* (**‘OHS Act’**).⁹⁷ Under the OHS Act, employers ‘must, so far as is reasonably practicable, provide and maintain for employees of the employer a working environment that is safe and without risks to health’. Interpretations of the OHS duty may provide guidance on how the GED will be understood, though courts have expressed caution about transposing ideas across areas of the law.⁹⁸

To fulfil the OHS duty, employers are required to take an active and flexible approach to identifying risks.⁹⁹ Duty-holders must be constantly considering risks and the reasonable practicality of minimising those risks. Risk management system manuals and registers,¹⁰⁰ and safety procedures¹⁰¹ have been referred to in case law as actions that may show an employer was actively fulfilling this duty. However, even if an employer is actively considering risks and minimisation, the court will scrutinise whether the

substance of the activity is to an adequate standard.¹⁰²

The nature of fulfilling the obligation, or whether acts such as safety plans are adequate, may also be informed by evidence such as industry codes of practice, industry regulations and general industry knowledge.¹⁰³

This means that the GED will more likely be breached where a business does not have an environmental management system, does not have publicly available data and information about environmental risk management, does not have dedicated environmental personnel and is not adopting best practice industry knowledge.

Interpretations under the OHS Act also provide the following guidance for understanding the GED:

- the risks will be determined by a factually specific consideration of the activity the duty-holder is engaged in. For plastics communities, the risks will be defined by location and conduct;
- the risk does not need to have eventuated for the duty to be breached;
- it will be necessary to point to an act that could minimise the identified risk. It will not be sufficient for a community to claim pollution. They must argue what activity or conduct should have been done differently;
- whether a duty-holder was minimising risks so far as reasonably

practicable may be influenced by codes of practice, regulations and general industry or trade knowledge.

Lessons from other jurisdictions

In states and territories with GEDs similar to Victoria,¹⁰⁴ the following measures have been held as reasonable and practicable by courts:

- a management plan that sets out measures taken to prevent or minimise environmental harm;¹⁰⁵
- retain and maintain infrastructure that is used to monitor, prevent, or minimise harm;¹⁰⁶
- relocate any equipment if its current position poses a risk;¹⁰⁷
- upgrade or increase equipment if necessary to support the action;¹⁰⁸
- regularly take samples of air, water, groundwater quality;¹⁰⁹
- regularly monitor and record air, water, groundwater quality;¹¹⁰
- stormwater management plan;¹¹¹
- waste management plan directing the waste not be released into the environment but disposed of at licensed facilities.¹¹²

Drastic times call for plastic measures

We started this report identifying the need for and trends to reduce plastic waste, and made the case that our community will be better served by greater scrutiny of the plastics industry around Melbourne. It is an industry that causes harm, has the potential to cause further harm, and contributes to climate change. We ended this report by looking at the Victorian GED. It provides a legal tool to reduce emissions associated with plastics manufacture, makes us think carefully about end of life for plastics, and will put pressure on the closure of stockpile sites of plastics. On the next page, we summarise the opportunity provided by the GED in a flowchart. The wording of the GED will mean that a broader scope of wrongdoing is captured in comparison to other Australian jurisdictions. It arms communities with the ability to ensure that businesses dealing with plastics have the correct risk management measures in place to prevent environmental or health disasters before they occur. Businesses will need to constantly monitor for any

potential risks and take all reasonable steps to reduce them, which will hopefully reduce the overall damage caused to Victoria's environment and human health.

If the EPA does not take charge for those plastics communities confronting environmental injustices, this report explains the activities and conduct that, if observed by communities, could support them in legal attempts to protect people and the environment. This sectoral inquiry might lead to further work in exploring how the GED in Victoria might be applied more broadly to industrial sectors that are contributing to climate change. Another report for another Day of Action, perhaps.

Authors: Miranda Aprile, Hayley Byrne, Brad Jessup, Alexander Laurence, Shuai Liu and L. M. Shirley

Using the GED for environmental justice for plastics communities

STEP 1 – Identify a possible environmental or human health risk

The risk doesn't need to be likely, just possible. Pollution does not yet have to have occurred. See our discussion on 'Triggering the GED' for an explanation and examples.

