



IPWEA vic Submission to the Draft Metropolitan Waste and Resource Recovery Strategic Plan 2013

Name: Ross Goyne (President)
Organisation: Institute Public Works Engineering Australasia (Victoria)
Address: PO Box 115 Oakleigh South VIC 3167
Telephone: 9005 0860
Email: vic@ipwea.org.au

Introduction:

The Institute Public Works Engineering Australasia (Victoria Division) is pleased to provide the following submission to the Draft Strategic Plan. The MWMG are to be congratulated on the high quality and comprehensive Draft Strategic Plan.

The Strategic Plan's thirty year horizon is highly appropriate in today's planning environment for two reasons:

1. Precinct structure plans are being finalised for all undeveloped land within the urban growth boundary that could impact existing and proposed landfill sites, waste management facilities and potential waste precincts; and
2. The lead time for all required permits and approvals, design and construction of waste management facilities (particularly landfills) can take 5-10 years.

IPWEA vic are willing to have their submission to the Draft Strategic Plan available to the public.

Part One: Metropolitan Plan

The objectives could be strengthened with an increased focus on environment protection in the provision of resource recovery and landfill infrastructure. This could be achieved by:

- Legislating a requirement for site specific buffers (where required by a specific facility – eg a landfill) which must be incorporated into the relevant planning scheme(s). The pending public release of the GHD report on the Wests Road landfill buffers in Werribee will likely provide a rigorous and comprehensive technical framework and process.

- The existing legislative framework for waste facilities is covered by more than one Act. Consideration should be given to simplifying the legislative environment to focusing legislative control for such facilities under a single Act.
- A significantly improved environmental outcome from waste management can be achieved by removing all organic material (mixed – green and food organics) from landfills, thereby avoiding the generation of methane at these sites. The (mixed) material can be separated at the source (ie at households -> approximately 50% of existing putrescible waste collected from households is organic/food waste that is capable of treatment) and collected in a compulsory third bin in municipalities. In proposing this model, it is acknowledged that some inner metropolitan areas and high density developments will special consideration and/or a different service model than typically provided to date. New high density developments could be dealt with via appropriate planning permit requirements for waste management. Introduction of a compulsory third bin for (mixed) organics will require comprehensive community engagement. Optionally, a compulsory primary sorting of all waste prior to landfill disposal could separate organic waste from the inert waste and redirect the organics for processing to produce commercial products.
- The identification of waste precincts where a full range of waste facilities are situated would maximise the synergies between these facilities. Future waste precincts could be identified and protected. The permit and approvals for such sites could be streamlined to reduce the risk, time and costs associated with the development of facilities at these sites.
- The inclusion of the Mornington Peninsula Shire into the MWMG boundary is logical.
- It is worth noting that like transport systems, waste management systems and infrastructure provision do not recognise nor are limited by municipal and / or waste management boundaries. The systems and services they support for communities across the State need to be integrated and seamless. To this end, it is seen as very important that the MWMG Strategic Plan is cognisant of the future needs of the adjoining Region's potential needs for inter-regional transfer of waste to optimise outcomes for their communities. This will require close liaison between the MWMG and all adjoining regions.

This is consistent with:

1. Getting full value - the Victorian Waste and Resource Recovery Policy which has as one of its objectives 'Integrated and efficient waste management and resource recovery – all resource recovery and waste management activities will be considered and managed as one integrated statewide waste system.'
2. The draft Statewide Waste and Resource Recovery Infrastructure Plan, currently out for consultation, has been developed with regard to key recommendations of the MAC which nominates that plans will 'include cross regional boundary planning' and that plans 'be developed through an integration process with SV to ensure that infrastructure schedules are coordinated and integrated with statewide objectives and regional needs'.

The diagram in Fig 1.1 does not appear to specifically identify organic material in the sorting, recovery and production phases of the resource flows. For the reasons outlined above, this oversight warrants review.

The role of the EPA Victoria in Table 1.2 is silent on the EPA's role in approving the design and construction of landfill cells, and the auditing of the completed construction prior to filling commencing. These are critical phases in the provision of airspace at landfills and it's considered that they should be included.

