

Submission

To The Environment Protection Authority Victoria (EPA)
Via [Upload](#)

From Colin Sweet, CEO
Australian Landfill Owners Association

Date: 30 October 2019

Subject: **Proposed regulations and environment reference standards**

The Australian Landfill Owners Association (ALOA) was formed in late 2008. It is an incorporated entity with members from across Australia.

Modern landfills are an essential element in today's integrated waste management infrastructure as landfills:

- Offer cost effective and reliable disposal of recycling and processing residues and unsorted wastes;
- Manage greenhouse gas emission by methane collection and combustion;
- Provide a source of renewable energy;
- Have the flexibility to accept variable waste volumes; and
- Are reliable last resorts for the acceptance of large volumes of 'disaster' waste.
- Member landfills provide services to the general public, local government, industry, property developers, mining and agriculture.

ALOA members receive and safely manage the disposal of almost three quarters of the waste landfilled in Australia.

Since its inception ALOA has defended the interests of its members in national and state issues. In particular, ALOA campaigned for fairer treatment under the 'carbon' tax and worked closely with the Australian Local government Association (ALGA) to develop the Voluntary Waste Industry Protocol to utilise collected carbon tax monies.

ALOA is governed by a 'national' board and has state 'chapters' in each of the mainland states.

Comments

Thank you for the opportunity to comment on the Proposed regulations and environment reference standards. ALOA supports EPA Victoria's efforts to transform Victoria's environmental protection laws. We note however one matter within the proposed regulation that has the potential to inhibit or restrict our industry's ongoing positive contribution to the environment. Our comments are as follows:

1. Proposed Regulation 20(1)(C)

The use of any landfill gas flare or thermal oxidising unit operating at the landfill site must result in the complete combustion of the landfill gas by holding the landfill gas at a temperature of at least 1,000°C for a minimum of 0.3 seconds each time a flare or unit is used.

ALOA considers the condition outlined in Regulation 20(1)(C) to be unnecessarily prescriptive means for a combustion system to achieve the required outcome. ALOA assumes the required outcome to be more than 98% destruction efficiency of methane and volatile organic compounds based on the requirements described in Table 6.4 of EPA Publication 788.3.

ALOA members operate landfill gas combustion devices across Victoria and Australia that meet this established performance outcome, proven through independent NATA testing. These combustion devices would not, however, achieve the criteria prescribed by the proposed regulation.

Further to this, ALOA notes that jurisdictions within Australia provide different criteria to achieve this same outcome, and it would be impracticable to design combustion devices to meet such variable criteria.

ALOA understands the prescribed proposed regulation is very similar to that provided in the (recently withdrawn) Guidance on Landfill Gas Flaring, published by the UK Environment Agency (2004). ALOA notes

that the withdrawn UK guidance provides this as an indicative standard only, for which alternative criteria offering equivalent performance may also be acceptable.

2. Section 2.12 (Retention time) from Guidance on Landfill Gas Flaring:

The minimum recommended retention time is 0.3 seconds at a minimum temperature of 1,000°C. This is an indicative standard that is likely to achieve the required emission standard. However, alternative criteria offering equivalent performance may also be acceptable - for example, a longer retention time combined with lower temperature.

In NSW, where flare performance standards are currently legislated through the NSW Protection of the Environment Operations (Clean Air) Regulation (2010), its regulations provide the following prescribed standard for achieving the 98% destruction efficiency:

NSW Regulations

Clause 50.(2):

An enclosed ground-level flare for the treatment of landfill gas must be operated in such a way that the time between landfill gas entering and exiting the flare is more than 0.6 seconds.

and

Clause 51.(2):

An enclosed ground-level flare for the treatment of landfill gas must be operated in such a way that the temperature for the combustion of landfill gas by the flare is more than 760°C.

However, the following requirement is also considered acceptable, as an alternative to the prescribed requirements of clauses 50 and 51.

Clause 52 (2):

An enclosed ground-level flare for the treatment of landfill gas must be operated in such a way that the destruction efficiency of the flare, in relation to landfill gas entering the flare, is more than 98%.

Recommendation

ALOA recommends that Regulation 20(1)(C) is amended to provide an outcome threshold, without prescribing the precise way it should be achieved, similar to Clause 52(2) of the NSW Clean Air Regulation.

We are also concerned this criterion applies to all thermal oxidising units, and therefore applies to landfill-gas-fuelled generators. For reciprocating gas engines this would also be an impracticable criteria, considering they operate above a rate of 1000 revolutions per minute (RPM) providing a combustion cycle of less than 0.06 seconds. Notwithstanding this, routine independent testing conducted on generators has also proven destruction efficiencies well above the required 98%.

ALOA members' combustion devices are not likely to meet the draft requirements described in Regulation 20(1)(C). These devices can however be operated to meet the required outcome described in Publication 788.3. We urge consideration of amending this clause as enforcement of any such prescriptive requirements has the potential to lead to perverse outcomes.

An appropriate wording of this clause, to obtain the required outcome without the use of prescriptive requirements utilised, could be:

Suggested wording

Any landfill gas flare or thermal oxidising unit operating at the landfill site must be operated in such a way that the destruction efficiency of methane and volatile organic compounds contained in the landfill gas entering the unit is more than 98%.

For further information on this important matter, please contact ALOA.

Yours Sincerely



Colin Sweet
CEO