STEP 2 – Find out if the business that has created the risk is taking actions to minimise the occurrence or magnitude of the risk. Have they taken action?

Examples of taking actions include: having an environmental management plan, monitoring and reporting emissions, and having systems or equipment to reduce the extent of emissions of degree of potential harm to the environment or human health.

STEP 3a – If the business is taking no action, then there is likely a breach of the duty *unless* the risk is to the environment or human health is very small or the costs of taking action would cause the business to close.

The EPA has specified a number of actions that must be taken, and not doing them may constitute a breach of the duty. We extract them in our discussion on 'Triggering the GED'.

STEP 3b – If the business is taking some actions, then you will need to identify other or more reasonable and practicable steps that the business should also be taking to minimise risks. Move onto Step 4.

STEP 4 – Can you identify an additional action from the list below that the law has said are actions that businesses should take that the business has not taken? There might be other actions you think that the business should take, but this list provides a short-cut for you.

Examples:

- management plans with measures to prevent or minimise environmental harm;
- use and upkeep of infrastructure that to monitor, prevent, or minimise harm;
- relocation or upgrade of equipment to minimise risks;
- regular monitoring and sampling of environmental quality;

STEP 5 – To argue that the action is reasonably practicable you will need to engage with the following factors. As a rule of thumb, a likely risk with high levels of harms will require more or more expensive actions to minimise risk. But even unlikely risks will require some actions.

- the likelihood of risks eventuating;
- the degree of harm that would result if those risks eventuated;
- what is known by the business about the harm or risks;
- the availability, cost and suitability of ways to eliminate or reduce those risks.

References

- ¹ See, eg, *Environment Protection Amendment Act 2019* (Vic); *Environmental Protection (Plastic Bags) Regulations 2018* (WA); *Plastic Shopping Bags Ban Act 2010* (ACT) 2010; *Plastic Shopping Bags (Waste Avoidance) Act 2008* (SA); *Plastic Shopping Bags Ban Act 2013* (Tas); *Single-use and Other Plastic Products (Waste Avoidance) Act 2020* (SA); *Waste Reduction and Recycling Amendment Act 2017* (Qld).
- ² Jacqueline Maley, 'Morrison's pledge on ocean waste – a shiny (plastic) distraction from climate policy', *The Sydney Morning Herald* (online, 15 August 2021) <<https://www.smh.com.au/politics/federal/morrison-s-pledge-on-ocean-waste-a-shiny-plastic-distraction-from-climate-policy-20210813-p58ikt.html>>.
- ³ Adam Carey, 'Recycling crisis: More than 200 dangerous stockpiles found in Victoria', *The Age* (online, 25 April 2018) <<https://www.theage.com.au/politics/victoria/recycling-crisis-more-than-200-dangerous-stockpiles-found-in-victoria-20180425-p4zblc.html>>.
- ⁴ CSIRO, *A circular economy roadmap for plastics, tyres, glass and paper in Australia* (Report, January 2021).
- ⁵ Parliament of Victoria, Environment and Planning Committee, 'Fires at recycling facilities and industrial sites', *Inquiry into recycling and waste management* (Interim Report, August 2019) 7-35.
- ⁶ Brad Jessup, 'Trajectories of Environmental Justice: From Histories to Futures and the Victorian Environmental Justice Agenda' (2017) 7(1) *Victoria University Law and Justice Journal* 48.
- ⁷ The Act was set to commence on 1 July 2020, but was postponed due to the COVID-19 pandemic.
- ⁸ *Environment Protection Act 2017* (Vic) s 25, inserted by the *Environment Protection Amendment Act 2018* (Vic).
- ⁹ 'Student Law Clinical Global Day of Action for Climate Justice', *Facebook* (Web Page) <https://www.facebook.com/studentlawclinicsforclimatejustice/?ref=page_internal>.
- ¹⁰ Luisa Cortat, Simonetti Goncalves and Michael Gerbert Faure, 'International Law Instruments to Address the Plastic Soup' (2018) 43(3) *William & Mary Environmental Law and Policy Review* 871.
- ¹¹ *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter*, London (United Kingdom), 29 December 1972, in force 30 August 1975, arts 3(1), 4(1)(a), annex 1(4).
- ¹² 'Report on the work of the ad hoc open-ended expert group on marine litter and microplastics at its fourth meeting' UN Doc UNEP/AHEG/4/7 (18 November 2020).
- ¹³ *Stockholm Convention on Persistent Organic Pollutants*, Stockholm (Sweden), 22 May 2001, in force 17 May 2004, art 3(1)(a).
- ¹⁴ Hope Johnson et al, 'Conceptualizing the Transnational Regulation of Plastics: Moving Towards a Preventative and Just Agenda for Plastics' [2021] *Transnational Environmental Law* 1, 16.
- ¹⁵ *Ibid* 25.
- ¹⁶ *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, Basel (Switzerland), 22 March 1989, in force 5 May 1992, Annexes II, VIII and IX.
- ¹⁷ Giulia Carlini and Konstantin Kleine, 'Advancing the International Regulation of Plastic Pollution beyond the United Nations Environment Assembly Resolution on Marine Litter and Microplastics Special Issue Articles: Plastics Regulation' (2018) 27(3) *Review of European, Comparative & International Environmental Law* 234, 236.
- ¹⁸ *International Convention for the Prevention of Pollution from Ships* (1973) 12 ILM 1319, Annex V reg 3(2).
- ¹⁹ *United Nations Convention on the Law of the Sea*, Montego Bay (Jamaica), 10 Dec. 1982, in force 16 Nov. 1994, art 1(4). See also: Cortat, Goncalves and Faure (n 10) 894; Johnson et al (n 14) 7.
- ²⁰ *Ibid* arts 207(1), 207(2), 194(1).
- ²¹ *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter*, London (United Kingdom), 29 December 1972, in force 30 August 1975, arts 3(1), 4(1)(a), annex 1(4).