In Sections 5.4.2 and 5.4.3, waste generation is forecast to grow at a faster rate than population growth (ie 1.6%pa Vs 1.5%pa). There is no explanation of this unfortunate situation or any recommended action to address it. It is suggested that a Strategic Plan objective of a maximum per capita (kg/person) waste generation quantity should be considered to at worst, limit growth in waste generation to accord with population growth. Furthermore, if food organics are included in the recovery and recycling tonnages as a compulsory measure, the disposal task for metropolitan Melbourne reduces significantly.

In the third paragraph of Section 5.4.2, it states that anecdotal evidence indicates levels of demolition activity have declined significantly. However in Section 5.4.3, three separate references state that the projected increase in C&D waste is >MSW, consistent with recent trends. These statements can be read as contradictory.

The final paragraph in Section 6.4 highlights how the ultimate infrastructure solution to manage the 1.2M tonnes/yr from the south east will influence how Melbourne's waste and resource recovery system over the next twenty years as existing landfills in these areas close over the next five years. As the stated time horizon for the Strategy Plan is thirty years, does this statement require review? In reality, the impact of the selected solution could/will extend well beyond the life of the Strategy Plan.

If an objective of the Strategy Plan is to minimise the environmental impact of landfilling through the exclusion of all organic material from landfilling, it is suggested that in Section 6.5, consideration be given to providing incentives (eg reduced landfill levy rates) for the diversion of organic material from landfilling. This could replace the 'penalty' of annual increases to the landfill levy.

Whilst it is acknowledged that treatment of mixed organic waste is not infallible yet (Section 7 Table 1.7), a commitment to ongoing process improvement, facility development and end markets for the process products are considered critical for the future.

Part Two: Infrastructure Schedule

In Chapter 11, reference to planning for and construction of new waste infrastructure to appropriately utilise existing and emerging markets and technologies is universally applicable across the entire metropolitan area (and the State), not just the south east. The outer metropolitan areas with their relative proximity to rural areas have the potential for new markets, particularly processed organic material.

The introduction of compulsory (mixed) organic bins for metropolitan households (some exclusions acknowledged) will increase the quantity and quality of feedstock for organic treatment facilities. Such action would reinforce the assertion in Chapter 12 which rightly highlights the opportunity for inclusion of specific commercial and industrial organic waste into the process.

Earlier in this submission, the importance of site specific buffering for landfills and waste precincts to be included in land use planning is strongly supported. Section 12.2.2 could be reviewed to strengthen the fundamental importance of this action. This could be reflected in Figure 2.6.

This submission has already strongly canvassed the need for a compulsory third (mixed) organic bin for the majority of the metropolitan area. It also discussed some ideas for new high density developments in regard to planning permit requirements for waste management at these sites. Chapter 13 could be reviewed to strengthen the need for improvements to collection services in the way we need to move forward over the next thirty years. The introduction of a single national standard for the colour of MGBs is fully supported for the reasons stated.

Provision of transfer stations and resource recovery centres transcends municipal boundaries. It therefore should be approached on a regional basis with metropolitan partnerships to co-ordinate the strategic siting of these facilities. One question that has not been discussed in Chapter 13 is whether there is a commercial appetite to privatise the provision and operation of these facilities. The proposed classification of TS/RRCs in Table 2.11 is endorsed in principle.

As previously stated, removal of organics (mixed) from landfill disposal is seen as fundamental to improved waste management environmental outcomes and will achieve a significant reduction in future requirements for landfill facilities. Chapter 15 could be reviewed to strengthen the importance of organic processing with a sharper focus on the imperative for a broad geographic spread of such facilities whilst highlighting the need for sustainable markets for the products from organic processing facilities. Consideration needs to be canvassed for financial assistance from landfill levy revenue to cross subsidise markets for these products over time. Given the principal users are most likely to be primary producers, access to a subsidy to fund purchase of the processed products is worthy of consideration.

Quality control of material placed in kerbside (mixed) organic MGBs will require ongoing community education for up to ten years to ensure appropriate household awareness for quality management of material placed in an organic recycling MGB. This would be in addition to the drop off / transfer station green organic facilities already in existence.

Please note that the introduction of compulsory **mixed** organic services will require a review of the service frequency for residual inert waste streams. To maintain existing service models, careful consideration of the service frequency for the residual waste and recyclables will be required.

