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Environment and Planning Committee



Inquiry into recycling and waste management

Interim report

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Legislative Council Environment and Planning Committee

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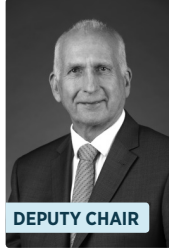
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About the committee

Functions

The Legislative Council Environment and Planning Committee's functions are to inquire into and report on any proposal, matter or thing concerned with the arts, environment and planning the use, development and protection of land.

As a Standing Committee, it may inquire into, hold public hearings, consider and report on any Bills or draft Bills, annual reports, estimates of expenditure or other documents laid before the Legislative Council in accordance with an Act, provided these are relevant to its functions.

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Chair's foreword

The inquiry into recycling and waste management, referred to the committee in early March 2019, has a broad set of terms of reference which cover a range of issues including the role that the changes to China's recycling policy have had on Victoria's management of recycling and waste and strategies to reduce waste generation and better manage waste such as product stewardship, the potential for a container deposit scheme, the banning of single use plastics and government procurement policies.

In addition to a final report, which is now due at the end of November, this terms of reference required the committee to prepare an interim report. Around the time of the commencement of the inquiry, there was a major fire at a factory in Campbellfield which had significant impact on businesses and the community in the area and highlighted one of the terms of reference, namely the need to avoid dangerous stockpiling of recyclable materials. The Campbellfield fire was just the latest in a string of similar incidents and the committee considered that the interim report should urgently deal with the issues related to the unsafe stockpiling of industrial waste, as well as recyclable materials.

While the committee has heard evidence from the key government departments on broader issues, the focus of much of the evidence to date has been around the issue of the fires and the threat they pose to community and environmental health and safety. Therefore, this interim report only deals with the issue of the risks of stockpiling of materials and how these risks are being managed.

The committee's final report, due at the end of November 2019, will address in detail the broader issues of recycling and waste management as outlined in the terms of reference.

I would like to express my appreciation for the work done by my fellow committee members and for the bipartisan and collegiate approach they have taken to the inquiry. Inquiries of this nature require a great deal of committee members' time in reading a large number of submissions and hearing evidence from a wide range of people and organisations and I thank members for their efforts to date and for their ongoing commitment to the inquiry.

I would also like to thank the extremely efficient and professional staff of the committee, the Secretary Michael Baker, Inquiry Officer Kieran Crowe, Research Assistant Alice Petrie and the committee's administrative staff, particularly Justine Donohue and Christina Smith.



Cesar Melhem MP
Chair

Findings

FINDING 1: Emergency services personnel have been put at serious risk as a result of regulatory non-compliance by private companies and individuals.

FINDING 2: While the information provided by the EPA and other agencies suggests that for the most part, air and waterway quality did not exceed human health guidelines, the Committee is concerned that some community members have reported adverse health impacts as a result of the fires.

FINDING 3: The Committee notes that while there are structures in place to ensure communication to the public during emergency responses, it is apparent there is not strong awareness about these communication channels in metropolitan areas.

FINDING 4: The Committee also finds that there was inadequate communication from the relevant agencies to the community about public health risks during and after the emergency.

FINDING 5: The Committee is concerned that there may have been inadequate investigatory, compliance and enforcement responses to reported pollution events, particularly in metropolitan waterways, in recent years.

FINDING 6: There is regulatory overlap and a lack of a coordinated approach to fire safety regulation in the waste and resource recovery industry. The Committee looks forward to the outcome of the review of the regulatory framework governing fire risks at sites storing combustible recyclable and waste materials, including making significant recommendations and changes to the regulation, oversight and coordination of the response to fire risk at these sites.

Terms of reference and scope of the interim report

1.1 Terms of reference for the Inquiry

On 6 March 2019, the Legislative Council resolved that the Environment and Planning Committee inquire into, consider and provide an urgent interim report, as the committee deems necessary, on the current circumstances in municipal and industrial recycling and waste management, and provide a final report, by Tuesday, 13 August 2019, on the crisis in Victoria's recycling and waste management system, partly resulting from the China waste importation ban, including, but not limited to:

1. the responsibility of the Victorian government to establish and maintain a coherent, efficient and environmentally responsible approach to solid waste management across the state, including assistance to local councils;
2. whether the China National Sword policy was anticipated and responded to properly;
3. identifying short and long-term solutions to the recycling and waste management system crisis, taking into account:
 - a. the need to avoid dangerous stockpiling and ensure recyclable waste is actually being recycle
 - b. the cleaning and sorting capabilities and the processing capabilities in Victoria and the potential to expand the local recycling industry
 - c. how to better enable the use of recycled materials in local manufacturing;
 - d. the existing business model and economic challenges facing the existing industry;
 - e. the quantifiable benefits, including job creation and greenhouse gas emissions reduction, of pursuing elements of a circular economy in Victoria;
 - f. the existing Sustainability Fund and how it can be used to fund solutions to the waste crisis;
4. strategies to reduce waste generation and better manage all waste such as soft plastics, compostable paper and pulp, and commercial waste, including, but not limited to:
 - a. product stewardship;
 - b. container deposit schemes;

- c. banning single-use plastics;
 - d. government procurement policies
5. relevant reviews, inquiries and reports into the waste and recycling industry in other Australian jurisdictions and internationally;
 6. any other related matters.

On 18 June 2019, the Legislative Council agreed to a motion extending the reporting date for the Inquiry's final report from 13 August 2019 to 29 November 2019. It also required the Committee to present an interim report on 29 August 2019.

1.2 Submissions

The Committee advertised the Inquiry and called for submissions through its News Alert Service and on Parliament's Facebook page. It was also advertised on the Parliament of Victoria website. Over 100 letters were sent to stakeholders to inform them of the Inquiry and to invite them to prepare a submission.

To date, the Committee has received 701 submissions. The Committee is still accepting submissions on a case-by-case basis.

1.3 Public hearings

The Committee has held public hearings to date on the following dates:

- 3 May 2019
- 10 May 2019
- 5 June 2019
- 24 June 2019
- 25 June 2019
- 6 August 2019
- 21 August 2019.

The Committee intends to hold further hearings in regional Victoria and in Melbourne, including with local councils, environmental and industry groups, before the final report is tabled.

1.4 Scope of the interim report

A key element of the terms of reference was the requirement that the Committee table an interim report prior to concluding the Inquiry.

The Committee decided to focus its initial inquiry into the urgent matter of three major fires relating to the waste and resource recovery system in Victoria since 2017. Two of those fires, at Coolaroo in 2017 and at Campbellfield in 2018, were related to over-stocking of recyclable and chemical waste. The third, at West Footscray in 2018, was related to illegal stockpiling of industrial and chemical waste. It is these issues that the Committee has addressed in its interim report.

There are a number of hearings that have not yet been held at the time of tabling the interim report, including a number of regional hearings. There are also a large number of submissions still to be analysed. As a result, the Committee is not addressing the broader issues being examined in this inquiry in this interim report. These broader issues of recycling and waste management, as outlined in the terms of reference, will be covered in detail in the final report, which is due to be tabled in November 2019.

In the final report the Committee intends to address some of the challenges relating to Victoria's waste and resource recovery system including, but not limited to:

- the existing business model and economic challenges for the waste and resource recovery sector
- the impact of China's National Sword policy introduction
- the State Government, local council and industry response to the crisis that followed the announcement of China's National Sword policy
- local council contracts for kerbside recycling
- infrastructure requirements.

The Committee also intends to look at strategies to improve Victoria's waste and resource recovery system including, but not limited to:

- a container deposit scheme
- community education
- product stewardship
- the use of recycled content in local manufacturing
- the potential for banning single use plastics¹
- Government procurement and circular economy policies
- diversion of municipal and commercial waste from landfill
- issues related to industrial waste
- the potential to reduce co-mingling of municipal recyclable material

¹ The Committee notes that under the *Environment Protection Amendment Bill 2019*, which at the time of writing is yet to pass Parliament, single-use plastic bags less than 35 microns will be banned in Victoria from 1 November 2019.

- waste to energy technology
- waste avoidance strategies
- further use of the Sustainability Fund
- dealing with toxic refuse
- market development for waste streams.

1.5 The current recycling crisis

The Committee is acutely aware of the significant difficulties being experienced in the recycling industry in Victoria at the moment. In particular, the Committee notes the difficulties currently being experienced across the State as a result of the closure of SKM Recycling. These issues will be dealt with in the final report.

1.6 The current role of the relevant agencies

As noted in section 1.4, this interim report deals with issues relating to three major fires at recycling facilities and industrial sites. A brief overview of the Government agencies involved in these incidents, as well as their roles and responsibilities in relation to the waste and resource recovery system, is outlined in this section.

1.6.1 The Environment Protection Authority (EPA)

The EPA is a statutory authority whose objective is to protect public health and the environment by preventing and reducing the harmful effects of pollution and waste.

The EPA enforces the *Environment Protection Act 1970* and the *Environment Protection Act 2017*,² which include a number of duties relating to the regulation of the waste and resource recovery sector. Its primary duties in relation to the sector are to ensure compliance with the Environment Protection Acts and regulations, including licencing and approvals.³

1.6.2 The Victorian Work Cover Authority (WorkSafe)

WorkSafe is Victoria's health and safety regulator and the manager of Victoria's workers' compensation scheme. As the health and safety regulator, WorkSafe administers the *Occupational Health and Safety Act 2004* (Occupational Health and Safety Act) and associated regulations to ensure safe workplaces. WorkSafe also administers the *Dangerous Goods Act 1985* (Dangerous Goods Act), which includes

² The *Environment Protection Act 2017* is due to come into force in July 2020.

³ Victorian Government, *Submission 699*, p.12; Mr John Bradley, Secretary, Department of Environment, Land, Water and Planning, public hearing, Melbourne, 3 May 2019, *Transcript of evidence*, p. 2.

regulations for the storage of chemical waste that are discussed in chapter 2 of this report.⁴

1.6.3 The Metropolitan Fire and Emergency Services Board (MFB)

The MFB is the fire service agency for the metropolitan district of Melbourne. It has responsibilities to provide fire safety, fire suppression, fire prevention and emergency response services. The MFB provides advice to local councils and all State Government agencies on fire safety in the waste and resource recovery sector.⁵

⁴ WorkSafe Victoria, *Submission 661*, p. 1.

⁵ Metropolitan Fire and Emergency Services Board, *Submission 580*, pp. 1-2.

2.1 Overview of the fires

There have been three major fires at recycling facilities and industrial sites in the Melbourne metropolitan area since 2017. They are:

- The Coolaroo fire on 13 July 2017, which took at a recycling facility owned by SKM.
- The West Footscray factory fire on 30 August 2018, which took place in a warehouse that had been used to illegally store chemical waste.
- The Campbellfield fire on 5 April 2019, which took place at Bradbury Industrial Services, a chemical waste storage and disposal company.

The Committee notes there have been other fires of a smaller scale, though no less serious, at recycling and waste facilities in recent years. For the purposes of this interim report, the Committee has decided to focus on the major fires listed above.

2.1.1 The Coolaroo fire

On 13 July 2017, a fire broke out at SKM's Coolaroo material recovery facility, which is the largest facility of its kind in the southern hemisphere. The facility sorts and processes household recycling and waste for many local councils in the metropolitan area.¹

The fire was concentrated on burning piles of cardboard. It lasted for 20 days and over 100 firefighters attended. The smoke from the fire resulted in the evacuation of nearby residents. Four people were hospitalised and 12 required medical attention.²

2.1.2 The West Footscray factory fire

On 30 August 2018, a fire broke out at an industrial warehouse in West Footscray. The warehouse was partly constructed with asbestos and contained a large quantity of 44-gallon drums of unknown chemical and industrial waste.³ The fire burned for several days before it was extinguished. The fire was categorised by the MFB as an 8th alarm, which is the highest category given to an emergency response.⁴

1 SKM Recycling, *Submission 581*, p. 5; SKM has waste and recycling contracts with over 30 of Victoria's 79 local councils, including many in the Melbourne metropolitan area.

2 Inspector-General for Emergency Management, *Review of SKM Coolaroo Recycling Plant Fire*, Victorian Government, Melbourne, 2017, pp. 12-13; Victorian Government, *Submission 699*, p. 217.

3 United Firefighters Union, Victoria Branch, *Submission 408*, p. 2.

4 Metropolitan Fire and Emergency Services Board, *Submission 580*, p. 1.

An EPA analysis of Stony Creek, which runs alongside the site, showed a range of chemicals flowed into the creek as a result of the fire. These included detergents, industrial solvents and PFAS, which is a key ingredient in fire retardant foams.⁵

The United Firefighters Union, Victoria Branch (UFU) advised the Committee they believed the chemicals were illegally moved to the site in the days before the fire.⁶ Victoria Police are investigating the cause of the fire and the Coroners Court of Victoria are conducting an inquest into the fire.