²² ‘Resolution 1/6, Marine Plastic Litter and Microplastics’ UN Doc UNEP/EA.1/6 (27 June 2014); ‘Resolution 2/11, Marine Plastic Litter and Microplastics’ UN Doc UNEP/EA.2/Res.11 (4 August 2016); ‘Resolution 3/7, Marine Litter and Microplastics’ UN Doc UNEP/EA.3/Res.7 (6 December 2017).

²³ ‘First Meeting of the Ad Hoc Open-Ended Expert Group on Marine Litter’, *UNEP* (Web Page) <<http://www.unep.org/events/un-environment-event/first-meeting-ad-hoc-open-ended-expert-group-marine-litter>>.

²⁴ ‘Report on the work of the ad hoc open-ended expert group on marine litter and microplastics at its fourth meeting’ UN Doc UNEP/AHEG/4/7 (18 November 2020).

²⁵ Sustainable Development Goals, Target 14.1

²⁶ Sustainable Development Goals, Target 12.5

²⁷ *The Honolulu Strategy: A Global Framework for Prevention and Management of Marine Debris* (United Nations Environmental Programme; National Oceanic and Atmospheric Administration, 2011) <<https://wedocs.unep.org/bitstream/handle/20.500.11822/10670/Honolulu%20strategy.pdf?sequence=1&isAllowed=y>>.

²⁸ ‘The Circular Economy Solution to Plastic Pollution’, *The Ellen MacArthur Foundation* (Web Page, 23 July 2020) <https://plastics.ellenmacarthurfoundation.org/breaking-the-plastic-wave-perspective?gclid=Cj0KCQjw18WKBhCUARIsAFiW7JxmEe3pfg-AfDnNU9qEJy4yDprIDAjk9U4PHTNSqTpf7bu_dj62oN4aApGoEALw_wcB>.

²⁹ Johnson et al (n 14) 27.

³⁰ See, eg, *Plastic & Climate: The Hidden Costs of a Plastic Planet* (Center for International Environmental Law, Environmental Integrity Project, FracTracker Alliance, Global Alliance for Incinerator Alternatives, 5Gyres, #breakfreefromplastic, 2019).

