

Submission to the Climate Change Authority – Special Review February 17, 2016,

"Australia's options flowing from the Paris climate change conference – how to secure further abatement from the waste sector"

The Australian Landfill Owners Association (ALOA) is pleased to submit the following proposal in response to the Authority's call for policy option suggestions by February 19, 2016.

1. The Australian Landfill Owners Association

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

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

- 1. Offer cost effective and reliable disposal of recycling and processing residues and unsorted wastes:
- 2. Manage greenhouse gas emission by methane collection and combustion;
- 3. Can provide a source of renewable energy;
- 4. Have the flexibility to accept variable waste volumes; and
- 5. Are reliable last resorts for the acceptance of large volumes of 'disaster' waste.

ALOA member landfills provide services to the general public, local government, industry, property developers, mining and agriculture.

Currently member's landfills receive and safely manage the disposal of almost three quarters of the waste landfilled in Australia.

Since its inception, ALOA has represented the interests of it members on national and state issues. In particular, ALOA has campaigned for:

- Increased recognition of landfilling as an essential service,
- The adoption of best practice operations at all landfill sites,
- The harmonization of environmental regulations across all states,
- Improvements in data reporting under the 'NGER' determination, and
- More relevant treatment under policies related to climate change.

ALOA is governed by a 'national' board and has state 'chapters' in each of the mainland states. Members include both commercial and local government owners.

The ALOA secretariat is located in Melbourne.

2. Background

The waste sector accounts for less than 2% of Australia's greenhouse gas emissions and has taken significant action to reduce emissions through waste diversion of organic waste from landfills and increasing methane gas capture over the past twenty years.

Theoretical emissions from waste are estimated to have been 20 million tonnes of carbon dioxide equivalence (CO2-e) in 1990 were only around 13 million tonnes of CO2-e in 2014 - a reduction of 35 percent.

Emissions from landfill facilities consist mainly from the release of methane from decomposing organic material - such as food, paper, garden waste and wood. This organic material decays over time and, unlike other industrial emissions, continues to be released for many decades following the initial deposition of waste.

Under the recent carbon legislation, the waste sector faced significant costs increases as a result of the need to provide upfront for emission to be released over many decades. As a result most landfill owners covered under the legislation charged customers upfront for the anticipated future carbon tax liability for each tonne of waste deposited during 2012-13 and 2013-14.

Unfortunately, the scheme experienced many difficulties as only landfills emitting over 25,000 tonnes of CO2-e were covered under the legislation. As these landfills competed in some markets with smaller 'uncovered' landfills there was considerable market distortion.

Following the repeal of the 2012 carbon legislation, the Australian Competition and Consumer Commission (ACCC) encouraged all Australian landfill industry participants to work with government to negotiate an appropriate solution for the handling of early collected carbon charges.

As a result early in 2015 the landfill industry, through ALOA and the Australian Local Government Association (ALGA), developed the Waste Industry Protocol to ensure that surplus early collected carbon charged would be returned to consumers or expended for community benefit.

Then in July 2015 the Minister for the Environment issued a statement supporting the ALGA/ALOA voluntary Protocol and called for wide participation from the landfill industry.

¹To date the following companies/councils have registered under the Protocol:

- Veolia
- Ti Tree Bio Energy
- Integrated Waste Services
- SUEZ (SITA/PSWMG)
- Boral Waste Solutions
- Wyndham City Council (VIC)
- Wollongong City Council (NSW)
- Greater Geelong City Council (VIC)
- The City of Rockingham (WA)

3. Tracking to 2020 and on to 2030

In the Government's recent "Tracking to 2020" report, the waste sector emissions are reported to be declining.

"The waste sector includes emission from the anaerobic decomposition of organic material in landfill (solid waste to landfill), decomposition and treatment of wastes in wastewater, anaerobic decomposition of organic material in composting facilities, and the combustion of waste in controlled incineration facilities.