The fire produced a large amount of harmful smoke. Air quality monitoring showed a 'very-poor' air quality rating at times during the incident. EPA analysis also showed that concentrations of chemicals were very high in Stony Creek on Thursday, 30 August 2019, and caused the death of fish and aquatic life in the creek. In some cases, it exceeded human health recreational guidelines for several days after the fire.⁷

Concentrations of these chemicals have declined significantly over time, although as at August 2019, the EPA recommended avoiding contact with the water and to avoid eating fish from the creek.⁸

2.1.3 The Campbellfield fire

A fire at the Campbellfield site of Bradbury Industrial Services broke out on Friday, 5 April 2019. Bradbury Industrial Services was a company that provided storage and disposal services for chemical and hazardous waste.⁹ The fire was accidentally started in the morning and was also categorised as an 8th alarm. The MFB were able to bring the fire under control by the afternoon,¹⁰ however, a large amount of harmful smoke was emitted during the incident.¹¹ It resulted in the closure of several schools and residents were evacuated from nearby streets.¹² It was reported that two employees of Bradbury Industrial Services were injured in the fire.¹³ There was substantial damage to adjoining properties and there is a significant pollution problem.

The Committee heard from Mr Robert Timmins, whose factory adjoined Bradbury Industrial Services' Campbellfield site. Mr Timmins explained that he called the

5 Environment Protection Authority Victoria, *Waterways around the West Footscray industrial fire*, 13 August 2019, <<https://www.epa.vic.gov.au/our-work/current-issues/industrial-fire-in-west-footscray>>, accessed 15 August 2019.

6 United Firefighters Union, *Submission 408*, p. 2.

7 Environment Protection Authority Victoria, *Waterways around the West Footscray industrial fire*.

8 *ibid.*

9 *The Age* reported on 10 July 2019 that Bradbury Industrial Services had been placed into administration; see, Chris Vedelago and Sumeyya Ilanbey, 'Company behind Campbellfield fire collapses, taxpayers could foot bill', *The Age*, 10 July 2019, <<https://www.theage.com.au/national/victoria/company-behind-campbellfield-fire-collapses-taxpayers-could-foot-bill-20190710-p525x3.html>> accessed 15 July 2019.

10 Mr Adam Dalrymple, Acting Deputy Chief Fire Officer, Metropolitan Fire and Emergency Services Board, public hearing, Melbourne, 3 May 2019, *Transcript of evidence*, p. 11.

11 Metropolitan Fire and Emergency Services Board, *Submission 580*, p. 1.

12 Metropolitan Fire and Emergency Services Board, Campbellfield factory fire update, media release, 5 April 2019, <<http://www.mfb.vic.gov.au/News/Campbellfield-factory-fire-update.html>> accessed 15 August 2019.

13 Peter Lusted, 'Melbourne fire prompts calls for tighter regulation as two workers recover from burns', *ABC News*, 6 April 2019, <<https://www.abc.net.au/news/2019-04-06/union-critical-of-campbellfield-waste-storage-plant-after-fire/10977338>> accessed 25 July 2019.

emergency services switchboard (triple zero) as the fire began to spread to his factory. The switchboard told Mr Timmins that the incident had already been lodged with the MFB and that they would not attend to put out the fire taking hold in his factory. Mr Timmins was forced to call again and tell the switchboard that a new fire had started on his street to get the MFB to attend his factory.

As in most chemical fires I imagine there is a fair bit of liquid. We were downhill. It was pretty obvious to me and anybody else who wants to think about it that the liquid was going to come downhill, and sure enough at about 8 o'clock we were onto the emergency services—we were ringing 000—trying to get them to identify the fact that the fire was now spreading to us, and nobody turned up. They would not take our call initially and said that they were aware of a fire and therefore they did not need to do anything. In the end one of our group said, 'It's a new fire', and at about that point they—this is 000—accepted that call, and we then got a fire brigade truck to turn up in our street at 8.24, as I said.¹⁴

The Committee is concerned that communication between the switchboard and the emergency incident controller is not sufficient to be able to provide the incident controller with additional information from callers to the switchboard. The Committee is concerned about this issue and will pursue it further in the final report.

2.2 Causes of increased fire risk

The Committee believes there are several key issues that contributed to increased fire risks at these sites. They are:

- illegal dumping and storage of chemical waste at industrial sites
- over-stockpiling of recyclable and other waste materials at legal recycling and waste facilities
- a lack of end markets for hazardous waste disposal
- the location of waste and resource recovery facilities in buildings that are not fit for purpose
- the inadequate system of proactive monitoring and enforcement of chemical waste storage by responsible authorities
- siting of facilities in inappropriate areas.

2.2.1 Illegal dumping and storage of chemical waste

As a result of multi-agency intelligence work undertaken following the West Footscray fire, a taskforce led by WorkSafe in conjunction with the EPA and other agencies, found

¹⁴ Mr Robert Timmins, public hearing, Melbourne, 6 August 2019, *Transcript of evidence*, p. 13.

illegal stockpiling of chemical waste and other waste materials at thirteen industrial sites in Epping, Campbellfield and Craigieburn.¹⁵

WorkSafe told the Committee that between 16 and 25 million litres of illegally dumped chemical waste has been discovered at these sites.¹⁶ Approximately 65 per cent of the chemicals discovered are class 3 flammable liquid dangerous goods, which combust at 60 degrees celsius.¹⁷

The Committee was told that five of the identified sites were occupied by Bradbury Industrial Services.¹⁸ The Committee understands alleged organised criminal activity may be responsible for some or all of the material at the remaining sites.¹⁹ The Committee notes there are ongoing investigations into the person(s) and organisations responsible.

The Committee heard from the EPA that this activity may be caused by a desire to avoid chemical disposal costs.²⁰

WorkSafe is leading a multi-agency group to remove the waste and recover the clean-up costs from the duty holders under the Dangerous Goods Act. The sites are under 24-hour security while the clean-up takes place.²¹ In response to a question on notice, WorkSafe informed the Committee that as at 30 January 2019, the cost for the security was over \$1.6 million.²²

Ms Sheriden Tate, a local resident and member of the Hume City Council safety advisory committee, told Members that despite the 24-hour security, she was concerned about the safety risks due to the location of some of the illegal dump sites:

One of the illegal waste dumps sits next to a service station. Should that go up, it will take out the suburb. They have got caravans at these sites where they bring the chemicals out and process the chemicals, because they do not know what chemicals are in the site, so they have got what they call caravans out the front with 24-hour guards. So they are there. They bring the chemicals out test barrel by barrel, and then they know how to dispose of them. Because these are in industrial estates, it is a big hoon area, so in incidents they have had hoon drivers up there and a car has lost control and narrowly missed hitting that site.²³

¹⁵ As at 13 July 2019. WorkSafe Victoria, *Taskforce to clean up additional dangerous goods site*, media release, 13 July 2019.

¹⁶ Mr Mark Carter, Acting Assistant Chief Fire Officer, Metropolitan Fire and Emergency Services Board, public hearing, Melbourne, 3 May 2019, *Transcript of evidence*, p. 10.

¹⁷ Australian Transport Council, *Australian Code for the Transport of Dangerous Goods by Road And Rail*, Commonwealth Government, seventh edition, p. 57.

¹⁸ Ms Marnie Williams, Chief of Business Operations, WorkSafe Victoria, public hearing, Melbourne, 10 May 2019, *Transcript of evidence*, p. 3.

¹⁹ Mr John Bradley, *Transcript of evidence*, pp. 10-11.

²⁰ Dr Cathy Wilkinson, Chief Executive Officer, Environment Protection Authority Victoria; public hearing, Melbourne, 3 May 2019, *Transcript of evidence*, p. 15.

²¹ Ms Marnie Williams, *Transcript of evidence*, p. 7.

²² WorkSafe Victoria, *Inquiry into Recycling and Waste Management hearings*, response to question on notice received 31 May 2019, p. 1.

²³ Ms Sheriden Tate, public hearing, Melbourne, 6 August 2019, *Transcript of evidence*, p. 31.

According to WorkSafe, as at 13 July 2019, five million litres of waste chemicals have been removed and three of the illegal sites in Epping have been completely cleared.²⁴ The Committee notes that in late July 2019, it was reported that up to 50 million litres of additional chemical waste had been dumped at a property near Kaniva in the state's north-west.²⁵ The EPA said in a media release that a ground-penetrating radar drone has been used to identify 20 areas at the property where chemical waste had been buried in pits.²⁶ It is reported in the media that there are links between this site and the sites discovered in the metropolitan area.²⁷

The Committee notes with concern that reportedly up to 75 million litres²⁸ of chemical waste were disposed of outside of the legal chemical waste disposal industry²⁹ without regulators becoming aware until the West Footscray fire. The steps the EPA is taking to improve the chemical waste tracking system are discussed in section 2.8.6.

The Government is also taking action to strengthen penalties for those who illegally dump chemical waste. This is discussed in sections 2.8.2 and 2.8.5.

Lack of facilities to dispose of chemical waste

The Committee heard from WorkSafe, who is leading efforts to dispose of the illegally dumped chemical waste, that there is currently insufficient capacity within the state to dispose of the waste.³⁰ There is only one company, Geocycle, which is able to accept and process the chemicals left by Bradbury Industrial Services following the closure of their site due to the fire, and subsequent entry into administration.³¹

The Committee heard that assessments were taking place to look at whether Geocycle's operations as far afield as Tasmania could assist with processing the waste.³² There is an urgent need for more disposal facilities for dangerous and toxic waste.

²⁴ WorkSafe, *Taskforce to clean up additional dangerous goods site*, media release.

²⁵ Chris Vedelago, Sumeyya Ilanbey and Cameron Houston, 'Massive illegal chemical dump found buried on bush block in country Victoria', *The Age*, 19 July 2019, <<https://www.theage.com.au/national/victoria/massive-illegal-chemical-dump-found-buried-on-bush-block-in-country-victoria-20190719-p528y9.html>> accessed 22 July 2019.

²⁶ Environment Protection Authority Victoria, 'Illegal waste dump - EPA to hold Kaniva community meeting', media release, 20 July 2019.

²⁷ Vedelago, Ilanbey and Houston, 'Massive illegal chemical dump found buried on bush block in country Victoria'.

²⁸ This figure includes up to 25 million litres of chemical waste discovered in metropolitan Melbourne and the reported discovery of 50 million litres of chemical waste at a property in north-west Victoria.

²⁹ The Committee acknowledges that some of this chemical waste may have been generated in the black market.

³⁰ 300,000 litres per week are able to be processed. See, Mr Michael Coffey, Head of Hazardous Industries and Industry Practice, WorkSafe Victoria, public hearing, Melbourne, 10 May 2019, *Transcript of evidence*, p. 9.

³¹ Australian Securities and Investments Commission, *Combined Notice of Appointment and First Meeting of Creditors of Company Under Administration: Bradbury Industrial Services Pty Ltd*, published notice, 9 July 2019, <<https://insolvencyntices.asic.gov.au/browsesearch-notices/notice-details/Bradbury-Industrial-Services-Pty-Ltd-121279847/a734b4c3-26b8-4bdc-a2f8-898261a696ea>> accessed 25 July 2019.

³² Mr Michael Coffey, *Transcript of evidence*, pp. 9 and 16.

Notice of EPA inspections

The Committee has heard that the EPA has conducted many unannounced inspections following the discovery of significant illegal storage of chemical waste.³³ However, the Australian Workers' Union - Victorian Branch told the Committee in a submission that, according to their members, 'recyclers are given adequate notice of an intended EPA visit that allows the dodgy operators to move products off-site or allow it to be hidden from site and we understand this also happened at the Campbellfield site.'³⁴

Businesses that dump non-chemical waste

Mr Peter Stafford, an MFB officer presenting at a public hearing with the UFU,³⁵ told the Committee that it is not just chemical waste being dumped and abandoned in warehouses, but also other types of waste such as building and construction materials or tyres. Again, such activity is without regard for fire safety measures:

...they are using a system that is sometimes referred to as a phoenix system of acquiring a block of land cheaply, often a building in disrepair as Steve talked about, and stockpiling recyclable materials, whether it is batteries, CRWM or, as you would probably be more aware of it, co-mingled recycled stuff, chemicals, tires, construction and demolition material. It does not matter what industry and what material you look at, they use the same process: stockpiling lots of stuff, making lots of money and then just leaving it for us to clean up.³⁶

2.2.2 Over-stockpiling at legal recycling and waste processing facilities

Another key cause of the major fires has been over-stockpiling of recyclable and other waste material at legally operating waste facilities. This was the case with the Coolaroo fire, where recyclable material was overstocked, and at the Campbellfield fire where chemical waste was overstocked.

The Coolaroo fire

The Committee heard that stockpiling of materials had become more common as a consequence of the fall in the market for recycled goods following the introduction of China's National Sword policy.³⁷

The Committee heard that prior to the Coolaroo fire, stockpiles at the site were 'not in any kind of orderly way'.³⁸ The EPA noted that stockpiles of recyclable material are

³³ Most of the 116 inspections the EPA has conducted since the West Footscray Fire were unannounced. See, Dr Cathy Wilkinson, *Transcript of evidence*, p. 11.