³¹ The UNFCCC has, however, informally acknowledged the relationship between climate and plastic through its blog: see, eg, ‘Five Climate Action Projects We Love’, *UNFCCC* (14 May 2021) <<https://unfccc.int/blog/five-climate-action-projects-we-love>>; ‘The Last Straw’, *UNFCCC* (21 June 2021) <<https://unfccc.int/blog/the-last-straw>>.

³² See generally Johnson et al (n 14).

³³ ‘The Global Commitment’, *Ellen MacArthur Foundation* (Web Page) <<https://ellenmacarthurfoundation.org/global-commitment/overview>>.

³⁴ *Commitments, Visions and Definitions* (New Plastics Economy Global Commitment, February 2020), Appendix I - Common Vision.

³⁵ Johnson et al (n 14) 28–29.

³⁶ ‘Signatories’, *Ellen MacArthur Foundation* (Web Page) <<https://archive.ellenmacarthurfoundation.org/resources/apply/global-commitment-progress-report/signatories>>

³⁷ ‘Our Members’, *Global Partnership on Marine Litter* (Web Page) <<https://www.gpmarinelitter.org/who-we-are/our-members>>.

³⁸ ‘Global Partnership On Marine Litter’ <<https://www.gpmarinelitter.org/>>; U. N., ‘Global Partnership on Marine Litter’, *UNEP - UN Environment Programme* (16 August 2017) <<http://www.unep.org/explore-topics/oceans-seas/what-we-do/addressing-land-based-pollution/global-partnership-marine>>.

³⁹ ‘What We Do’, *Global Partnership on Marine Litter* (Web Page) <<https://www.gpmarinelitter.org/what-we-do>>.

⁴⁰ ‘5Gyres.Org’ (Web Page) <<https://www.5gyres.org/>>.

⁴¹ ‘What We Do’, *Break Free from Plastic* (Web Page) <<https://www.breakfreefromplastic.org/about/>>.

⁴² ‘About Gaia’, *Global Alliance for Incinerator Alternatives* (Web Page, 26 October 2015) <<https://www.no-burn.org/about-gaia/>>.

-
- ⁴³ ‘What We Do’, *Global Alliance for Incinerator Alternatives* (Web Page, 11 November 2016) <<https://www.no-burn.org/what-we-do/>>.
- ⁴⁴ Ibid.
- ⁴⁵ Ibid.
- ⁴⁶ ‘Stop Waste Colonialism’, *Global Alliance for Incinerator Alternatives* (Web Page) <<https://www.no-burn.org/stop-waste-colonialism/>>.
- ⁴⁷ ‘FEATURE: UN’s Mission to Keep Plastics Out of Oceans and Marine Life’, United Nations (Web Page, 27 April 2017) <<https://news.un.org/en/story/2017/04/556132-feature-uns-mission-keep-plastics-out-oceans-and-marine-life>>.
- ⁴⁸ Friedrich Widdel, ‘Plastics and the curse of durability’, *Phys.org* (Web Page, 3 May 2017) <<https://phys.org/news/2017-05-plastics-curse-durability.html>>.
- ⁴⁹ Kerri Major, ‘Plastic Waste and Climate Change - What's the Connection?’, World Wildlife Fund—Australia (Blog Post, 30 June 2021) <<https://www.wwf.org.au/news/blogs/plastic-waste-and-climate-change-whats-the-connection#gs.b755jn>>.
- ⁵⁰ Ibid.
- ⁵¹ Despite this fact, Australia refused to sign up to a global pledge to cut methane emissions at the 2021 UN Climate Change Conference in Glasgow.
- ⁵² E. A. Crunden, ‘How Useful Is Recycling, Really?’, *The Atlantic* (online, 28 January 2021) <<https://www.theatlantic.com/science/archive/2021/01/recycling-wont-solve-climate-change/617851/>>.
- ⁵³ Roger Harrabin, ‘Should we burn or bury waste plastic?’, *BBC News* (online, 20 February 2018) <<https://www.bbc.com/news/science-environment-43120041>>.
- ⁵⁴ Elizabeth Royte, ‘Is burning plastic waste a good idea?’, *National Geographic* (online, 12 March 2019) <<https://www.nationalgeographic.com/environment/article/should-we-burn-plastic-waste>>.
- ⁵⁵ Johnson et al (n 14) 2, 8–9.
- ⁵⁶ Ibid 8.
- ⁵⁷ Ibid 9–10.
- ⁵⁸ Ibid 9.
- ⁵⁹ Ibid 9–10.
- ⁶⁰ Ibid 18.
- ⁶¹ Environment Protection Authority, *Compliance and Enforcement Review: A Review of EPA Victoria’s Approach* (Report, February 2011).
- ⁶² The Terms of Reference for the 2017 EPA inquiry included ‘the ability of the EPA to ensure that the principle of environmental justice is adhered to, the environment is protected for the benefit of the community, and members of the community can be meaningfully involved in, and access fair treatment through, environmental regulation’.
- ⁶³ *Environment Protection Act* (n 8) ss 25, 308, 309, 313, 430, 431.
- ⁶⁴ Environment Defenders Office, *Environmental Justice Project* (Final Report, July 2012).
- ⁶⁵ David Schlosberg, *Defining Environmental Justice: Theories, Movements, and Nature* (Oxford University Press, 2007); Brad Jessup, ‘A New Justice for Australian Environmental Law’ (PhD Thesis, Australian National University, 2019).
- ⁶⁶ Environment Defenders Office (n 64).
- ⁶⁷ Cobi Calyx and Brad Jessup, ‘The Nuclear Citizens Jury: From Local Deliberations to Transboundary and Transgenerational Legal Dilemmas’ (2017) 11 *Environmental Communication* 491.

