

AORA Victoria – Position Statement concerning the intended Environmental Protection Act and its Subordinate Legislation 2021

INTRODUCTION TO AORA Vic

The Australian Organics Recycling Association (AORA) is the peak body representing organics recyclers across Australia with branches in five States. In Victoria, the association is referred to as AORA Vic.

AORA Vic has a base of around 40 members comprising composters (large and medium sized processors who provide more than 70% of the State's composting capacity), organics recovery technology providers, soil science practitioners and environmental consultants. AORA Vic is governed by a strong Executive group, some members of which also serve as officers of the national body.

EXECUTIVE SUMMARY

The delayed implementation of Victoria's new Environment Protection Act and its Subordinate Legislation provides an opportunity to revise the regulation of the organic recycling sector with a new scheme of registrations, permits and licenses creating a tiered structure for organics processing, maximising the amount of municipal, industrial and agricultural materials recycled and improving the quality of the recycled product.

This document recommends a minimally-regulated regime for the industry with a clear Government structure of responsibilities that avoids confusion among multiple Departments and Agencies.

BACKGROUND

Whilst AORA Vic appreciated the opportunities to liaise with EPA Vic and DELWP prior to the intended 01-07-2020 implementation of the Act, there was a strong feeling that the process was being rushed, and was focussed too strongly focussed on prevention of highly unlikely health risks, such as Mad Cow Disease, and not nearly enough on the encouragement of an industry sector that has continually demonstrated beneficial environmental outcomes.

AORA Vic has also commented that the many State Government departments and agencies that are involved with the recycling sector appeared to be developing policies and projects that were not being coordinated at Ministerial level and were, therefore, confusing rather than encouraging the industry's participants. There has been recent, adequate demonstration of the serious downsides of such an approach.

AORA Vic is currently optimistic about an apparent change in this respect, evidenced by:

- The 2019 report on the waste industry by the Victoria Attorney General's Office which clearly describes the failures of certain departments to act in cases of environmental transgressions, notes the multiplicity of agencies impinging upon the waste sector and is critical of the lack of overall government policy and activity coordination in the sector.

- The adoption in early 2020 of the State of Victoria’s Circular Economy Policy. AORA Vic was pleased to have been consulted by DELWP on that policy and feels that it provides a sensible basis for the development of the organics recycling sector.
- The publication in April 2020 of a report by Infrastructure Victoria titled “Advice on Recycling and Resource Recovery Infrastructure” which recommends substantial investment in, and the encouragement of, additional waste recovery facilities throughout the State, including:
 - Dedicated organics recovery transfer stations to Melbourne’s north and west
 - Open windrow composting capacity growth in regional Victoria
 - In-vessel composting capacity in both metropolitan and regional areas
 - Anaerobic Digestion capacity to process food waste
 - Dedicated sites in regional agriculture areas for maturation and blending of composts
- The appointment of Sustainability Victoria to be responsible for the implementation of the Recycling Victoria organics programs, including funding for new recycling infrastructure, facilitates further development of the already positive cooperation between SV and AORA Vic.
- The recently announced intention that DELWP will translate the recommendations of the report “Recycling Victoria: A new economy” into a new waste and recycling Act accompanied by the creation of a new waste authority for Victoria. AORA Vic is pleased to have been consulted already on this scheme and will be a willing participant in further discussions.
- The announced increases in State landfill levies that will certainly encourage greater rates of recycling. It would be even more effective if this was accompanied by a policy of investing landfill levy income into the improvement of the organics recycling sector.