³⁴ Australian Workers' Union - Victorian Branch, *Submission 694*, p. 3.

³⁵ Mr Stafford told the Committee he was working with the multi-agency Resource Recovery Facilities Audit Taskforce.

³⁶ Mr Peter Stafford, Member, United Firefighters Union, public hearing, Melbourne, 25 June 2019, *Transcript of evidence*, p. 4.

³⁷ Ms Rose Read, Chief Executive Officer, National Waste and Recycling Industry Council, public hearing, Melbourne, 5 June 2019, *Transcript of evidence*, p. 1.

³⁸ Dr Cathy Wilkinson, *Transcript of evidence*, p. 11.

not inherently dangerous, as long as they are managed and stored appropriately.³⁹ Following the fire, which the Committee heard was the first major fire of its type for many years, the Government introduced an interim waste management policy.⁴⁰ The policy gave the EPA powers to ensure fire safety measures were applied to stockpiles of recyclable materials.⁴¹ The EPA told the Committee what a safe stockpile looks like:

When it is turned into piles that are no more than 4 metres with 10 metres or 20 metres distance between them on all sides and so on, and only in defined areas where the fire management plan relates, that is an appropriate stockpile. We cannot guarantee there would never be another fire, but it means if there is the fire agencies can get in and put it out much more safely, much more quickly, with less offsite impacts, if that is helpful.⁴²

Stockpiles of recyclable material are now required to conform to fire safety standards according to the EPA's Waste Management Policy at all recycling facilities across the state.

The Resource Recovery Facilities Audit Taskforce

After the Coolaroo fire, the EPA established the Resource Recovery Facilities Audit Taskforce (the Taskforce). The Taskforce comprises:

- MFB
- Country Fire Authority (CFA)
- Emergency Management Victoria (EMV)
- WorkSafe Victoria
- Department of Environment, Land, Water and Planning (DELWP).

The job of the Taskforce is to ensure that recyclable and other waste materials are stored and managed appropriately, including with regard for fire risk. The Taskforce has conducted 500 inspections, across 150 high risk sites. It has issued over 150 remedial notices and 28 sanctions.⁴³

One such sanction was against SKM, where there continued to be non-compliance issues. The EPA issued a notice to the company to stop receiving recyclable materials at its Coolaroo and Laverton North sites on 14 February 2019.⁴⁴ This caused significant disruption to the state's recycling capacity. SKM regained compliance and was able to return to operation on 25 March 2019, but in the meantime, many of the Councils that had contracts with SKM were forced to send their kerbside recyclable materials

³⁹ Dr Andrea Hinwood, Chief Environmental Scientist, Environment Protection Authority Victoria, public hearing, Melbourne, 3 May 2019, *Transcript of evidence*, p. 4.

⁴⁰ The final waste management policy was issued in October 2018.

⁴¹ Dr Cathy Wilkinson, *Transcript of evidence*, p. 7.

⁴² *Ibid.*, p. 11.

⁴³ *Ibid.*, p. 7.

⁴⁴ Environment Protection Authority Victoria, *EPA issues SKM notices for Coolaroo and Laverton sites to stop receiving waste*, media release, 14 February 2019, <<https://www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/february/14/epa-issues-skm-notices-for-coolaroo-and-laverton-sites-to-stop-receiving-waste>> accessed 17 July 2019.

to landfill.⁴⁵ The Victorian Parliamentary Budget Office estimated that 21 402 tonnes of kerbside recyclables were sent to landfill over a ten week period and that it cost councils an additional \$1.7 million to send this waste to landfill.⁴⁶ The Committee heard from the MAV's submission that this event had 'damaged the public's trust of all levels of Government and potentially undone decades of community education by local government'.⁴⁷

The Committee heard that SKM has had many issues with non-compliance at its Coolaroo site, which has been the subject of 28 EPA site inspections and 6 legally enforceable notices.⁴⁸ Since the Coolaroo fire of 2017, there have been other, less serious, fires at the site. The Committee heard that stockpiles must be reduced and sorting is urgent.

The Campbellfield fire

Over-stockpiling of material and incorrect storage was also a factor in the Campbellfield fire. Bradbury Industrial Service's licence to receive chemical waste at its Campbellfield site was suspended by the EPA on 21 March 2019, 16 days before the fire. This was because it was storing 'significantly in excess' of the licence permission,⁴⁹ and its storage containers were not adequately labelled and were outside an adequately bunded area.⁵⁰ During the suspension, the company was only permitted to process the material that was already onsite to bring the volume down to comply with its licence. The EPA told the Committee that volumes had been brought down when it inspected the site the day before the fire.⁵¹

The EPA described the suspension of Bradbury Industrial Services' licence to accept waste as 'a very strong regulatory tool'.⁵² However, the Australian Workers Union – Victoria Branch offered a contrary view. In its submission, it said it was inadequate for the EPA to suspend the licence without enforcing a timetable for the removal of the excess waste and ascertaining exactly what type of waste was being stored. It described the EPA's failure to do so as 'negligently lax'.⁵³

The EPA told the Committee that, in relation to the time it took to suspend Bradbury's licence once it found out that it was storing in excess of that licence, there was typically a two week period to allow for due process before the suspension occurred. In this case,

45 Ms Claire Dunn, Manager, Environment and Regulatory Services, Municipal Association of Victoria, public hearing, Melbourne, 24 June 2019, *Transcript of evidence*, p. 5.

46 Parliamentary Budget Office, *Councils recycling costs; Impact of China's National Sword Policy and temporary closure of recycling facilities*, advice provided for the Australian Greens – Victoria, 3 July 2019.

47 Municipal Association of Victoria, *Submission 651*, p. 9.

48 Environment Protection Authority Victoria, *Fire at SKM Recycling*, media release, 8 July 2018, <<https://www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2018/july/08/fire-at-skm-recycling>> accessed 15 August 2019.

49 Dr Cathy Wilkinson, *Transcript of evidence*, p. 5.

50 A bunded area refers to a constructed bank or retaining wall built around a storage area. Environment Protection Authority Victoria, *EPA Suspends Campbellfield company licence*, media release, 21 March 2019, <<https://www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2019/march/21/epa-suspends-campbellfield-company-licence>>, accessed 17 April 2019.

51 Dr Cathy Wilkinson, *Transcript of evidence*, p. 6.

52 Ibid.

53 Australian Workers' Union – Victoria Branch, *Submission 694*, p. 4.

the EPA acted within five days.⁵⁴ However, the Committee heard from Ms Sheriden Tate, who believed that the EPA did not act to suspend Bradbury's licence in a timely manner:

You had Bradbury's—the EPA waited until they had got to 450 000 litres, which was nearly three times what they were licensed for, before they acted. And when they did act and we had the fire at the point that they had got it down to 300 000 litres of chemicals, after the fire, at the community meeting, EPA put it across that we almost should have been grateful that by stopping them they had got down to 300 000, which was double what they were licensed for. So the community is frustrated.⁵⁵

2.2.3 The inadequate system of proactive monitoring and enforcement of chemical waste storage by responsible authorities

The Committee heard that illegal stockpiling was likely caused by a perception of a lax system of enforcement and penalties regarding chemical waste storage. Without proactive enforcement and monitoring by responsible agencies, it is anticipated that legal and illegal operators worked with an assumption that they were not likely to be caught or fined for poor storage and fire risk prevention behaviour. A WorkSafe-led taskforce has reported some success in improving enforcement and monitoring.

2.3 Risks to firefighters

The Committee heard that the MFB and UFU are particularly concerned about incidents where firefighters attend fires involving unknown quantities of unknown chemicals, at buildings without adequate fire safety measures. In its submission, the UFU told the Committee that:

As it stands, our members are being forced to attend fires that amount to a premeditated ambush. Such ambushes increase the risk of injury, illness and potential death of first responders due to the complete lack of warning or placarding to alert them to what they have to confront in the firelight that they have been deployed to. In short, this illegal business model disregards the normal placarding arrangements⁵⁶ that give prior notice to firefighters as to the dangers involved in the fire. Essentially firefighters are being deployed blindly.⁵⁷

Mr Adam Dalrymple, Acting Deputy Chief Fire Officer at the MFB, told the Committee that the fires were examples of market failure and blatant non-compliance of private industry.⁵⁸ He said he was concerned that firefighters were being put at risk because of these issues:

⁵⁴ Dr Cathy Wilkinson, *Transcript of evidence*, p. 5.

⁵⁵ Ms Sheriden Tate, *Transcript of evidence*, p. 31.

⁵⁶ The placarding requirements include a duty to state the type and quantity of dangerous goods stored: Dangerous Goods (Storage and Handling) Regulations 2012, s.48 and Schedule 2.

⁵⁷ United Firefighters Union, *Submission 408*, p. 7.

⁵⁸ Mr Adam Dalrymple, *Transcript of evidence*, p. 1.

The effect of this has somewhat been transferred, or the risk has been transferred, across to the Metropolitan Fire Brigade, because we need to attend these premises, whether it is a fire-related issue or an incident or a chemical leak or some sort of protracted issue that we might be faced with, and that actually puts our firefighters at some sort of risk, so it is real concern to us.⁵⁹

2.3.1 Health and safety impacts

The MFB told the Committee at a public hearing that it has a health and safety process called MFB Safe, which facilitates reporting of incidents that result in harm, injury or damage.⁶⁰ The Committee was told in correspondence from the MFB that as of 1 August 2019, the following MFB Safe reports were lodged for the Campbellfield and West Footscray fires:

Campbellfield Fire

There have been 72 reports entered into MFB Safe for the Campbellfield fire, generated by 68 individuals.

- 58 reports relate to exposure (filed as hazard or near miss)
- 14 reports relate to injury (6 for respiratory related issues, 8 for sprain/strain related issues)

Most, but not all, of those reports were from operational firefighters.

One individual entered three separate reports.

Tottenham [West Footscray] Fire

There were 609 reports that were entered into MFB Safe linked to the Tottenham fire, generated by 467 individuals.

Of those individuals, the majority (448) were operational fire fighters.⁶¹

In its submission, the UFU provided the Committee with information about the types of chemicals firefighters were exposed to and the injuries reported by those who attended the Campbellfield and West Footscray fires:

The firefighters who attend these fires have been exposed to highly toxic smoke and debris produced by the burning of chemicals, including acetone, oxy-acetylene, benzene, toluene ethylbenzene, xylene and methylethylketone, chlorinated solvents-carbon tetrachloride, trichloroethylene, or methylene chloride, class 3 diamond-flammable liquids, class 4 flammable solids, class 8 corrosives, class 9 miscellaneous goods, paints, inks and other unknown chemicals.

Firefighters who attended the fire reported having suffered from:

⁵⁹ Ibid.

⁶⁰ Mr Mark Carter, *Transcript of evidence*, p. 7.

⁶¹ Kirsty McIntyre, General Counsel, Metropolitan Fire and Emergency Services Board, correspondence, 2 August 2019, p.1.

- Sore eyes, sore sinuses and a severe headache.
- Sinus infection which left me bedridden for a few days. This infection was exacerbated by my constant headaches.
- Fatigue and severe lack of concentration.
- Flu-like symptoms.
- Coughing, sore throat and hoarse voice.
- Lung irritation.
- Blood nose. Immediately after the fire, blood from nose multiple times a day. Now every two and three days.
- Fatigue, exhaustion.
- Memory loss.
- Dry itchy eyes and skin rashes.⁶²

FINDING 7: Emergency services personnel have been put at serious risk as a result of regulatory non-compliance by private companies and individuals.

2.3.2 Risks from fires in buildings not fit for purpose

The Committee heard that legally operated recycling facilities were often located in buildings with inadequate fire safety measures.

Fire safety failures under the *Building Act 1993*

The Building Interim Regulations 2017, which are made under the *Building Act 1993* (the Building Act), outline ‘essential safety measures’ that an occupant must satisfy to receive an occupancy permit. For example, fire safety sprinklers; fire hydrants; foam and water supplies; non-combustible building materials; clear exits and access and emergency information for crews attending.⁶³

Acting Station Officer Stephen Munro, presenting at a public hearing with the UFU, told the Committee that fire safety inspections at recycling facilities often found compliance breaches under the Building Act:

I have had a lot of involvement in these sites over the years. As a result of numerous inspections of waste and recycling plants, whether they be legally operated or illegally operated, 99.9 per cent of these buildings are operating in non-compliant buildings under the Building Act, ranging from critical defects to multiple minor and

⁶² United Firefighters Union, *Submission 408*, p. 5.