-
- ⁶⁸ Adam Carey, 'Recycling crisis: More than 200 dangerous stockpiles found in Victoria', *The Age* (online, 25 April 2018) <<https://www.theage.com.au/politics/victoria/recycling-crisis-more-than-200-dangerous-stockpiles-found-in-victoria-20180425-p4zblc.html>>.
- ⁶⁹ Environmental Justice Australia, *Raising a stink: Communities from Melbourne's west struggle for environmental justice* (Report, 22 March 2018).
- ⁷⁰ Parliament of Victoria (n 5) 7 [2.1.1]. See also: ABC News, 'Coolaroo recycling plant fire in Melbourne 'may take three days to extinguish'; Dallas issued emergency warning (online, 13 July 2017) <<https://www.abc.net.au/news/2017-07-13/recycling-plant-fire-speaks-evacuation-warning/8704414>>.
- ⁷¹ Ebony Bowden, 'Smoke from Coolaroo fire could cause long-term health problems, expert warns', *The Age* (online, 14 July 2017) <<https://www.theage.com.au/national/victoria/smoke-from-coolaroo-fire-could-cause-longterm-health-problems-expert-warns-20170714-gxazoj.html>>.
- ⁷² Rachael Dexter, 'School closes, smoke warnings after South Melbourne warehouse fire' *The Age* (online, 6 May 2021) <<https://www.theage.com.au/national/victoria/school-closes-smoke-warnings-after-south-melbourne-factory-fire-20210506-p57pb0.html>>.
- ⁷³ Jewel Topsfield, '\$150m waste-to-energy to plant in Melbourne's west gets green light' (Online, 21 January 2021) <<https://www.theage.com.au/national/victoria/waste-to-energy-plant-in-laverton-north-gets-green-light-20200121-p53tg7.html>>.
- ⁷⁴ Centre for International Environmental Law, *Plastic & Climate – The hidden cost of a plastic planet* (Report, 2019).
- ⁷⁵ *Ibid.*
- ⁷⁶ Kierra Parker, 'Insights for Victoria's General Environmental Duty from across the Ditch' (2021) 38 *Environmental and Planning Law Journal* 263, 264.
- ⁷⁷ Victoria, *Parliamentary Debates*, Assembly, 20 June 2018, 2084 (Hon Lily D'Ambrosio).
- ⁷⁸ *Ibid.*
- ⁷⁹ *Environment Protection Act* (n 8) s 3.
- ⁸⁰ Australia Government (Geoscience Australia), *Environment Legislation Guidelines* (2011).
- ⁸¹ *Environment Protection Act* (n 8) s 308.
- ⁸² Merri Creek Management Committee, Babi Marning (Cooper Street) Grassland Significance, (Web Page, 5 October 2021) <https://mcmc.org.au/index.php?option=com_content&view=article&id=246&Itemid=331>.
- ⁸³ *Director of Public Prosecutions v Esso Australia Pty Ltd* [2001] VSC 263, [6].
- ⁸⁴ *Chugg v Pacific Dunlop (No 2)* [1999] 3 VR 934, [53]; *R v Australian Char Pty Ltd* [1995] 3 VR 834, [43].
- ⁸⁵ Environment Protection Authority Victoria, *General environmental duty* (GED), (Web Page, 11 May 2020) <<https://www.epa.vic.gov.au/for-business/new-laws-and-your-business/general-environmental-duty>>.
- ⁸⁶ *Environment Protection Act* (n 8) s 25(4).
- ⁸⁷ *Ibid* s 6(2).
- ⁸⁸ Environment Protection Authority Victoria, *General environmental duty* (GED), (Web Page, 22 September 2020) <<https://www.epa.vic.gov.au/about-epa/laws/new-laws/what-is-reasonably-practicable>>.
- ⁸⁹ *Graham Barclay Oysters Pty Ltd v Ryan* [2002] 211 CLR 540 ('*Graham Barclay Oysters*')
- ⁹⁰ (2012) 246 CLR 92.
- ⁹¹ *Ibid* [15].
- ⁹² *Keilor Melton Quarries v R* [2020] VSCA 169, [43].
- ⁹³ *Chugg v Pacific Dunlop* (n 84) [38]-[39]; Elizabeth Bluff and Richard Johnstone, 'The Relationship between 'Reasonably Practicable' and Risk management regulation' (2005) *Australian Journal of Labour Law* 197, 211.
- ⁹⁴ *Graham Barclay Oysters* (n 89) [111], [204], [283].