¹ Reference Australian Government – Department of Environment

Waste emissions were 13 MtCO2-e in 2014, a 23 percent decrease on 1999-2000 levels. Emission are projected to be 10 MtCO2-e in 2019-20, a decreased of 25 percent below 2014-15 levels. These results include abatement from the Emission Reduction Fund".²

As waste volumes increase with population, maintaining downward pressure on emissions will be difficult.

Over the past 20 years the sector has benefited from the introduction of landfill gas collection and combustion. This in turn has lead to the creation of a significant new industry – landfill gas to energy – at larger landfill sites.

As population numbers grow, new initiatives will be required to ensure emissions can be held at current levels.

4. Emissions and the waste sector

ALOA has argued since its inception that the 'waste' sector should not be covered by 'industry' emission policy.

This position continues to be maintained as:

- Emissions from landfill are generated over time up to 100 years in drier climates deferring the 'impact' from the action of landfilling the waste;
- Emissions cannot be measured directly, meaning all 'liability' data must be developed from complex modelling;
- Individual landfill emission modeling is unreliable with errors in individual site modelling up to 100% in some cases;
- Landfill emissions are less than 2 percent of the national inventory; and
- The sector in an essential service.

As a result, ALOA believes the best policy approach is to pursue a suite of policies aimed at fully utilizing current and new technologies and a new approaches to reduce the emission sources rather than be 'covered' by broader industry climate change policy .

5. Suggested Emission Reduction Policies for the Waste Sector

As waste management is generally regulated under state environmental legislation, ALOA believes that harmonization of 'best practice' environmental regulation coupled with a continuation of funding through the Emission Reduction Fund offers the best opportunity to continue to drive down emissions over the next five years and then to avoid increases as population increases in the future.

a) Harmonization of current environmental regulations

ALOA sees a need for the introduction of:

- 1. Consistent 'best practice' environment regulations for landfill that ensure all sites receiving more than 10,000 tonnes per annum minimize methane emission by using cell lining systems, daily compaction and cover, final capping and the installation of landfill gas collection and combustion equipment as soon as gas volumes are generated.
- 2. A new campaign to see landfill gas collection and combustion systems installed at all smaller landfills.
- 3. New initiatives to increase organic waste diversion from landfill.

² Reference Tracking to 2020

b) Continuation of the Emission Reduction Fund

The Emission Reduction Fund (ERF) – and the Carbon Farming Initiative before it – has been the main driver for the emission reduction achieved in the waste sector to date. As we move forward it is important that ERF recognises 'new' diversion of organic waste from landfill.

It is recognized this is currently envisaged with the proposed new ERF methods for organic waste diversion (based on methane minimization) and compost usage in agriculture (based on increases to soil carbon) but it is critical that these are adopted quickly so that new infrastructure can be constructed and organic waste diverted from landfill.

Introducing these structural changes will take time as the new infrastructure must be built and new 'organic' farming practices must become more widespread.

c) Emission Trading Scheme (ETS) Coverage

ALOA believes that coverage of the waste sector by any future Emission Trading Scheme (ETS) is not necessary as the harmonization and emission reduction fund arrangements above will continue to drive the sector's future abatement program.

This approach is in line with the recent New Zealand report into their ETS, which indicated that the waste sector in New Zealand has been more influenced in recent years by regulatory changes than the NZ ETS³.

Further, ALOA is concerned that unless a future ETS covers all landfills it will recreate the market distortions experienced under the 2012 legislation.

6. Summary

The waste sector has been a leader in emission reduction over the past twenty years.

ALOA believes this can continue into the future if appropriate environmental policies relating to landfills can be put in place at the 'state' level and these are supported by the Emission Reduction Fund.

Further ALOA believe that the waste sector – being an essential service embracing clients from the domestic householder to commercial offices to manufacturing to agriculture and mining – should not be covered in any broader 'emission reduction' scheme that may be introduced to cut Australian emissions in line with the Government's new Paris commitments.

ALOA Melbourne 17 February, 2016.

For further information please contact ALOA CEO - Max Spedding - on 0400 880 677 or at info@aloa.com.au.

 $^{^{\}rm 3}$ Reference 'New Zealand Emission Trading Scheme Evaluation 2016', page 21.