⁶³ Mr Stephen Munro, Member, United Firefighters Union, public hearing, Melbourne, 25 June 2019, *Transcript of evidence*, p. 2.

medium-range defects. I say 99.9 per cent, but I could just about guarantee that every site we visit is non-compliant to some extent.⁶⁴

Mr Peter Marshall, Secretary of the UFU, told the Committee that breaches under the Building Act are reported to the local council in which the facility is situated. Once breaches are reported, councils may issue compliance notices to the owner of the facility. If such a notice is not complied with, the CEO of the council must decide whether to prosecute the operator. Mr Marshall told the Committee that such prosecutions rarely take place:

Essentially the fire brigade goes out and investigates, reports their channel of actions to the council and the council will issue a compliance notice which could be up to 12 months. If that is not complied with, there is very little deterrent for an operator because it is up to the CEO of the council to make an economic decision, or alternatively a legal decision, to prosecute. You are hearing firsthand that that very rarely happens.⁶⁵

He added that local councils may be unwilling to prosecute companies for breaches of the Building Act because of the cost involved in prosecution and other competing priorities:

They do not do it, but then it is up to a CEO of a council who has got all sorts of other pressures to try and make a decision as to whether they will spend money prosecuting. You will have heard—not from me; you have heard from the practitioners—that what happens is rather than prosecute they will go back and extend the notice.⁶⁶

The Committee notes the valuable work now being undertaken by the Resource Recovery Facilities Audit Taskforce. The EPA's waste management policy, which is used by the Taskforce, includes requirements for essential safety measures at waste and recycling sites such as sprinklers, fire doors and paths of travel to exits. The waste management policy is enforceable by EPA officers under the *Environment Protection Act 1970*, rather than the Building Act. The Committee notes there is overlap in the regulatory framework for fire safety in the waste and resource recovery sector. This is discussed further in section 2.7.

Avoidance of regulatory scrutiny by operating from several sites

The MFB told the Committee that some recycling companies were diluting regulatory scrutiny by operating out of several buildings that had been re-purposed and may not have adequate fire protection measures. Mr Mark Carter, Acting Assistant Chief Fire Officer, said:

I think it is fair to say that probably one of the biggest issues is the volume of storage. Quite often, though, in buildings that are not fit for purpose—so that is when we have lost some sort of regulatory control in that space, so these are either industrial buildings that have been repurposed for recycling, so part of the recycling industry...

⁶⁴ Ibid..

⁶⁵ Mr Peter Marshall, Secretary, United Firefighters Union, public hearing, Melbourne, 25 June 2019, *Transcript of evidence*, p. 2.

⁶⁶ Ibid., p. 4.

He added that the practice of operating from several sites was making it harder for regulators to do their job:

...there has been a bit of a shift to move the problem from the big sites that have a lot of close scrutiny to a lot more, maybe, co-joined smaller sites which have far less fire protection requirements, for example.⁶⁷

2.4 Public health risks and community distress

The Committee heard from Government agencies that the smoke from the West Footscray and Campbellfield fires and the chemical runoff into Stony Creek and Merlynston Creek did not cause an immediate, large scale public health incident for most of the surrounding residential areas. However, the Committee was presented with reports from individuals who had developed adverse health symptoms following smoke inhalation and contact with Stony Creek.

The evidence provided to the Committee suggests one of the biggest impacts on residents was the distress caused from the advent of multiple fires. Some witnesses said their distress was made worse by uncertainty about the health impacts of the fires as a result of a lack of communication from government agencies.

2.4.1 The EPA's emergency response efforts

When there is an event that risks community exposure to contaminants, such as fires in facilities where toxic chemicals are stored, it is essential that subsequent monitoring is undertaken to identify risks to public and environmental health.

Dr Cathy Wilkinson, CEO of the EPA, explained the procedures for initial and ongoing monitoring of health and other impacts. The EPA has responsibilities under the Emergency Management Manual Victoria, including carriage of joint standard operating procedure 3.18 whereby the EPA deploys incident air-monitoring equipment to support community health advice. The EPA also has enhanced monitoring stations that are suitable for long-duration events.⁶⁸ The EPA are also often called upon to monitor pollution in waterways during emergency events.⁶⁹

Dr Andrea Hinwood, Chief Environmental Scientist at the EPA, told the Committee that smoke is a good indicator of air quality. The EPA uses air-monitoring equipment to measure particulates in the air as an indicator of the severity of the smoke plume, which provides information on public exposure. The EPA use PM 2.5⁷⁰ as a standard measure, but in the case of West Footscray and Campbellfield fires, they also monitored

⁶⁷ Mr Mark Carter, *Transcript of evidence*, p. 8.

⁶⁸ Dr Cathy Wilkinson, *Transcript of evidence*, p. 4.

⁶⁹ Ibid.

⁷⁰ PM2.5 is a category of particle size. PM2.5 particles are smaller than 2.5 micrometres (0.0025 mm) in diameter. The PM2.5 data on the EPA website is reported as a mass per volume of air – micrograms per cubic metre (µg/m³).

for gasses.⁷¹ In the case of the Campbellfield fire, measures were put in place to contain significant fire water and chemical runoff into Merlynston Creek.⁷²

In relation to communication of environmental and public health risks in an emergency event, the EPA, in conjunction with other agencies, provides advice on the environmental and public health aspects of the official warnings that are posted on the Emergency Management Victoria website. The EPA also has a role in providing advice on public health and environmental effects at community meetings and may publish air quality advice on its social media channels and through its AirWatch website.⁷³

Dr Hinwood advised the Committee that testing within the community would occur only if there had been a significant source of pollution.

2.4.2 The evidence from government agencies regarding public health risks for the West Footscray and Campbellfield fires

In response to a question on notice, the EPA provided the Committee with a summary of their monitoring activities for the West Footscray and Campbellfield fires.

The West Footscray fire

In relation to the smoke from the West Footscray fire, there were spikes in the levels of PM 2.5 that were in the unhealthy sensitive range⁷⁴ in West Footscray and Brooklyn over a one hour average.⁷⁵ The measurements of PM 2.5 averaged out over a 24 hour period and did not reach unhealthy levels in the community.⁷⁶ The levels were not expected to result in long term human health effects.⁷⁷

Results from asbestos monitoring were below the limit of detection.⁷⁸

There was a very high concentration of some chemicals in Stony Creek on the day of the fire and in the days after, as discussed further in section 2.5.⁷⁹ The amount of these chemicals at certain parts of Stony Creek, particularly at Cruickshank Park, far

71 Dr Andrea Hinwood, *Transcript of evidence*, p. 8.

72 *Ibid.*, p. 4.

73 *Ibid.*

74 The 'unhealthy sensitive' range is 63-97 µg/m³ of PM 2.5 over a one hour period. This range is above the 'moderate' range, but below the 'unhealthy all' range. It is the 3rd highest category out of 7 categories. Dr Cathy Wilkinson, Chief Executive Officer, Environment Protection Authority Victoria, Inquiry into Recycling and Waste Management hearings, response to questions on notice received 14 August 2019, p. 47.

75 Dr Cathy Wilkinson, Chief Executive Officer, Environment Protection Authority Victoria, Inquiry into Recycling and Waste Management Hearings, response to questions on notice received 14 August 2019, p. 47.

76 *Ibid.*, p. 21.

77 *Ibid.*, p. 47.

78 *Ibid.*, p. 31.

79 The chemicals measured by the EPA that exceeded recreational water quality guidelines for short periods of time were PFOS, C16-34 Hydrocarbons (in sediments), Toluene, Ethylbenzene, Xylene, Acetone, Methyl ethyl ketone, Benzene, Ethylbenzene and C6-C10 Hydrocarbons (in sediments). Dr Cathy Wilkinson, response to questions on notice received 14 August 2019, pp. 5, 7, 10, 13 and 15).

exceeded recreational health guidelines on those days.⁸⁰ The levels of some chemicals⁸¹ in creek sediment at Cala Street (near the site of the fire) and Cruickshank Park again exceeded recreational health guidelines during subsequent incidences of heavy rain. One of these heavy rain events was on 6 November 2018, the day of the Melbourne Cup.⁸² The concentration of chemicals in the creek diluted considerably outside those times. Measurements of chemicals in Stony Creek were generally below recreational water quality guidelines and aquatic ecosystem guidelines.⁸³ The latest EPA testing results indicate that water in the creek meets human health water quality guidelines for recreational contact.⁸⁴

In relation to odour coming from the creek, the EPA measured volatile organic compounds (VOCs), which give off vapours in the air. The levels of VOCs sampled were all well below health guideline levels. Long term health effects were not expected from short term exposures to VOCs.⁸⁵

The environmental impact of the West Footscray fire is discussed further in section 2.5.

The Campbellfield fire

Air quality monitoring on the day after the fire indicated low levels of PM 2.5 at Campbellfield and in residential areas south of the fire in Dallas and Coolaroo.⁸⁶

Pollutants associated with firewater were elevated in the immediate vicinity of the stormwater outlet into Merlynston Creek. Some pollutants were above ecosystem guidelines for waterways. No fish deaths were observed.⁸⁷

The Committee was given an assessment of the health risks of the Campbellfield fire at a public hearing. Dr Hinwood said that measurements of harmful smoke were low and serious chemical runoff into Merlynston Creek was able to be contained by the deployment of booms:

...in the community, in terms of the fire, we had pretty low levels of PM 2.5. We predicted that earlier in the morning because we were very fortunate with the weather conditions that the plume stayed buoyant. Now, that is not to say that businesses around the area and in the local area of the fire were not impacted. What we are talking about here is where the community and the residents are, and the impact on those people. So that is not to say that some people would have experienced smoke and some odour. One of the key impacts of course was the impact on Merlynston Creek, where we did have fire water. It was contained. They deployed booms very early and were in fact skimming

⁸⁰ Dr Cathy Wilkinson, Chief Executive Officer, Environment Protection Authority Victoria, Inquiry into Recycling and Waste Management Hearings, response to questions on notice received 14 August 2019, p. 4.

⁸¹ Particularly C16-34 Hydrocarbons.

⁸² Dr Cathy Wilkinson, Chief Executive Officer, Environment Protection Authority Victoria, Inquiry into Recycling and Waste Management Hearings, response to questions on notice received 14 August 2019, p. 38.

⁸³ *Ibid.*, pp. 5-46.

⁸⁴ *Ibid.*, p. 4.

⁸⁵ *Ibid.*, pp. 8 and 31.

⁸⁶ *Ibid.*, p.55.

⁸⁷ *Ibid.*, pp.66-69.

off product very early during the first part of the fire. I guess from this point of view we have potential impacts, but we do not think from a community perspective there were substantive impacts from this fire.

Dr Hinwood said that in the case of the Campbellfield fire, based on the EPA's environmental monitoring, they did not investigate public health risks further:

I do not want to dismiss the health impacts because there are very sensitive people within the community who do have issues who may have been in particular locations that impacted them but all of the measurements were below. On that basis, we would not go and specifically investigate health.⁸⁸

The Government's Acting Chief Health Officer, Dr Angie Bone, also told the Committee that her office had not received any health complaints following the fires.⁸⁹

The Committee did not receive enough evidence on the Coolaroo fire to comment on the public health risks of that fire.

The evidence given to the Committee from the EPA in relation to the West Footscray and Campbellfield fires indicates that air and waterway quality was within human health guidelines, apart from short periods of time for the West Footscray fire. In that case, guidelines were exceeded for air and waterway quality on the day of the incident and during limited subsequent heavy rainfall events. This was supported by the evidence given by the EPA at a public hearing. However, the Committee did hear some reports from individuals that had developed adverse health symptoms following the fires and contact with affected waterways. This is discussed in section 2.4.3.

2.4.3 The view of community organisations and individuals regarding public health risks

The Committee held a public hearing to hear the views of community organisations and individuals who had been affected by the fires. The Committee was told there was significant distress about the risks to health, the environment and public amenity.

One of the community organisations that appeared at the hearing was the Anti-Toxic Waste Alliance, which is a coalition of 35 organisations including environmental groups, residents groups and schools. The group was formed in April 2019 in response to the fires.⁹⁰ Ms Sue Vittori, the Chair of the group, relayed what had happened to a resident who lived near the site of the Coolaroo fire in 2017. The resident, his pregnant wife and young family lived just outside the evacuation zone for the fire. Ms Vittori said the family experienced nausea and dizziness from the fumes and were forced to leave their home and live in their car during winter. Hume City Council was able to arrange relief accommodation for them three days later. The family was able to return home six days

⁸⁸ Dr Andrea Hinwood, *Transcript of evidence*, p. 9.

⁸⁹ Dr Angie Bone, Acting Chief Health Officer, Department of Health and Human Services, public hearing, Melbourne, 3 May 2019, *Transcript of evidence*, p. 6.