THE BENEFITS OF RECYCLING ORGANICS

There is clear and widespread acceptance that diverting organic waste from landfill to create soil additives results in major environmental benefits:

- Carbon sequestration as an element of climate change alleviation
- Reduction of greenhouse gas emissions
- Improved soil structure and water retention levels
- Increased soil microbe nutrition
- Increased resilience of farming systems

It is not as well known that organics recycling industry also creates significant economic benefits for the State and has huge potential, if encouraged by sensible regulation and investment, to dramatically improve those positives. A recent independent study commissioned by AORA highlighted the following economic benefits for Victoria of the current organics recycling sector:

- 960 jobs
- \$73 million in wages and salaries
- \$404 million in annual turnover
- \$373 million sourced across the supply chain
- \$35 million invested in land, plant and vehicles
- \$144 million contributed to the Victorian economy

These numbers are achieved with a State organic recycling rate of only 49.6%. Three other States are performing higher recycling rates with South Australia leading the way at 78.9%. It is clear that by

encouraging recycling in Victoria, even if only to the South Australian rate, the environmental and economic benefits would be more than significant.

SO, WHAT'S THE PROBLEM?

Whilst AORA Vic noted some alleviation of EPA Vic regulatory intent in the last round of consultation, it is still very much the Association's view that the Policy and Subordinate Legislation, in their current form, will stifle the positives noted above, discourage investment in new recycling facilities and prevent the adoption of an industry structure that will support and sustain growth.

The current regulatory drafts show no tendency to develop the industry, just a penchant for risk aversion and control. They appear to take no account of their negative impact on the capacity and structure of the industry nor do they illustrate any desired outcome other than consolidating EPA's position as a "micro-regulator".

The Infrastructure Victoria report very clearly outlines the size of the recovery shortfall and lack of processing capacity, a situation created over a decade of regulatory overreach. The outcome being experienced now, as reported by Infrastructure Victoria, has been entirely predictable and observable over time. Without change toward flexibility and the encouragement of business and investment, the continuing outcome will be no different.

A lighter touch to regulated capital requirements is needed to bring about fundamental change to the structure of the organics processing market, facilitating increased capacity, quality and the capability to process the expected growth of compostable plastics. For example, under AS 4736, (the Australian Standard for Compostable Plastics), compostable plastic materials require a maximum of 12 weeks to break down in aerobic compost systems. Most recently-established Victorian metropolitan composting facilities, because of costs arising from regulatory impositions, do not have 12-week processes and find it impossible to produce the more mature compost that is preferred by the agricultural industry in the State.

South Australia demonstrates a much more successful model of market-led high quality products obtained from longer processing times and realistic capital requirements that encourage the SME sector. This is in stark contrast to a supply-pushed, low quality disposal operation.

Barriers to entry and to the sustainability of existing processing sites

New investment is stifled by high barriers to entry, uncommercial competition, the high technology requirements of EPA Compost guidelines 1588.1 and the zero-risk approach of EPA Vic instead of an appropriate risk management approach. These factors result in:

- The feedstock and capital requirement grid being prohibitive of practical, site-appropriate development.
- A continuous push for capital upgrades
- Increased Financial Security impositions which are extremely difficult to fund, in effect making a cash deposit a requirement to process
- Public enterprise competition operating with uncommercial gate fees
- The interminably long, costly and uncertain Works Approval / Development Assessment process where every application is a traumatic journey in cost escalation.
- The SME sector being discouraged from participation by:
 - high capital requirements
 - onerous obligations to EPA backed by recently imposed higher corporate and personal fines
 - the high requirements of financial security and limited methods of posting said security

- operating at low gate fees, driven by Government Authority competition
- low margins from finished products priced to clear in Metropolitan markets.
- Big business is cautious to invest, making poor returns and being unable to provide the whole solution across the entire supply chain from collection to paddock.

As a result, there is now very little new capacity being built.

The need to increase capacity for Food Waste & FOGO

All fast food can be presented in compostable wares and this would be an avenue for increasing food waste recovery. For example, where required in the USA, McDonalds can adopt a compostable packaging system. If such a policy were to be implemented in Victoria there is insufficient capacity to accept such waste and to process it to maturity. Willingness to invest has dried up because of Government policy and practice.

Infrastructure Victoria allude to the matter of industry capacity. They refer to the need for restructuring the industry including processing in regional areas together with links between metropolitan and regional processors, even without considering the compostable plastic issue.

