"Working together - healthy landscapes, viable communities"

The Queensland Murray-Darling Committee Inc.'s submission on the Waste Reduction and Recycling and Other Legislation Amendment Bill 2012

Submission To: Research Director Agriculture, Resources and Environment Committee Parliament House George Street Brisbane Qld 4000 Email: <u>arec@parliament.gld.gov.au</u>

Submitting Organisation: Chief Executive Officer Queensland Murray-Darling Committee Inc. PO Box 6243, Toowoomba QLD 4350 Phone: 07 4637 6270 Fax: 07 4632 8062 Email: <u>geoffp@gmdc.org.au</u>

This submission is presented by the Chief Executive Officer, Geoff Penton, on behalf of the Queensland Murray-Darling Committee Inc. (QMDC). QMDC is a regional natural resource management (NRM) group that supports communities in the Queensland Murray-Darling Basin (QMDB) to sustainably manage their natural resources.

1.0 Background

QMDC and the communities we work closely with have identified waste management as an important NRM issue. Waste in its many forms (domestic, rural, industrial) provides not only challenges to the region's natural resources and assets but also opportunities for better NRM practices and strategies.

Waste management is identified as a key issue in the Regional NRM Plan. In order to secure sustainable waste reduction and recycling outcomes at local, regional and State levels the proposed legislation must align with regional and national planning and policy instruments.

QMDC's submission is informed by discussions with community members and groups, local and State government staff and representatives. These discussions identified the need to analyse waste management and recycling opportunities against nationally and internationally accepted priorities in conjunction with regional NRM plans and other relevant regional planning instruments, for example, Regional Council Strategic Plans, the Queensland Waste Strategy 2010 -2020, the Queensland Government's Coal Seam Gas Water Management Policy, and other key statutory documents.

Areas of significant interest to QMDC include:

 coordinated and collaborative large scale waste minimisation and waste recovery projects with local government, industry and the Department of Environment and Heritage Protection;







- community education with schools, landholders, the wider community, industry and business clusters;
- the Queensland State enacting container deposit legislation similar to South Australia and Northern Territory
- brokerage of investment into waste avoidance and recovery technology, especially Green waste; and
- sustainable CSG water management.

2.0 General comments

In order for recycling to be effective, financial incentives must be offered to local government to establish separation/recycling centres and establish a network of recycling depots or collection points across Southwest Queensland. This will help to achieve a critical waste mass and deal with the challenge of distance and transport costs.

Waste contains a lot of nutrients and with the ever increasing emphasis on food security the State government should be looking at innovative ways of returning these nutrients to agriculture.

2.1 Regional NRM planning and waste management

QMDC asserts the purpose of any new waste legislation should be to primarily **avoid** the ever increasing cumulative impact caused by waste generation and disposal in the QMDB. In QMDC's opinion the Bill does not reflect this aspiration but instead promotes mitigation and a relaxing of waste management strategies.

The Regional NRM Plan continues to serve as a framework to guide coordinated and holistic regional planning and on-ground action to improve the management and condition of the natural resources in the NRM Plan area. Identifying and prioritising resource condition and aspirational targets for the country's regional assets together with innovative waste management actions will in QMDC's opinion help State and local governments, industry and community achieve the objects of the Act.

Any changes to the Act should therefore build on and improve current waste management action targets. QMDC argues that the new mechanisms in the Bill place very little focus on motivating changes in land use and in production and environmental management practices to reduce waste. It is of concern to QMDC that the Bill is more about saving on paper work, than it is about protecting and conserving regional and catchment environmental values and, undertaking activities to arrest degradation and rehabilitate degraded areas.

Regional NRM plans, and associated technical reports, regional profiles or overviews can provide important data on resource condition and trend analysis. These Plans therefore offer national frameworks, objectives and priorities a better understanding on the waste reduction and recycling investment activities needed for the long term health and sustainability of a region's natural assets and its communities.

QMDC suggests that the State government rather than relaxing its "*waste resource management principles*" it should be providing a stronger platform for ecologically sustainable management.

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2.2 Setting thresholds and threshold limits

QMDC recommends the inclusion of thresholds and a threshold limit approach in the Bill as part of its approach to achieving the Act's objects. This approach would provide greater clarity and certainty because thresholds limits would help to define those natural resource assets identified as being both nationally and regionally at risk to the impacts caused by both waste production and waste disposal resulting from domestic and industrial activities and infrastructure.

Setting threshold limits for natural assets (water (surface and groundwater); vegetation & biodiversity; land and soils; air; nitrogen, phosphorous, carbon elements) will help to identify whether a new development or existing industries or businesses can operate without generating or disposing of levels of waste that will cause unacceptable impacts on those assets within the defined threshold limits. In QMDC's opinion including threshold limits in the Bill will be far more effective in providing more efficient administrative processes and are more clearly synchronised with its overall objects.

2.3 Consideration of Queensland's current land contamination and landfill status

Critical to the review and reform of the Act is a well-considered response to data on Queensland's current land contamination and landfill status. The proposed reforms warrant further consideration and investigation to inform a regional analysis and environmental, social and economic audit of key issues pertaining to the current status of Queensland's landfills, and contaminated sites registered on the Environmental Management and Contaminated land Registers. A thorough and robust examination and analysis of these landfills and registered lands and the cumulative impact of waste and its correlated contamination on human health, land, water and air quality, current and future land use capacity and economic sustainability is urgent.

QMDC is concerned that common toxic contaminants (See Appendix 4 of the "Environmental Guidelines: Assessment, Classification and Management of Non-Liquid Wastes" (NSW EPA, 1997)) are ever increasing in Queensland. These are contaminants found in products, by-products and waste.