⁹⁰ Ms Sue Vittori, Chair, Anti-Toxic Waste Alliance, public hearing, Melbourne, 6 August 2019, *Transcript of evidence*, p. 1.

after leaving. Ms Vittori told the Committee the resident was subsequently diagnosed with carbon monoxide poisoning. The resident was the lead plaintiff in a class action involving residents and business seeking compensation from SKM. The Supreme Court approved a \$1.2 million settlement to the victims.⁹¹

The Committee also heard from Ms Clare Sheppard from the community group Friends of Stony Creek, who described adverse health symptoms after visiting Stony Creek on several occasions to photograph environmental damage:

I spent a number of half-hour sessions each weekend for three consecutive weeks walking along the creek and photographing the effects on the vegetation, the creek banks, the rocks and the wildlife. Each time after my exposure I noticed I was short of breath for a few hours after being at the creek. After the second and third times I noticed that my nose was bleeding, and this would go on for a couple of days. I stayed away for two weeks, and it seemed to improve. After the next visit the symptoms returned. I made the decision to avoid the creek and did not go again for a number of weeks except to cross to get to and from school.⁹²

The Anti-Toxic Waste Alliance's submission stated that 'many adults and children experienced blood noses, headaches and respiratory problems after being exposed to the smoke and fumes'.⁹³ Further, Ms Dorothy Bruck, presenting on behalf of the Anti-Toxic Waste Alliance, told the Committee she had received a report of a child whose asthma had worsened significantly following the West Footscray fire. Another submitter to the Committee reported that her granddaughters had nosebleeds following the Coolaroo fire.⁹⁴

The Committee was told by Dr Marion Cincotta, appearing with the Anti-Toxic Waste Alliance, that a study in the USA had linked short term exposure to PM 2.5 with an increase in hospital admissions, stroke and heart failure. She further stated that another study had associated exposure to spikes in PM 2.5 to an increase in asthma-related hospital admissions for children.⁹⁵

Ms Dorothy Bruck recommended that the Government take steps to ensure that the exposure of residents to the smoke and polluted waterways be recorded as part of a health screening program so that medical professionals can take the exposure into account when treating residents in the future.⁹⁶

FINDING 8: While the information provided by the EPA and other agencies suggests that for the most part, air and waterway quality did not exceed human health guidelines, the Committee is concerned that some community members have reported adverse health impacts as a result of the fires.

⁹¹ Ibid.

⁹² Ms Clare Sheppard, Friends of Stony Creek, public hearing, Melbourne, 6 August 2019, *Transcript of evidence*, p. 45.

⁹³ Anti-Toxic Waste Alliance, *Submission 696*, p. 4.

⁹⁴ Roslyn Evans, *Submission 294*, p. 1.

⁹⁵ Dr Marion Cincotta, Anti-Toxic Waste Alliance, public hearing, Melbourne, 6 August 2019, *Transcript of evidence*, p. 4.

⁹⁶ Ms Sue Vittori, *Transcript of evidence*, p. 9.

2.4.4 Community distress and poor communication from government agencies

Apart from physical health impacts, the Committee heard that the fires caused distress among residents. Darren Bennetts, from Friends of Stony Creek, told the Committee how the pollution of Stony Creek had impacted himself and the community:

The creek literally died, but the community suffered as well. Not only has it taken away our place of refuge, that enjoyment, but to see it suffering and continuing to suffer for so many months afterwards—it will be our 12-month anniversary at the end of the month. Issues like anxiety, stress, helplessness, fear of inaction, being abandoned—these are all genuine feelings that I felt.⁹⁷

The Committee heard that residents experienced distress not only because of the fires, but because some believed they were not adequately informed about the health and environmental risks. Sue Vittori, from the Anti-Toxic Waste Alliance, said that communication with residents after the fire was not adequate:

...when you are at the epicentre of a traumatic experience it only deepens your trauma when you are not being well informed, or at least having someone—you do not have to have the answers; you just need someone to knock on the door and say, 'We're doing everything we can. This is what we recommend you do right now'. It is just basic decency, but it is also a responsibility and accountability to caring and having a duty of care.⁹⁸

The Committee notes that, as discussed in section 2.4.1, the EPA provided public health warnings and data about the fires and waterway pollution as part of its emergency response work. However, Ms Vittori from the Anti-Toxic Waste alliance said she did not believe there was adequate ongoing communication about the public health risks for residents:

From many years of hard-learned lessons, Victoria's emergency service agencies have significantly improved how they coordinate efforts during a bushfire emergency, including how they communicate with local residents. However, unlike their country counterparts, very few metropolitan residents in my experience are aware of Emergency Victoria's website or app. I certainly was not. And apart from a couple of town hall meetings there has been no direct door-to-door communication with the most affected residents on the day or any time since the West Footscray fire, and there still has not been.⁹⁹

She added:

The community was left completely cold. There were people who were looking over their back fences seeing Melbourne Water workers wearing hazmat suits and gas masks working in the creek metres from their homes, and no-one had anyone doorknock on their homes. No-one was telling them whether it was safe or not. And on top of that,

⁹⁷ Mr Darren Bennetts, Friend of Stony Creek, public hearing, Melbourne, 6 August 2019, *Transcript of evidence*, p. 45.

⁹⁸ Ms Sue Vittori, *Transcript of evidence*, p. 9.

⁹⁹ *Ibid.*, p. 3.

there was just no direct communication with anyone. If you heard that there was a town hall meeting, you were lucky and you went along if you could.¹⁰⁰

FINDING 9: The Committee notes that while there are structures in place to ensure communication to the public during emergency responses, it is apparent there is not strong awareness about these communication channels in metropolitan areas.

FINDING 10: The Committee also finds that there was inadequate communication from the relevant agencies to the community about public health risks during and after the emergency.

2.5 Environmental impacts of the fires

A number of organisations and individuals have expressed concerns to the Committee regarding the environmental impacts of the fires, and the implications for flora and fauna in their local areas. In particular, the West Footscray fire occurred at a facility that is adjacent to Stony Creek, resulting in industrial chemical solvents, detergents and fire soot particles flowing into the waterway. As noted earlier in this report, the EPA acknowledged the very high level of toxic chemicals concentrated in the creek following the fire, and recommended that residents avoid contact with the water and surrounding contaminated areas. Specifically, the EPA has confirmed that the following chemicals were detected in the water:

- phenol (an industrial chemical and cleaning product)
- polyaromatic hydrocarbons (fire by-products)
- benzene, toluene, ethylbenzene and xylene (lighter petroleum hydrocarbon chemicals, also known as BTEX)
- per- and poly-fluoroalkyl substances (also known as PFAS, chemicals commonly used in household products and fire-fighting foam)
- various industrial solvents, including acetone and butanone.¹⁰¹

At the public hearing on 6 August, community groups provided further evidence on the environmental effect of these chemical flows on the creek. Mr Bennetts advised that all marine life below the creek's watermark had been killed—not even bacteria such as *E. coli* were present in the water. In addition, birds were found distressed or killed; there were ongoing tree deaths; a build-up of contaminated sediments along creek edges had occurred and a persistent odour was evident in the vicinity of the creek for four months. Mr Bennetts described the state of the creek six weeks after the fire:

¹⁰⁰ Ibid., p. 8.

¹⁰¹ Environment Protection Authority Victoria, *Waterways around the West Footscray industrial fire*.

The creek was completely black in parts and vivid white in others. It had a very strong chemical odour and there was a rainbow sheen on the water ... The vegetation in the creek had clearly been on fire. It literally looked like the creek had been napalmed.¹⁰²

Rehabilitation of the area is complex, costly and ongoing.

The Anti-Toxic Waste Alliance provided the Committee with photographs of the creek both before and after the fire in August 2018. The Committee notes the concerning colour of the creek in Figure 2.2, reportedly as a result of chemical runoff from the fire.

Figure 2.1 The southern section of Stony Creek in Cruickshank Park before the West Footscray factory fire



Source: Supplied by the Anti-Toxic Waste Alliance, *Submission 696*, p. 7.

Figure 2.2 Stony Creek on 30 August 2018 during or after the West Footscray factory fire



Source: Supplied by the Anti-Toxic Waste Alliance, *Submission 696*, p. 8.

¹⁰² Mr Darren Bennetts, *Transcript of evidence*, p. 43.

Friends of Stony Creek stated that they had raised concerns with Melbourne Water about the risk of further spread of contamination should heavy rainfall or flooding occur, while waiting for rehabilitation activities to commence on the creek.¹⁰³ They provided evidence that as a result of subsequent heavy rainfall, much of the initial contamination was pushed further downstream, and the effects of the pollution on marine life extended out of the creek into Port Phillip Bay.¹⁰⁴ The EPA has also confirmed that rainfall in November and December 2018 ‘helped to dilute and flush the creek of water-borne contaminants, and aided in the movement of contaminated sediments downstream’.¹⁰⁵ Melbourne Water began dredging the creek following these rainfall events, on 1 April 2019.¹⁰⁶

The Committee notes that significant social and recreational implications also flow from damage to the environment in the aftermath of extreme polluting events. Witnesses have described the intangible connection between nature areas and their local communities, and the responsibility undertaken by community groups to maintain and protect these spaces. Sonya Rutherford from the Broadmeadows Progress Association provided one example of the impact that major pollution events have had in this respect. Following the July 2017 Coolaroo fire, signage was installed at Jack Roper Lake to warn the public to avoid any contact with the water.¹⁰⁷ The signage remained for up to a year while the waters and surrounds were being rehabilitated due to toxic run-off.¹⁰⁸ The lake provides numerous recreational benefits to the surrounding community, including a volunteer-run sailing program for young people with disabilities, which could not operate for the time the restrictions were in place.¹⁰⁹ The Committee also received in evidence some artwork created by young children at Gowrie Victoria’s Clare Court Early Learning Centre, near the site of the West Footscray fire. These children are still unable to visit the creek that runs directly past their centre, which they used to do on a daily basis. The artwork touched on the fire itself, and the sadness the children felt at the state of the creek and its surrounding parkland.

¹⁰³ Ibid., p. 44.

¹⁰⁴ Ibid., pp. 43-44.

¹⁰⁵ Environment Protection Authority Victoria, *Waterways around the West Footscray industrial fire*.

¹⁰⁶ Ibid.

¹⁰⁷ See, Environment Protection Authority Victoria, *EPA Victoria - Fire at the SKM Coolaroo site*, 26 July 2017, <<https://www.epa.vic.gov.au/about-us/news-centre/news-and-updates/news/2017/july/26/epa-victoria---fire-at-the-skm-coolaroo-site>> accessed 13 August 2019.

¹⁰⁸ Similar warnings were issued following the April 2019 Campbellfield fire. See, Environment Protection Authority Victoria, *Campbellfield industrial fire*, 9 April 2019, <<https://www.epa.vic.gov.au/our-work/current-issues/campbellfield-industrial-fire>>, accessed 13 August 2019.

¹⁰⁹ Mrs Sonya Rutherford, Broadmeadows Progress Association, public hearing, Melbourne, 6 August 2019, *Transcript of evidence*, pp. 21-22.

Figure 2.3 Mural artwork by children from Gowrie Clare Court early learning service, depicting the West Footscray fire and impact on Stony Creek



Source: Anti-Toxic Waste Alliance, correspondence.

Friends of Stony Creek advised the Committee that these major pollution incidents are not isolated, and numerous other events have occurred in the Stony Creek area in recent years—many of which have not been investigated or resulted in little or no financial penalty to the polluter.¹¹⁰ A number of witnesses, including community groups and private individuals, provided evidence that the response to pollution incidents from the EPA and other responsible agencies has been underwhelming, if any response is provided at all.¹¹¹ Some witnesses felt that when fines are imposed on polluters, for example, they often do not cover the cost of clean-up and rehabilitation activities in the polluted nature area. The remaining costs then fall to government agencies and the community. In some circumstances, investigations into toxic spills and other pollution events are delayed to the point that evidence required to ascertain the polluter is no longer discoverable.¹¹² There was concern expressed from some witnesses that there will be a need for pollution mitigation for many years.

Both Friends of Stony Creek and the Anti-Toxic Waste Alliance attributed this inaction to inadequate funding of the EPA's critical investigatory, compliance and enforcement activities. There have been recent funding announcements, as well as legislative reform to the EPA, that are likely to deliver positive results. However, community groups feel that it will take some time before the material impacts of these changes are seen on the ground.¹¹³

FINDING 11: The Committee is concerned that there may have been inadequate investigatory, compliance and enforcement responses to reported pollution events, particularly in metropolitan waterways, in recent years.

¹¹⁰ Mr Darren Bennetts, *Transcript of evidence*, p. 48.

¹¹¹ See: Mr Darren Bennetts, *Transcript of evidence*, p. 42; Mrs Sonya Rutherford, *Transcript of evidence*, p. 21; Mr William Freeman, public hearing, Melbourne, 6 August 2019, *Transcript of evidence*, p. 28; Ms Sue Vittori, *Transcript of evidence*, p. 2.

¹¹² Mr Darren Bennetts, *Transcript of evidence*, pp. 42, 50.

¹¹³ Mr Darren Bennetts, *Transcript of evidence*, p. 48.

2.6 Regulatory framework for the waste and resource recovery industry

The Committee notes there are a number of overlaps in the regulatory framework for Victoria's waste and resource recovery industry, particularly in relation to chemical waste and recyclable material. There is a memorandum of understanding between the EPA and WorkSafe to deal with some of these overlaps.