⁹⁵ Ibid [113].

⁹⁶ Ibid [110].

⁹⁷ *Occupational Health and Safety Act 2004* (Vic) s 21.

⁹⁸ *Ashton Valley Fresh Pty Ltd v Dolon* [2021] SASC 44, [145].

⁹⁹ *Bluff and Johnstone* (n 93) 212; *Holmes v Spence* (1992) 5 VIR 119, [123].

¹⁰⁰ *Director of Public Prosecutions v Hazelwood* [2020] VSC 278, [62].

¹⁰¹ *Baiada v Poultry Pty Ltd v R* (2012) 246 CLR 92 [70].

¹⁰² *Director of Public Prosecutions v Hazelwood* [2020] VSC 278, [111].

¹⁰³ *Chugg v Pacific Dunlop* (n 84) [38].

¹⁰⁴ *Environmental Protection Act 1994* (Qld) s 319; *Environment Protection Act 1993* (SA) s 25; *Environmental Management and Pollution Control Act 1994* (Tas) s 23A; *Waste Management and Pollution Control Act 1998* (NT) s 12; *Environment Protection Act 1997* (ACT) s 22.

¹⁰⁵ *Cuthbert v Moreton Bay Regional Council (No 2)* [2018] QPEC 40, [27] ('Cuthbert').

¹⁰⁶ *Longley v Chief Executive, Department of Environment and Heritage Protection* [2018] QCA 32, [4] ('Longley').

¹⁰⁷ *Gregg v Northern Midlands Council* [2004] TASSC 10 [11].

¹⁰⁸ *Longley* (n 106), [4].

¹⁰⁹ Ibid.

¹¹⁰ Ibid. See also: *Cuthbert* (n 105); *Onesteel Manufacturing Pty Ltd v Whyalla Red Dust Action Group Inc* [2006] SASC 114.

¹¹¹ *Cuthbert* (n 105), [148].

¹¹² Ibid [195].