The proposition of waste to energy is yet to be successfully tested in Victoria. However Federal and State Governments should be approached to test their appetite to trial a suitable application of the technology.

Victorian metropolitan communities are well versed in source separation of recyclable material into their fortnightly collection bin. The longitudinal community education on the merits of actively supporting recycling has meant that the service is now part of the DNA of metropolitan households. The challenge for the Strategic Plan in Chapter 16 is to ensure that the provision and capacity of MRFs keeps pace with the growth in the metropolitan demand. The same equally applies to the provision of reprocessing facilities in Chapter 17.

The nomination of an implementation schedule for waste management infrastructure in Chapter 19 is important as it provides a framework for the ongoing monitoring of facility provision to achieve the environmental outcomes that the Strategic Plan aspires to deliver. It is seen as fundamental to measuring achievement of the aspirations and objectives of the Plan.

Part Three: Landfill Schedule

Management of the metropolitan area's waste will always require landfill disposal for some of the waste stream, including post treatment of domestic/MSW waste. Therefore the identification and nomination of existing and future landfill sites is a fundamental aspect of the Strategic Plan. It reinforces the need for appropriate protection in land use planning around these sites, particularly in light of the current widespread precinct structure planning being undertaken by the State Government.

It is worth reiterating some matters previously raised in this submission:

- Inclusion of the Mornington Peninsula in the MWMG boundary is strongly supported;
- The MWMG Strategic Plan must be cognisant of the future needs of the adjoining Region's potential needs for inter-regional transfer of waste to optimise outcomes for their communities therefore requiring close liaison between the MWMG and all adjoining regions; and
- The existing multi Act permit and approval framework for landfills should be simplified and streamlined under one Act to reduce the red tape and associated cost for the development and operation of landfill facilities.

The principles articulated in Chapter 20 are broadly supported, however the application of the principles under a single Act are advocated.

Removal of (mixed) organic waste from landfill waste proposed in this submission will result in landfills becoming the repository of inert waste rather than putrescible waste. This will deliver significant long term environmental benefits.

Cross regional landfill disposal will achieve the orderly and prioritised restoration of exhausted quarries, thereby avoiding the legacy of disused quarries that are an existing land use blight in the south east and western areas of the metropolitan area. It must be acknowledged that any model of cross regional landfill disposal will require widespread and ongoing community communication to manage public perceptions that the municipalities where landfills are located are the 'dumping ground' for the metropolitan area.

It is suggested that the Landfill Schedule could specify a target volume (say XXm³ at any time) of operating landfills across the metropolitan area to meet the projected landfilling needs of the metropolitan area. The target volume would need to have regard for the lead time associated with the permits and approvals, design and construction timing to maintain the specified target volume. This could be included in Chapters 21, 22 and 23. The forecast focus of residential growth in the west and north west of the metropolitan area for the next three to four decades will be important in the identification and prioritisation of future landfills to service these new and emerging residential communities over that time, plus assisting with the south eastern suburbs and Geelong disposal needs.

An important aspect of managing community perceptions around landfills will be the requirement for the progressive rehabilitation of landfill cells as they are filled. This action will provide certainty to the adjacent communities that both the regulator and landfill operator have a clear line of sight to the end use of the landfill site. It is recommended that this obligation should be incorporated in Chapter 25.

Conclusion

In conclusion, the IPWEA Vic considers that 'best practice' in landfilling can only be achieved if organic material is not accepted at landfills. It should instead be separated from the MSW stream at the source and sent to organic treatment facilities strategically sited across the metropolitan area. The processed organic waste can then be returned to the land across a wide variety of applications.

The same obligation should apply to C & I waste material. Landfills would therefore be restricted to solid inert waste which will result in significantly improved environmental outcomes in the short, medium and long terms. This proposition may require mandatory pre-sorting of some waste before the residual is disposed to landfill.

It is therefore requested that the Draft Strategic Plan be reviewed across the three sections to have regard for the suggestions in this submission.

The IPWEA Vic would welcome the opportunity to discuss any aspect of this submission with the MWMG.



Ross Goyne

President

IPWEA Vic