WorkSafe provided an overview to the Committee of the framework for the regulation of Victoria's waste and resource recovery industry, which is outlined in the following sections.

2.6.1 *Environment Protection Act 1970*

The EPA administers the *Environment Protection Act 1970*, which is the primary Act for regulating waste management in Victoria. The EPA is responsible for approving development and licensing of waste facilities under this Act and enforces compliance with environment protection regulation in the waste and resource recovery sector. The level of regulatory requirements for particular types of waste depend on how hazardous the material is and the activity the duty holder is undertaking.¹¹⁴

2.6.2 *Dangerous Goods Act*

Waste materials that are also dangerous goods because they are corrosive, flammable, toxic, explosive, oxidising, water-reactive, or have other hazardous properties, are regulated by the Dangerous Goods Act, which is administered by WorkSafe. Such materials include chemical waste of the type dumped in Melbourne's northern and western suburbs. WorkSafe has powers under the Act to order duty holders to comply and to take action for the destruction and removal of dangerous goods where they believe there is an immediate risk to a person or property.¹¹⁵

2.6.3 *Occupational Health and Safety Act 2004*

In addition to the *Environment Protection Act 1970* and the Dangerous Goods Act, any person that operates a workplace has duties under the Occupational Health and Safety Act,¹¹⁶ to ensure the workplace is safe and without risks to other persons' health and safety. WorkSafe has oversight of occupational health and safety matters in all workplaces, including workplaces that provide recycling and waste management operations, as well as workplaces that deal with dangerous goods.¹¹⁷

¹¹⁴ WorkSafe, *Submission 661*, p. 2.

¹¹⁵ *Ibid.*, pp. 2-3.

¹¹⁶ This Act is also administered by WorkSafe.

¹¹⁷ WorkSafe, *Submission 661*, p. 2.

2.6.4 Inter-agency cooperation

According to the WorkSafe submission, if waste is also a dangerous good, a duty holder will have responsibilities under dangerous goods, environment protection and occupational health and safety legislation. WorkSafe told the Committee that they have a Memorandum of Understanding with the EPA that describes how the organisations will work together to share information and cooperate on joint regulatory activity where there are overlapping responsibilities.

The Committee was also informed by the Government submission that the Government has established an oversight group chaired by the Department of Environment, Land, Water and Planning. The group includes representatives from Emergency Management Victoria, WorkSafe, the EPA, the Department of Justice and Community Safety, the Department of Premier and Cabinet, the Department of Treasury and Finance, and the Department of Health and Human Services, and will work to develop a framework for addressing high risk waste sites.¹¹⁸

2.7 Regulatory framework for fire safety in the waste and resource recovery industry

Like the regulatory framework for the waste and resource recovery industry as a whole, there are overlaps when it comes to fire safety regulation in the industry. The Committee was told that the EPA, WorkSafe and the MFB each have regulatory tools to ensure fire safety. However, the Committee heard from the MFB that there is not a comprehensive plan of all regulatory powers and what the triggers for action are.¹¹⁹

2.7.1 Waste Management Policy (Combustible and Recyclable Material)

The Waste Management Policy (combustible recyclable and waste material) is made and enforced by the EPA under the *Environment Protection Act 1970*. The policy is intended for recycling facilities, rather than chemical waste processing facilities. It is one of the legislative tools used by the Resource Recovery Facilities Audit Taskforce, discussed in section 2.2.2.

The policy includes requirements for recycling facilities to:

- understand the fire hazards associated with their activities and take reasonably practicable steps to reduce the fire risk associated with those hazards
- take all reasonable steps equivalent to the guideline to manage and store combustible recyclable and waste materials in a manner that minimises the risk of harm to human health and the environment

¹¹⁸ Victorian Government, *Submission 699*, p. 11.

¹¹⁹ Metropolitan Fire and Emergency Services Board, *Submission 580*, pp. 12-13.

- prepare an emergency management plan.¹²⁰

2.7.2 Dangerous Goods Act—fire protection requirements

Chemical waste processing facilities have fire protection requirements under the Dangerous Goods Act. A duty holder of premises where dangerous goods are stored and handled must ensure the premises are equipped with a fire protection system that is designed and constructed for the types of dangerous goods stored at the premises. While the Act is administered by WorkSafe, fire service agencies have a role in advising whether duty holders have met the fire protection requirements.¹²¹

2.7.3 Building Act

As noted in section 2.3.2, the UFU described to the Committee that the Building Act and related regulations are one of the key regulatory tools its members (who work for the MFB) use to ensure fire safety. It includes requirements for ‘essential safety measures’ such as fire safety sprinklers, fire hydrants, foam and water supplies and emergency exits.

2.7.4 Lack of coordination

The MFB noted in its submission that powers and duties to ensure fire safety were spread across agencies and questions could arise as to which agency should act in certain situations and which power should be used. The Committee was told that, to the MFB’s knowledge, there does not exist:

- a comprehensive plan of all regulatory powers, what the triggers for action are (the ‘hazard’ based approach), and an indication of which agency will use which powers and when
- regulatory mapping and an agreement on risk triggers and likely regulatory responses
- a manual (similar to the Emergency Management Manual Victoria, which is accessible and used by all parties in that sector) or a Code of Practice.¹²²

The MFB also observed that:

unlike the emergency management sector which, after a number of reviews, adopts an ‘all hazards, all agencies’ approach, the work of agencies in this area, while well intentioned, is still somewhat separate.¹²³

¹²⁰ Environment Protection Authority Victoria, *Combustible recyclable and waste materials*, 2019, <<https://www.epa.vic.gov.au/business-and-industry/guidelines/waste-guidance/combustible-recyclable-and-waste-materials>> accessed 22 July 2019.

¹²¹ This includes a Memorandum of Understanding between WorkSafe, the MFB and the CFA; WorkSafe, *Submission 661*, pp. 2-3.

¹²² Metropolitan Fire and Emergency Services Board, *Submission 580*, p. 12.

¹²³ Ibid.

The Committee notes that the Government has committed in its *Managing fire risk at resource recovery facilities: Action Plan*, to conduct a review into the broader regulatory framework for managing fire risks at recycling facilities. This includes requirements under the Building Act, the powers of the fire service agencies, occupational health and safety laws, environment protection legislation and the role of local government. The review will consider:

... Whether using an EPA-enforced WMP [Waste Management Policy] is the best way to manage fire risk at these facilities in the future, or if there are other more streamlined and effective options for achieving this. The Victorian Government will consider whether it boosts the fire management expertise of EPA, boosts the regulatory role and capacity of emergency services agencies, local government and other regulatory bodies, or combines these approaches.¹²⁴

The review was projected to be completed by August 2019.

FINDING 12: There is regulatory overlap and a lack of a coordinated approach to fire safety regulation in the waste and resource recovery industry. The Committee looks forward to the outcome of the review of the regulatory framework governing fire risks at sites storing combustible recyclable and waste materials, including making significant recommendations and changes to the regulation, oversight and coordination of the response to fire risk at these sites.

2.8 Strengthening of legislative powers

In its submission to the inquiry, the Government advised the Committee that Victoria's new environment protection legislation, the *Environment Protection Amendment Act 2018* (the Environment Protection Amendment Act) will come into effect in July 2020. The Act will broaden the EPA's investigative and inquiry powers and strengthen penalties for non-compliance.¹²⁵ The Committee also heard the Government had asked WorkSafe to investigate the appropriateness of tougher penalties under the Dangerous Goods Act.

2.8.1 General environmental duty

According to the Government's submission, one of the key powers outlined in the Environment Protection Amendment Act is the general environmental duty (GED), which 'represents a preventative approach to environmental regulation'.¹²⁶ It requires those who engage in an activity that may cause risks of harm to human health or the environment from pollution or waste to minimise those risks, so far as reasonably practicable.¹²⁷

¹²⁴ Department of Environment, Land, Water and Planning, *Managing fire risk at resource recovery facilities: Action Plan*, August 2018, p. 4.

¹²⁵ Victorian Government, *Submission 699*, p. 10.

¹²⁶ *Ibid.*

¹²⁷ *Environment Protection Act 2017*, s 25(1).

The legislation outlines penalties for a breach of the GED, including fines and imprisonment. The Government submission notes ‘a successful prosecution of aggravated offences like the dangerous stockpiling of hazardous chemicals will attract penalties as high as \$644,000 and/or five years’ imprisonment for individuals and fines over \$3.2 million for a corporation.’¹²⁸

2.8.2 Increased regulation and penalties relating to industrial waste

The Environment Protection Amendment Act also outlines duties or requirements relating to industrial waste. Industrial waste is defined in the legislation as ‘waste arising from commercial, industrial or trade activities or from laboratories’.¹²⁹ It includes chemical waste, such as the type illegally dumped in warehouses.

The submission notes that people who generate industrial waste will be required to take all reasonably practical steps to ensure that their waste goes to a place with lawful authority to receive it.¹³⁰ Those who generate industrial waste must also pass on ‘information about the waste to consigners and transporters to enable it to go to a place authorised by EPA to receive that type of waste and verifying that the place holds the required authorisation’.¹³¹

The Government submission outlines increased penalties for breaching the industrial waste duties:

The maximum penalty for individuals who breach this duty will be \$322,000. Corporations that breach the industrial waste duty face maximum penalties of up to \$1.6 million ... Individuals who commit a second breach of the industrial waste duties within 5 years from having been convicted of a previous offence against these duties will face a maximum fine of up to \$644,000 and also face up to 2 years imprisonment in addition to, or in place of, this penalty. Body corporates which breach the repeat industrial waste offence will be liable for a maximum penalty of up to \$3.2 million.¹³²

2.8.3 Fit and proper person requirements

The submission also outlines stronger ‘fit and proper person’ requirements and prohibited person provisions, which will mean that undesirable operators can be prevented from holding a licence.¹³³ The following penalties will apply:

Prohibited persons who do engage in prescribed activities face maximum penalties of \$322,000 for an individual, \$1.6 million for a corporation for licenced activities; \$161,000 for an individual, \$805,000 for a corporation for permitted activities; and \$80,000 for

¹²⁸ Victorian Government, *Submission 699*, p. 11.

¹²⁹ *Environment Protection Act 2017*, s 6.

¹³⁰ Victorian Government, *Submission 699*, p. 11.

¹³¹ *Ibid.*

¹³² *Ibid.*

¹³³ *Ibid.*

an individual, \$402,000 for a corporation for registration activities. Individuals will also be liable for up to two years in prison (additional to or in lieu of the fines).¹³⁴

2.8.4 EPA internal independent review into systems and processes for chemical waste

The EPA is also conducting an independent review into its own mechanisms and processes for chemical waste regulation. The review will 'will identify any areas for improvement in EPA's regulatory practice and systems'.¹³⁵

2.8.5 Strengthening penalties for dumping chemical waste under the Dangerous Goods Act

The Government has asked WorkSafe to review penalties under the Dangerous Goods Act. This is in addition to the measures in the new EPA legislation. The current penalties for someone who should reasonably have known their actions would endanger health and safety, property or the environment is \$160,000 or four years imprisonment for an individual and \$800,000 for a corporation.¹³⁶ The Committee heard that the penalties may be reviewed to align with harsher penalties under the Occupational Health and Safety Act.¹³⁷

2.8.6 Electronic tracking of prescribed industrial waste

Throughout the public hearings a number of witnesses, including the MFB, WorkSafe, the Chief Health Officer and Hume City Council, were asked whether an online database that included quantities and types of chemical waste stored on licenced premises would be helpful. The proposed database would be able to be accessed by all Government agencies, particularly fire service agencies.¹³⁸ The witnesses all responded that such a scheme would be helpful, but offered that separate schemes were already in place and that it may not assist with tracking illegal waste operators.¹³⁹

The Government announced in April 2019, that it would introduce a fully electronic waste tracking system to record the production, movement and receipt of industrial, including chemical, waste.¹⁴⁰ The new system came into force on 1 July 2019. The Government submission noted that 'the new system will enable EPA to monitor the movement of hazardous waste more quickly and more accurately'.¹⁴¹

¹³⁴ Ibid.

¹³⁵ Ibid., p. 61.

¹³⁶ The Hon. Jill Hennessy, Minister for Workplace Safety, *Stronger Penalties For Dangerous Goods Offences*, media release, 14 June 2019.

¹³⁷ Ms Marnie Williams, *Transcript of evidence*, p. 4.

¹³⁸ See for example: Ms Marnie Williams, *Transcript of evidence*, p. 10.

¹³⁹ Ibid.

¹⁴⁰ The Hon Lily D'Ambrosio, Minister for Energy, Environment and Climate Change, *New Electronic Tracking System for Waste Sector*, media release, 15 April 2019.

¹⁴¹ Victorian Government, *Submission 699*, p. 11.