The forthcoming Environmental Protection Act and its Subordinate Legislation present the ideal opportunity to facilitate a structure linking the city and rural processing facilities in a network that creates mature, high quality outputs unconstrained by punitive, high cost regulations. Such a structure would also buffer capacity in the event of a processor shutting down temporarily.

Barriers to allowing composting of FOGO streams in open windrow, non-metropolitan facilities should be removed based upon the management of site-specific conditions.

Contamination of Garden Organic Streams and FOGO streams

In a separate document dated 17 July 2020, AORA Vic discusses the effects of contaminated feedstocks arising from FOGO (Food Organics Garden Organics) collections. That document focusses on compostable plastics, but more needs to be done to improve all contamination levels in feedstock receipts.

- Councils may not recognise the inconvenience and cost placed on composters by badly contaminated incoming materials
- The intended new EPA Vic regulations encourage this risk shift, since they decree that responsibility commences on receipt at the processors' premises rather than at collection points.
- Contaminated finished product has severely limited markets and defeats the purpose of the recycling effort.

AORA Vic is pleased to work with the Metropolitan Waste and Resource Recovery Group (MWRRG) on programs aimed at educating Councils and their tenants on the importance of separation at source of contaminants. MWRRG recently published a series of icons that assist in the identification of desirable and undesirable FOGO bin contents.

Agricultural manures should be composted

Poultry, piggery, feedlot and dairy wastes should be composted for **bio-security reasons** to conform to Dept of Agriculture and Fresh Care guidelines and to stop the undesirable practice of applying unprocessed manures to land. EPA Vic classifies manures as requiring enclosed force aeration under 1588.1 but:

- High capital cost causes unrealistic gate fees for the Agricultural industry

- There is no SME investment in this sector.
- 1588.1 as written is an active discouragement to any composting involving manure.

The result is the continued practice of raw manure spreading, with its attendant health risks and the loss of an excellent input to the compost process which would render the material safe through pasteurisation.

Counteracting the current conservative approach

Examples of constraint faced by organics processors include:

- *Compost Guidelines 1588.1 Conservatism of Feedstock classification. Section 5.1 Feedstock Classifications and Section 5.3 table 5 Technology Requirements* for the given feedstocks sets the scene for over-capitalisation and does not adequately assess this prescriptive table in terms appropriate to site-specific assessment.
- EPA's Literature Review shows the effectiveness of compost systems in pathogen destruction including prions (the Mad Cow Disease pathogen). There has never been a Mad Cow Disease outbreak in Australia but in 1588.1 EPA still maintains disproportionate concerns about it.
- Increasing capital requirements and financial security to be posted by processors
- Prevention of additions to compost at on-farm maturation sites

SMEs and farm-based composters should be authorised to accept pasteurised but immature city composted material and further compost it with Agricultural wastes added, improving the nutrient value of the end-product and providing de-centralised distribution. This would enable the complete breakdown of compostable plastics within the time frame allowed in the standard.

The immature city-composted material should be classified as a product rather than as a waste so that it can be transported without punitive regulatory compliance and the associated costs.

AORA is working with the office of the National Soil Advocate on its Soils for Life program which aims to improve soil health in agriculture and horticulture where compost application is the start of a chain action of soil carbon sequestration.

AORA has met with Sustainability Victoria to discuss how State programs could leverage the national Emissions Reduction Fund approval of protocols for soil carbon sequestration programs, although no concrete outcome has yet emerged. Infrastructure Victoria specifically state that the link between carbon credits and organic recycling should be developed and promoted.

Progress on all of these initiatives will be stifled without changes that lead to increased processing and diversion of food wastes from landfill.

OPPORTUNITIES

Infrastructure Victoria calls for clarity of responsibility between DEWLP, SV and the Metropolitan / Regional Waste and Resource Recovery Groups in recommendation 10. It unfortunately omits EPA Vic from this list - a critical omission in understanding the disproportionate impact EPA has on the industry in comparison with those other organisations.

