ALOA

Australian Landfill Owners Association

# Submission to: EPA on publication 1337 the draft for consultation of the 'Best Practice Environmental Management Siting, Design, Operation and Rehabilitation of Landfills'

Submitted by: Australian Landfill Owners Association, Victorian Chapter

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The members of ALOA in Victoria submit the following comments and suggestions in good faith for consideration by the EPA prior to issuing the final document:

## 1. General

ALOA's major concern is the move to the more prescriptive requirements of the BPEM.

The use of prescriptive 'Required Actions or Outcomes' is acceptable as a baseline however the opportunity to meet Performance Standards through mitigation measures should be afforded to landfill operators in the event that the purely Prescriptive controls cannot be achieved. The EPA can then determine if the proposed mitigation measures or Risk Assessments are acceptable. There are clear examples where the prescriptive requirements prohibit landfill improvements in the area of phytocaps and Enhanced Degradation Landfills.

## 2. Buffer Distances – Operating and Closed Landfill Sites

Table 5.2 - This should be explicitly stated that Buffers can be reduced by a Risk Assessment.

Table 5.2 - Landfill operators on existing sites may have no control over decisions to establish new buildings within 500 metres of the landfill cells. In addition, it is likely that existing landfills may be within 100 metres of surface waters. These requirements should be considered as Suggested Measures for 'existing sites' thereby requiring greater Risk Management if they cannot be met.

Please delete the paragraph on page 16 Section 5.1.5: '***Failure to Preserve an appropriate buffer and maintain compatible land uses within the buffer may result in limitation of future development of the landfill.'***

Landfill Operators and Local Councils (challenged at VCAT) may not be able to preserve Buffers around existing sites. We strongly contest that any consideration in taking action against the Landfill Operators in these circumstances. There are other provisions in the EP Act that could be used to police performance of landfills with lesser buffers. The inclusion of this paragraph in the BPEM may allow third parties to seek relief through VCAT against existing sites that do not have these buffers.

ALOA is in discussion with the Minister for Planning's Office on the establishment of regulations within the Planning Act to protect Waste Industry site from incompatible development which later results in EPA enforcement action on amenity issues.

Table 8.2 - We support the buffers for closed cells at 250m as it is in the UK, but the BPEM has stuck to 500m.

**3. Seepage Rate through the Liners**

Please confirm in the BPEM that the seepage criteria are only Design Standards and could not be applied in the operational phase of a landfill cell and that no measurement for compliance would be required.

**4. Leachate Collection Pipes**

Leachate collection pipes should never be placed in trenches. The trenching of clay liners can result in tears some distance from the trenches and secondly FML's will have stress points at the corners of the trenches.

**5. Phytocaps cannot meet the draft Landfill Gas Levels at the Cap nor the 75% rule.**

Table 6.4 The final cap limit of 100ppm for methane will not be possible to meet without a geomembrane; the 500ppm limit will be difficult to meet on batters.

Section 6.8 an EDL should be allowed more cap infiltration than "dry tombs"

Given that the EPA are not going to change their position on the 75% rule, we seek the consideration of the timeframe that would apply (such as a twelve month period)

**6. Enhanced Degradation Landfills**

Section 6.8 Enhanced Degradation Landfills: The process of approving an Enhanced Degradation Landfill Cell at existing landfills should be through a Licence Amendment rather than full Works Approval. This is a largely technical assessment of process improvement and Works Approvals will result in unnecessary additional cost for the social review.

> **'In considering any works approval application for an EDL cell at an existing site, the proponent will be required to demonstrate that the proposal meets all required outcomes for siting as set out in Section 5 ('Best-practice siting consideration').'**

The final paragraph (reproduced above) changes the concept of the BPEM being based upon Performance Standards to that of a prescriptive document that limits existing sites from upgrading and shortening the Post Closure care period in built up areas.

The definition of Enhanced Degradation Landfill needs greater clarity as their will be degrees of leachate / moisture addition. Some existing sites may wish to recirculate a small proportion of their leachate to improve the onset of the degradation process rather than seek full saturation of 100% of the waste mass to its field capacity. The EPA could require existing sites that are seeking to improve the rate of degradation that do not meet the 'Siting' criteria to apply with a Risk Assessment and staged implementation under strict monitoring to ensure that amenity and the environment is being protected. The simple exclusion of existing sites is unreasonable.

The definition of an Enhanced Degradation Landfill should be developed as an addendum to the BPEM following a consultative process.

**7. Miscellaneous Comments**

In addition the following bullet points have been provided for your consideration:

- Section 6.5.2. Treatment should not be required for leachate that is reused onsite via recirculation into previously deposited wastes.
- Section 6.7.1. Consideration should be given to landfill gas action levels for temporary (or interim) capped landfill batters which will exhibit some gas emissions higher than final capped landfills.
- Section 6.7.1. Clearer text is required to ensure that use of vertical gas wells in an operating or yet-to-be-capped landfill is a satisfactory practice.
- Section 6.8. By its very nature, an enhanced degradation landfill should allow more rainwater infiltration than the traditional dry tomb landfill.
- Section 6.8. Strategies to achieve uniform moisture content should include spraying of water on covered areas as well the tip face.
- Section 6.8. The suggested leak detection system to monitor seepage rates through base liners should be deleted as it is not required for conventional landfills.
- Section 7.6. It should be acknowledged that waste lifts can be higher than 2 metres. The lift height is dependant on both the rate that waste is accepted and the volume of traffic.

- Cap performance should be 75% of the draining capacity of the leachate collection system rather than 75% of the base liner seepage rate as depicted in table 8.1.
- The "soil subbase" thickness for Type 2 caps as depicted in Table 8.1 should be reduced from 1.0m to 0.6m to be consistent with the current good performance of caps constructed to date.
- More consultation is required on Section 8.1.6. Requiring highly sealed landfill caps will prevent surface gas emissions leading to dangerous sideways gas migration should a landfill gas collection system fail.
- Section 8.1.7. It should be acknowledged that a phytocap may well not reduce infiltration to the same extent as a geomembrane cap.
- Section 8.1.7. The minimum thickness of a phytocap should be determined from lysimiter trials and such trials need only be a minimum period of 3 years covering 2 winter seasons.
- The maximum gas monitoring bore spacing for clay strata depicted in Table B2 should be adopted as the "minimum" and new maximum values should be selected.