The new system is intended to digitise the existing paper-based system of waste transport certificates. All producers and receivers of chemical waste are now required to submit their waste transport certificates via an online portal. This data will feed into the new GPS electronic tracking system, which will come into operation prior to the Environment Protection Amendment Act coming into effect on 1 July 2020.¹⁴²

The Committee notes the rollout of the system should include communication and support, particularly for small businesses, to help them make the change from the old paper-based system.

The Committee hopes the new tracking system will enable the EPA to intervene earlier where risks are identified in order to prevent cases such as the Campbellfield fire, where a chemical waste disposal company was storing more chemical waste than their licence allowed. The Committee also hopes the system will be able to help the EPA detect when large amounts of chemical waste is not disposed of through the legal chemical waste system and is dumped illegally.

**Adopted by the Legislative Council Environment and Planning Committee
Parliament of Victoria, East Melbourne
26 August 2019**

¹⁴² Environment Protection Authority Victoria, *Help with your waste transport certificates*, 2019, <<https://www.epa.vic.gov.au/portal-help/help-with-your-interaction/waste-transport-certificates#Switch>> accessed 23 July 2019.

Appendix 1

About the inquiry

A1.1 Submissions

1	Pending
2	Tracy McGowan
3	Peta Hoiles
4	Abigail Elder
5	Leonie Chester
6	Susan Stafford
7	Loddon Shire Council
8	Pending
9	Mildura Rural City Council
10	Brenton Ford
11	Sophie Paterson
12	Maxwell Kitson
13	Aaron Brooks
14	Melita Slieker
15	Emma Ward
16	Pending
17	Peter Lim
18	Gemma Carr
19	Joey Remenyi
20	James Burgoyne
21	Kerry Lewis
22	Nicholas Yalcin
23	Pending
24	Irina Zahra
25	Pending
26	Steven Cahill
27	Chau Nguyen
28	Wim Olivier
29	Nicole Butcher
30	Elle Kay
31	Caleb Ostwald
32	Emma Matthews
33	Pending
34	John Lynch
35	Tamara Morgan
36	Melanie Nemer
37	Kylie Aggio
38	Nishani Nithianandan
39	Withdrawn
40	Jorgina Glover
41	Robyn Kilpatrick
42	Aaron Parsons
43	Dario Bulfone
44	Tom Davis
45	Pending
46	Pending
47	Debbie Davies
48	Dietmar Brisker
49	David O'Brien
50	John Bowman
51	Kitty Walker
52	Nadine Joy
53	Brian Park
54	Penny Spencer
55	Deborah Cleaves
56	Pending
57	Bernard Abadie
58	Daniel Thompson
59	Chantelle Martin
60	Sonia Bourne
61	Saba Khalid
62	Ashley Leadbeatter
63	Karina Foster
64	Helen Schofield
65	Belinda Pearson
66	Pending
67	Pending
68	Laura Walsh
69	Mo Phillips
70	Kate Forster
70a	Kate Forster
71	Valerie Forster
72	Pending
73	S & D Van Der Kaay
74	Pending
75	Nina Vincent

76	Julie Copeland	122	Kelli Lavelle
77	Colin Smith	123	Peita Pini
78	Trebor George	124	Pending
79	Tegan Perry	125	Rocco Di Zio
80	Lauren Starr	126	Pending
81	Emily Jeffery	127	Chris Clark
82	Melba Rivera	128	Pending
83	Pending	129	Sara Riva
84	Melissa Peterno	130	Priscilla Phelps
85	Phillip Geschke	131	Susan Sdrinis
86	Debbie Powell	132	Casey Wright
87	Damon Geeves	133	Matthew Flattley
88	Liz Spillane	134	Stuart Gordon
89	Ruth Varencia	135	David Shutler
90	Clem Baade	136	Kara Stuart
91	Lyn McMurdie	137	Richard Garth
92	Ryan Sherring	138	Pending
93	Pending	139	Margaret Waddington
94	Pending	140	Julie Fox
95	Bill Featherstone	141	Michelle Butler
96	Michelle Davies	142	Pending
97	Jean Christie	143	Jolie Boyd
98	Julia Lewis	144	Tammie Meehan
99	Lauren Bugeja	145	Geoffrey Brown
100	Androula Michaels	146	Vasiliki Erophile
101	Peter Stafford	147	Farah Bostock
102	Saravanan Mani	148	Rebecca Bowles
103	Trish Morrow	149	Vick Johnson
104	Megan Hollick	150	Jade Canavan
105	Julie Doyle	151	Chereyne Colby
106	Sydney Braunfeld	152	Chris Shearer
107	Pending	153	Geraldine Bagwell
108	Mary Cotter	154	Dallas Kinnear
109	Pending	155	Pending
110	Clare Sheppard	156	Pending
110a	Clare Sheppard	157	Lettie Gerard
111	Rob Michael	158	Duncan Leggoe
112	Pending	159	Louella Scanu
113	Francesca Dias	160	Guna Green
114	Susan Patton	161	Pending
115	Jo Adams	162	Pending
116	Samarra McErvale	163	Adrian Eppel
117	Pending	164	Pending
118	Rahni Gee	165	Matt Macgill
119	Ron Murfett	166	Robyn Congreve
120	Pending	167	John Langer
121	Wendy Radford	168	Steve Balmforth
		169	Leesa Brock

170	Selene Dudley-Bateman	216	Pauline Tranchant
171	Pending	217	Geoffrey Linnell
172	Andrea Dunkley	218	Maeve Johnson
173	Jane Brownrigg	219	Matt Miller
174	Pending	220	Willard Lloyd
175	Naomi Taig	221	Sarah Briggs
176	Llewellyn Stephens	222	Sarah Rostron
177	Tara Maree	223	Rebecca Berto
178	Carolyn Gilpin	224	Lauren Poulton
179	Georgia Cooke	225	Marine Care Ricketts Point
180	Markus Egli	226	Pending
181	Victoria Torabi	227	Pending
182	Rachel Fogarty	228	Pending
183	Pending	229	Lisa Magnusson
184	Kerryn Lester-Smith	230	Ciara O'Dwyer
185	Suzan Dlouhy	231	Wendy Savage
186	Freya Headlam	232	Rita Fellows
187	Pending	233	Gabrielle Gautier
188	Naomi Davis	234	Daniel Lim
189	Pending	235	Pending
190	Pending	236	Aaldert Vandenberg
191	Pending	237	Sarah Maclagan
192	Lawrence Mcguire	238	Heath Wallace
193	Martin Cedec	239	Kim Jackson
194	Simon Maynard	240	Vishnu Hazell
195	James Cannon	241	Jorell Knoblock
196	Alison Horton	242	Pending
197	Angela Bruni	243	Melanie Wiltshire
198	Josephine Taylor	244	Pending
199	Tamir Berkman	245	Pending
200	Hazel Maung	246	Abigail Benham-Bannon
200a	Hazel Maung	247	Jolie Boyd
201	Bronwyn Hardman	248	Pending
202	Pending	249	Sing Wong
203	Michelle Newton	250	Claire Campbell
204	Pending	251	Pending
205	Tim Dean	252	Nina Zimmerman
206	Pending	253	Kerry Omeara
207	Julia Symons	254	Pending
208	Betsy Dunne	255	Alessia Valenza
209	Allison Diston	256	Dayan Youssef
210	David Charles	257	Natasha Rabbidge
211	Pending	258	Julia Gilbert
212	Pending	259	Roanne Maxwell
213	Pending	260	Hilary Hoggett
213a	Karen Furniss	261	Riina Aapa
214	Nick Heynsbergh	262	Alec Hand
215	Claire Pedersen	263	Jackie Garton

264	Diana Gary Sanchez
265	Pending
266	Louise Vernieux
267	Pending
268	Wojtek Michalski
269	Tara Porter
270	Geoff Browne
271	Pending
272	Ena Vasudevan
273	Pending
274	Natalie Laussade-Long
275	Tara Reed
276	Fraser Marsden
277	Tom Heath
278	Rebecca Nichols
279	David Rogers
280	Anne Cox
281	James Jackson
282	Brad Homewood
283	Alison Ryan
284	Charlene Sohn
285	Helen Hoffman
286	Pending
287	Rosemary Gaetjens
288	Chris Breaden
289	Anna Young
290	Lindsay Rex
291	Fiona Connan
292	Rio Marten
293	Rachael Wilmot
294	Roslyn Evans
295	Pending
296	Jacqui Scruby
297	Silke van der Linden
298	Terminate Tulla Toxic Dump Action Group Inc
299	Rachael Witham
300	Graeme Walters
301	Paul Carrick
302	Jennifer Lehmann
303	Katy Elwin
304	Friends of Steele Creek
305	Lauren Andrew
306	Karen and Danny Ellis
307	Tegan Mumford
308	Lorris Jones
309	Christine Czajko
310	Megan Hallows

311	Pending
312	Jack Ralph
313	William Dunstan
314	Richard Duong
315	Christine Slatter
316	Judy Routt
317	Number not used
318	Erin Temming
319	Karen Heinz
320	Pending
321	Olive Archibald
322	Phil Heading
323	Pending
324	Tim Foley
325	Callum Rogers
326	Janet Hall
327	Marina Oliphant
328	Julie Mayer
329	Anca Dragoi
330	Susan Langridge
331	Josh Brammar
332	Simone Fitzgerald
333	Heather Smith
334	Nicole Foote-Lenoir
335	Kyle Papini
336	Danty George
337	Julie Ward
338	Melanie Gibson
339	Pending
340	Vicki Johnson
341	Kelly-Anne Twist
342	Anita Jacobsen
343	Craig Ward
344	Robert Ward
345	Kirsty Price
346	Marco Setiawan
347	Pending
348	Pending
349	Katherine McIntosh
350	Janet Russell
351	Jeffrey Barlow
352	Anne Laver
353	Silke Dole
354	Sasha Hall
355	Marilla Druitt
356	Pending
357	Tamsin Kelly
358	Natasha Crawford

359	Frances Walsh
360	Sam Rodgers
361	Kym OShannassy
362	Jackie Yowell
363	Pending
364	Environment East Gippsland
365	Paula Gowans
366	Ross Headifen
367	Jamie Corominas
368	Lillian Cummins
369	Herbert Weber
370	Sarina Kelly
371	Jean Allan
372	Charlie Lempriere
373	Linda Dal Castello
374	Geraldine Bagwell
375	Martin Suter
376	Pending
377	Margaret and Sophie Green
378	Philippa Harrison
379	Pending
380	Helen Knight
381	Glenn Boyd
382	Pending
383	Lyn Kellett
384	Vaiya Fermanis
385	Abby Gee
386	Jess Yorke
387	Pending
388	Pending
389	Simone Cusack
390	Inge Steyaert
391	Pending
392	Robert Briggs
393	Richard Telford
394	Cheryl DeCoite
395	Mark Kerlin
396	Ana Grayson
397	Liz Arnold
398	Paul Newport
399	Julia Laskowski
400	Pending
401	Andy Breaden
402	Australians for Refunds on Cans and Bottles
403	Michael Howes
404	Bayside City Council
405	Courtney Gardner
406	Clean Up Australia
407	Tina Zacharis
408	United Firefighters Union
408a	United Firefighters Union
409	Tell Arstargazer
410	Southern Grampians Shire Council
411	Natalie Abboud
412	Warrnambool City Council
413	Sara Sjoquist
414	Wendy Brand
415	Jessica Townsend
416	Margaret Byron
417	Travis Blake
418	Janet Lieber
419	Sharyn Cambridge
420	John Tully
421	Relle Graefe
422	Kathy Faulkner
423	Hobsons Bay City Council
424	Boomerang Alliance
425	Joanna Drennan
426	Sally Dawe
427	Stephen Koci
428	Pauline Lacaze
429	Lisa Coffa
430	Darebin Creek Management Committee
431	Petar Pantic
432	Anne Makhijani
433	Friends of Merri Creek
434	Scott Compson
435	Becky Walls
436	Christina Caleo
437	Elizabeth Melgaard
438	Marc Katsambis
439	BEAM Mitchell Environment Group Inc
440	Eleni Smith
441	City of Wodonga
442	Ashleigh Peplow Ball
443	Charles Quinn
444	Surf Coast Shire
445	Golden Plains Shire
446	Pending
447	Ramona Headifen
448	Anna Kjer-Nielsen
449	Gianfranco Bisesti
450	City of Greater Bendigo
451	David Priest
452	Wellington Shire Council