It is to be hoped that the new Victorian "Waste Authority" will be used as a vehicle to slim down the current multiplicity of government agencies involved in regulating the organic recycling industry and will ensure that the EPA legislation encourages industry growth rather than contradicting and suppressing it.

In an ideal world, the organics recycling industry would form a partnership with Government to implement a non-regulated program for environmental risk management along the lines of the food industry's HACCP (Hazard Analysis Critical Control Points), an industry led, highly effective best-practice scheme.

The delayed subordinate regulations provide EPA the opportunity to revise the 1588.1 guidelines to create lower cost entry to the industry, tiered under the new registration, permit and licence structure. At this stage of consultations, no detail has been provided on volume/tonnage thresholds and capital equipment expectations as the scale is descended

1588.1 is an overly conservative and prescriptive document particularly in its approach to feedstock classification and capital requirements. This is true for licensed sites at high scale, let alone for 2nd and 3rd tier operations that registration and permits may allow. The application of 1588.1 to a permitted site defeats the purpose of a 2nd tier permitted site by saddling it with the onerous requirements of a licensed site.

To develop processing capacity capable of dealing with compostable plastics and the economic pasteurisation of manures, a structure needs to be developed of metropolitan pasteurisation sites feeding regional finishing sites, close to agriculture where manures are incorporated at lower capital open windrow facilities that have the space and time to make quality compost.

In a COVID-19 world, the development and encouragement of small and medium enterprise is going to be vital in creating employment and opportunity. We also now face a much more cost-sensitive environment at a time of scheduled increased waste taxation for the coming triennium. The risk of over-regulation is the continuation of "more of the same" as the last decade:

- SME participants leaving the industry,
- little capacity increase,
- low quality short process time projects,
- no progress with handling agricultural wastes
- no progress toward the capability to properly process compostable plastics.

Suggested Regulatory Framework for Aerobic Composting

Tier	Proposed Parameters
Licence	>50,000 tonnes per annum 1588.2 – with realistic revision. Urban pasteurisers, Regional Hubs. Vessel operators.
Permit	5,000 – 50,000 tonnes per annum 1588.2 light – skewed to enable open windrow as much as possible. Pasteurised urban & regional Hub feedstocks. Import agricultural manures etc and AD digestate.
Registration	1,200 – 5,000 tonnes per annum farm-based maturation and on-site feedstock blending.
Unregistered no requirements	<1,200 tonnes per annum, farm-based maturation and on-site feedstock blending

Organics Recovery Processes other than Composting

- **Anaerobic Digestion**

AORA requests EPA Vic to finalise guidance on management of the appropriate use & applications of digestate from Anaerobic Digestion (AD).

Without clear direction around digestate management, a nutrient rich output generated from the AD process, investment in AD and achieving government outcomes relating to food waste recycling and renewable energy drivers will be difficult to obtain. This has been identified as a significant barrier from various AD feasibility studies in Victoria already.

A range of end use applications for digestate are well established internationally, including application to land for agricultural purposes, use in stock feeds and post treatment options such as composting. The markets have identified the beneficial alternatives organic fertilisers, in the form of digestate, provide compared with energy-intensive mineral fertilisers. Additionally, flexibility in the end use markets for digestate is vital to the sustainability of AD investment in Victoria. Options should also consider accommodation for both single and co-digestion facilities.

It should be noted that even in possession of full literature reviews of long established and controlled overseas practices the Victorian EPA has made no progress towards making a determination at this time despite ongoing requests from the existing EPA licenced AD operator in Victoria, and various others attempting to develop business cases for new investment.

A lack of appropriate regulation directly inhibits investment in valuable organics processing AD technology, which aligns directly with Victorian State Governments, Organics Resource Recovery Strategy.

- **On-site Processing less than 1200 tonnes input per annum**

Dehydration and On-site Composting are examples of relatively small-scale processing of organics at or close to the point where the waste is created.

Where regular testing of process outputs confirms pathogen-free status or pasteurisation together with pH and elemental composition suitable for soil application (at concentrations recommended by a soil scientist or agronomist), there should be no requirement for licencing, permits or registration.