453	James Tutt
454	Pending
455	Laura May
456	Haylea Fitsimmons
457	Alexandra Russo
458	St Kilda Mums Inc
459	Jamie Clowes
460	Pending
461	Pending
462	Number not used
463	Alec Sandner
464	Morgan Koegel
465	Pending
466	Bianca Cottle
467	Trevor Thornton
468	Carolina Aguirre
469	Pending
470	Robert Heron
471	Anne Hasegawa
472	Gabrielle Hogan
473	Banyule City Council
474	Ken Woodward
474a	Ken Woodward
474b	Ken Woodward
474c	Ken Woodward
474d	Ken Woodward
474e	Ken Woodward
474f	Ken Woodward
474g	Ken Woodward
475	City of Ballarat
476	City of Monash
477	Pending
478	Mount Alexander Shire Council
479	Mario Milici
480	Australian Industrial Ecology Network
481	Central Goldfields Shire Council
482	Pending
483	Rebecca Thompson
484	Vicky Ellmore
485	City of Port Phillip
486	Barwon South West Waste Resource Recovery Group
487	Greater Shepparton City Council
488	Bayside Climate Change Action Group
489	Shu Fei Wong
490	Ben Kaminsky
491	National Waste and Recycling Industry Council NWRIC
491a	National Waste and Recycling Industry Council NWIRC
492	Australian Council of Recycling
493	Kelly Gillespie
494	Alpine Shire Council
495	Brimbank City Council
496	Moreland City Council
497	Tim Landells
498	Australian Marine Conservation Society
499	J Allen Brent
500	Stephanie Wapling
501	City of Casey
502	City of Boroondara
503	Tony Smith
504	City of Greater Geelong
505	Meghan Lawson
506	North East Local Government Waste Forum
507	Wyndham City Council
508	SUEZ
509	Cleanaway Waste Management Ltd
510	Corangamite Shire Council
511	Northern Grampians Shire Council
512	ResourceCo
513	Anine Cummins
514	Belinda Mullen
515	Stephanie Mulligan
516	Petra Kahle
517	Sustainable Resource Use
518	Port Phillip EcoCentre
519	Hume City Council
520	Glenelg Shire Council
521	Victorian Local Governance Association
522	Yume Food Australia
523	Environment Victoria
524	Roslyn Aikman
525	Cement Concrete Aggregates Australia
526	ReLoop
527	Darebin City Council
528	WM Waste Management Services
529	City of Whittlesea
530	WM Waste Management Services
531	Gannawarra Shire Council
532	Aaron Zaharias
533	Joan Cashion
534	John Cashion
535	Nuer not used
536	Beaumaris Conservation Society
537	John Christou

538	Therese Illingworth
539	NSW Small Business Commissioner
540	Santosh Muttamsetty
541	Lauren Sandeman
541a	Lauren Sandeman
541b	Lauren Sandeman
542	ReGroup
543	Carly Jehu
544	Pending
545	Suzanne Brown
546	Barrie Tyson
547	Jane Howlett
548	Jacobs Lyons-Giusti
549	Moyne Shire Council
550	Uday Mohandas
551	Kathryn Hall
552	Christine Levic
553	Catherine Lyons
554	Jemma Crawford
555	Giridhar Vemulapalli
556	Nilumbik Shire Council
557	Lee Swan
558	Irene Proebsting
559	Tim Newhouse
560	Kathryn Farrell
561	Frances Lennard
562	Sylvia Lo Piccolo
563	Sara Melvin
564	Plastic Free Peninsula Facebook page
565	Ross Headifen
566	Briar-Rose Forrer-Lacey
567	iQ Renew
568	Teresa Teresa Day
569	Gianna Romano
570	Macedon Ranges Shire
571	Ocean Protect
572	Erin Lindwall
573	Hannah Marshall
574	Kaye Degenhardt
575	Mary Fennessy
576	Elizabeth Oldenburger
577	Rosalie Darby
578	Ella Pillay
579	Daniel Breves Ribeiro
580	Metropolitan Fire and Emergency Services Board (MFB)
581	SKM Recycling
582	Australian Paper
583	Mornington Peninsula Shire
584	Regional Cities Victoria
585	Lily Geyle
586	Felicity Maharjan-Reid
587	Kelly McGrath
588	Deirdre Boeyen Carmichael
589	The Australian Industry Group
590	Michelle Stephenson
591	Sarah Joyce
592	Liz Jakob
593	Emily Jeffery
594	Jo-Anne Britt
595	Rebecca Nichols
596	Friends of Langwarrin Outdoors & Waterways
597	Dr Jane Sewell
598	Melissa Whiting
599	Emily King
600	Loddon Malle Local Government Waste Forum
601	Maddy Butler
602	Sierra Laidman
603	Kate Chinarova
603a	Kate Chinarova
604	Alexia Huth
605	Jacqueline Rozenfeld
606	Geneva Atkinson
607	Storm Moore
608	Planet Ark
608a	Planet Ark
609	Gippsland Local Government Waste Forum
610	Love Our Street
611	Rebecca Carta
612	Yvette Agar
613	Nick Rees
614	Macedon Ranges Sustainability Group
615	Campaspe Shire Council
616	Gianna Romano
617	Knox City Council
618	Victoria McGinness
619	Katrin Pierce
620	Jenny Fry
621	Nina Skuja
622	City of Greater Bendigo
623	Camila Salazar
624	Strathbogrie Shire Council
625	Daniella Salazar
626	Sheriden Tate
627	Plastic-free Victoria Alliance

628	Hannah Goh	667	Margaret Jungwirth
629	Carolyn Layton	668	Geelong Sustainability
630	Friends of Moonee Ponds Creek	669	Greta Walters
630a	Friends of Moonee Ponds Creek	670	Susan Laukens
631	Zero Waste Victoria	671	Dr Maria Godinho
632	Stef Cooper	672	Nicole Johnston
633	Confidential	673	RAW Travel
634	Pamela Lloyd	674	Balwyn High Environment Committee
635	Erin Rhoads	675	Kirthika Kannan
636	Rachael Hart	676	Mount Eliza Waste Free Beach Patrol
637	Kim Meagher	677	Jennifer McAuliffe
638	BRACSIP	678	Li Mei Brusey
638a	BRACSIP	679	Andrew Shinn and Lisa Simpson
638b	BRACSIP	680	Louise Segrave
638c	BRACSIP	681	Sue Hollingworth
639	Amanda Kwong	682	TOMRA Collection Solutions
640	Dr Michelle Chow	682a	TOMRA Collection Solutions
641	Australian Nursing and Midwifery Federation Victorian Branch	683	Nina Franceschi-Eason
642	Stop the Tip Inc.	684	Pending
643	Pending.	685	Ken Savage
644	Nikkola Mikocki-Bleeker	686	Waste Management and Resource Recovery Association of Australia
645	Robyn Parker	687	Waste Industry Alliance Victoria
646	Tiffany Vines	688	VISY
647	Desirae Hancock	689	Sarah Lane
648	Shannon Burton-Rushworth	690	Law Institute of Victoria
649	Mitchell Shire Council	691	Tegan Ballinger
650	Moonee Valley City Council	692	Yarra Ranges Council
651	Municipal Association of Victoria	693	Diplomatic Group Pty Ltd
652	Jessie Smith	693a	Diplomatic Group Pty Ltd
653	Tammy Logan	693b	Diplomatic Group Pty Ltd
654	Hannah Robert	694	Australian Workers Union Victorian Branch
655	Murrindindi Shire Council	695	Brandon Monteith
656	Leanda Smith	696	Anti-Toxic Waste Alliance
657	City of Greater Dandenong	697	Simone Alesich
658	National Toxics Network	698	Pending
659	Natasha Ludowyk	699	Victorian Government
660	Lotte St Clair	700	Frankston City Council
661	WorkSafe Victoria	701	PlaSTEAMed
662	Rob Buttrose		
663	BINGO Industries		
663a	BINGO Industries		
664	Sylvia Worboys		
664a	Sylvia Worboys		
664b	Sylvia Worboys		
664c	Sylvia Worboys		
665	Sustainable Agriculture and Communities Alliance		
666	Zara Sell		

Please note that submissions marked pending indicate where a submitter has asked for confidentiality and is yet to respond to a request from the Committee to provide information about why the submission should be confidential.

A1.2 Public hearings

Friday 3 May 2019

Legislative Council Committee Room, Parliament House, East Melbourne

Name	Title	Organisation
Mr John Bradley	Secretary	Department of Environment, Land, Water and Planning and Environment Protection Authority (Victoria)
Ms Kylie White	Acting Secretary, Environment and Climate Change	Environment Protection Authority (Victoria)
Dr Cathy Wilkinson	CEO	Environment Protection Authority (Victoria)
Dr Andrea Hinwood	Chief Environmental Scientist	Metropolitan Fire and Emergency Services Board
Mr Adam Dalrymple	Acting Deputy Chief Fire Officer	Metropolitan Fire and Emergency Services Board
Mr Tass Georgas	Manager and Senior Engineer	Metropolitan Fire and Emergency Services Board
Mr Mark Carter	Acting Assistant Chief Fire Officer	Metropolitan Fire and Emergency Services Board
Dr Angie Bone	Acting Chief Health Officer	Department of Health and Human Services
Ms Bernadette Thomas	Acting Manager Sustainable Environment and Waste	Hume City Council

Friday 10 May 2019

Legislative Council Committee Room, Parliament House, East Melbourne

Name	Title	Organisation
Ms Marnie Williams	Chief of Business Operations	WorkSafe Victoria
Mr Michael Coffey	Head of Hazardous Industries and Industry Practice	WorkSafe Victoria
Mr Stan Krpan	CEO	Sustainability Victoria
Mr Matt Genever	Director Resource Recovery	Sustainability Victoria
Mr Richard Macchiesi	General Manager Insights and Innovation	Visy
Ms Alana Morgan	Corporate Counsel	Visy
Mr Craig Dunn	General Manager Communications and Sustainability	Australian Paper
Mr Ben McLean	Strategic Projects Manager	Australian Paper

Wednesday 5 June 2019

Legislative Council Committee Room, Parliament House, East Melbourne

Name	Title	Organisation
Ms Rose Read	Chief Executive Officer	National Waste and Recycling Industry Council
Mr Alex Serpo	Secretary	National Waste and Recycling Industry Council
Mr Peter Murphy	Member	National Waste and Recycling Industry Council
Mr Simon Mackie	Member	National Waste and Recycling Industry Council

Monday 24 June 2019

Legislative Council Committee Room, Parliament House, East Melbourne

Name	Title	Organisation
Mr Bo Li	Senior Policy Adviser	Victorian Local Governance Association
Mr Ian Guss	Director	Recovered Energy Australia
Mr Rob Millard	CEO	Metropolitan Waste and Resource Recovery Group
Ms Josephine Regal	Director of Corporate Strategy, Projects and Communication	
Cr Coral Ross	President	Municipal Association of Victoria
Ms Kerry Thompson	CEO	
Ms Claire Dunn	Manager, Environment and Regulatory Services	

Tuesday 25 June 2019

Legislative Council Committee Room, Parliament House, East Melbourne

Name	Title	Organisation
Dr Jonathan Spear	Executive Director, Advisory and Corporate	Infrastructure Victoria
Ms Elissa McNamara	Project Director, Waste and Resource Recovery Infrastructure Advice	
Mr Peter Marshall	Secretary	
Mr Frank Howell	Member	
Mr Stephen Munro	Member	United Firefighters Union
Mr Damon Coonan	Member	
Mr Peter Stafford	Member	
Mr Michael Sayers		Slater and Gordon
Mr Frank Lintvelt	Head of Strategy, Mergers and Acquisitions	Cleanaway
Mrs Penny Creswell	Senior Legal Counsel	
Mr Michael Strickland	Project Manager	WM Waste Management Services

Tuesday 6 August 2019

Legislative Council Committee Room, Parliament House, East Melbourne

Name	Title	Organisation
Ms Sue Vittori	Chair	
Ms Jane Miller	Secretary	Anti-Toxic Waste Alliance
Ms Dorothy Bruck		
Dr Marion Cincotta		
Mr Robert Timmins		
Ms Che Stockley		
Mr John Rutherford		
Mrs Sonya Rutherford		

Name	Title	Organisation
Mr William Freeman		
Ms Sheriden Tate		
Mr Peter Merrylees		
Ms Marion Martin		Stop the Tip
Ms Marlene Gorman		
Mr Darren Bennetts		
Mr Steven Wilson		Friends of Stony Creek
Ms Clare Sheppard		

Wednesday 21 August 2019

Morwell Bowling Club, 52 Hazelwood Rd, Morwell

Name	Title	Organisation
Mr Tim Rowe	Manager Natural Environment and Parks	Wellington Shire Council
Cr Graeme Middlemiss	Mayor	Latrobe City Council
Mr Steven Piasente	CEO	
Cr Natalie O'Connell	Mayor	
Mr Anthony Basford	CEO	East Gippsland Shire Council
Ms Fiona Weigall	General Manager Asset and Environment	
Mr Kartik Venkatraman	Manager Sustainability and Waste Minimisation	
Mr Malcolm Lewis	Chief Financial Officer	Baw Baw Shire Council
Mr Edward Pocock	Manager Infrastructure Delivery and Waste	
Ms Deirdre Griepsma	Manager Sustainable Environment	Bass Coast Shire Council
Mr Matthew Peake	CEO	Gippsland Waste and Resource Recovery Group
Ms Wendy Bezzina	CEO	Latrobe Valley Enterprises