REGULATION STREAM

AORA Vic proposes that the following regulatory areas need to be addressed and rationalised:

- **EPA 1588.1**
 - To account for Compostable Plastics
 - Australian Standard AS 4736:2006,
 - 84 Day process standard for plastics
 - Not suitable for 14-21 day vessels processes to reach completion
 - Requires longer process times after initial pasteurisation
 - Longer maturation
 - Feedstock & Technological Method Grid Review
 - Metro pasteurised material transferred

- Biosecurity benefit
 - Rural value adding
 - Manure feedstocks, rural city food & compostable plastics
- Encouraging Rural Enterprise to join Compost Industry
 - Lower technical license requirements
 - Avoid unregulated farm composting – Don't increase farm limit
 - Lighter Regulation but still licensed
 - New EPA Act captures all business anyway
 - Lower or No Financial Security
 - Access to Industry Assurance Fund
 - Closer to market
 - Adding manures and additional nutrients adds value to green waste based, low nutrition products
 - Long maturation times
- **Prescribed Industrial Waste - Financial Assurance**
 - Classification of Wastes
 - AD Digestate
 - Not prescribed to trip Financial Assurance
 - No worse than Dairy effluent for direct application or addition to compost
 - Industry Financial Assurance Fund
 - Acknowledge that financing a Financial Assurance is a significant hurdle for the SME sector
 - Significant first call drag on ability to Bank Finance. It is counted as a debt to the bank and immediately subtracted by the Bank in loan calculations
 - In effect asks for a cash deposit from potential SME players
 - For the SME it usually means putting up the family house
 - New Act already has SME sector under threat of \$1.6m fine
 - Set aside from Landfill levy monies \$5 or 10m In case a clean-up is needed
 - Organic clean up usually only require further aging or finishing of the product
 - Worst case, pick up material and move to licensed site or distribute among farms under the threshold
 - Licensed Sites, small levy based on EPA License Fee for access to Fund
 - Split of individual modest contribution for individual accountability and incentive to remain compliant
 - Access to Industry Assurance Fund
Lower access Barrier to existing market participants.
Lower Entry costs for new participants.
- **Climate Change / Soil Sequestration Stream**
 - Emission Reduction Fund qualification of compost and soil sequestration
 - Not well understood in farming community
 - Potential long-term secondary revenue stream
 - Soil Health and productivity benefits

- Organic matter benefit to soils and productivity
- Reduction in synthetic fertiliser use
- Role of compost and biosolids
- Complicated formula and proofs for payment
 - Significant non-productive investment in base line soil carbon data
 - Cost of tests and interpretation
 - Ongoing costs of monitoring to claim credit
- Compost use is only part of a wider/more broad farming system change
 - Significant challenge in agronomic education & extension
 - Great opportunity to link Soils for Life program and Office of the National Soils Advocate
 - See January report on Soils for Life
 - Treat soil as a resource equal to water and of national significance
 - Increase and monetise the Natural Capital of soil through the application of recycled organics.
- Opportunity to link State SV, DEWLP and DEJTR Ag Vic programs to the Federal incentive of ERF
 - Education and Extension
 - Summarising and putting together information packs on how to get your farm involved and the potential long term benefits
 - Compost Use
 - Practice change
 - Synthetic fertiliser cost reduction
 - Unlocking existing locked up phosphorus
 - Water efficiency, infiltration and retention benefits.

CONCLUSION

Organics recycling is often viewed as just another part of the overall waste management industry. AORA Vic urges all parties to consider that organics recycling:

- has a long track-record of producing outcomes that are beneficial to soil and to the environment,
- does not stockpile feedstocks in unsafe conditions and without capacity for processing,
- does not export feedstocks
- has not been the source of disease outbreaks or threats to human safety.

The sector wishes to substantially increase its processing capacity in order to build upon the benefits it has established but faces the continual barriers of over-regulation and associated costs. AORA Vic stands ready to work closely with State and National Government bodies to create an industry structure that facilitates rather than impedes progression.

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