Ongoing development in Queensland is creating the opportunity for more industrial pollution and land use known to be associated with land contamination. The Australian And New Zealand Guidelines For The Assessment And Management Of Contaminated Sites (ANZECC Guidelines) lists 30 industries and land uses that are known to have been associated with land contamination (ANZECC & NHMRC, 1992). A similar list is also included in the "Contaminated Land Practice Standard" by the Australian Institute of Valuers and Land Economists (AIVLE, 1994). It contains 67 items and incorporates most of the ANZECC Guidelines items. Some of these are industries are expanding in Queensland.

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Such important information and consideration is not being offered by the government in its explanatory notes on the Bill's policy objectives nor is there any reference to the need to facilitate a "zero waste" future. Consequentially this means the Bill is based on values that support ongoing land contamination regardless of its hazards to health, its detriment to economic sustainability and its contradiction to community aspirations for a clean future with less toxic pollutants

2.4 Committing to a "zero waste" goal

A future goal towards "zero waste", for example, has the potential to guide community, industry and government people in changing their lifestyles, practices and policies to replicate sustainable natural cycles, where all discarded materials or waste products are designed to become resources for other uses. Commitment to a "zero waste" ethic poses many challenges and also offers many opportunities.

By designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them will help to eliminate all discharges to land, water or air that are a threat to terrestrial, human, animal or plant health.

In QMDC's opinion, land contamination is equally a historical, current and future problem and recommends broadening the purpose of the Act under the proposed Bill to establish best practice for managing land contamination through a number of mechanisms – a threshold limit approach, the continuation of waste levies, a "zero waste" goal, the continued use of weighbridges at smaller waste sites, planning and development control processes that address site specific and cumulative impacts.

Queensland is fast becoming a "cess pit" for an extensive array of mining activities that produce hazardous contaminants e.g. drilling fluid, brine, leachate, PM^{2.5} dust etc. QMDC asserts the Bill falls far short of implementing and addressing best waste management practices which adequately address the current waste issues in Queensland.

QMDC asserts that the Act needs to be enforced so that current and proposed CSG or coal mining projects, must be required to demonstrate and guarantee that their proposed mine management methods will and can, for example, prevent the problem of heavy metal contamination, and that mine design is effective and able to keep water away from acid generating materials and help prevent contamination of water sources, agricultural land and soils occurring. Whether heavy metals are treated actively through a water treatment plant or passively through a self-operating system any contamination is in QMDC's opinion, unacceptable.

2.5 Deposit-refund system

QMDC asserts the State government is missing a valuable opportunity in this proposed Bill to introduce a deposit-refund system. In other states of Australia (South Australia and Northern Territory) and countries such as the United States of America, deposit systems are commonly associated with beverage containers, in part because these containers make up a large proportion of roadside rubbish.

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Deposit systems have also been used for other products such as pesticide containers, leadacid batteries, and tyres. Some of these systems are voluntarily implemented by industry, whereas others are implemented by state or local authorities.

South Australia is known as "the cleanest and tidiest" in Australia. (*EPA 074/10*). Returning empty beverage containers for recycling and reuse has become a way of life for South Australians. Container deposit legislation (CDL) now incorporated into the *Environment Protection Act 1993* enjoys overwhelming public and community support. The success of CDL has resulted in South Australia achieving recovery and reuse rates for beverage containers covered by the legislation that are above the national average. The associated reduction in rubbish has resulted in a cleaner environment, providing South Australia with a 'point of difference'.

http://www.epa.sa.gov.au/xstd_files/Container%20deposit/Information%20sheet/info_cdl.pdf

Another important objective of a deposit system is to divert recyclable items from the waste stream. Several studies in the United States of America have concluded that deposit systems are more cost-effective than other methods of reducing waste disposal, such as traditional forms of regulations, recycling subsidies, or advance disposal fees alone.

These American studies have found that deposit systems result in higher recovery rates of used products and less contamination of recyclables than curbside recycling programs. Under a deposit system which has been in effect in Columbia, Missouri, since 1982, consumers pay deposits on containers of beer, soft drinks, malt, and carbonated mineral water. Although retail stores are required to take back containers, no handling fees are mandated. The overall rate of redemption is estimated to be 85% to 95%. The deposit system in Maine is reported to have significantly reduced rubbish. A 1979 study by the Maine Department of Transportation found that total rubbish declined by 10% and that container rubbish declined by 56%.

Deposit schemes are also believed to cost more to administer than curbside programs. Fullerton and Kinnaman (1995) conclude that fees for waste collection should be priced as if disposal and recycling are the only two disposal options. If illicit burning or dumping is also an option, the optimal policy is "a tax on output plus a rebate on proper disposal," namely, a deposit system.

QMDC recognises that variable pricing programs for waste collection have the potential to give waste generators an incentive to improperly dispose of waste. Deposit schemes on the other hand give them an incentive to return waste for proper disposal or for recycling. One of the objectives of a deposit system is to discourage illegal or improper disposal. Waste products that are discarded improperly have higher environmental and socio-economic costs than those disposed of properly, since such rubbish can become a blot on the landscape or even an environmental or health threat. Improperly discarded waste is also quite expensive to redirect to the legal waste stream.

Anecdotal evidence from studies in America suggests that beverage container deposit laws have significantly reduced rubbish in several states, as would be expected. Maine reported decreases in rubbish following the introduction of its deposit scheme. Oregon reported a 75% to 85% decrease in roadside rubbish just two years after enacting deposit legislation.

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Another likely impact has been an increase in the percentage of containers recycled, although this is difficult to confirm due to a lack of historical data on recycling. Wellman, Inc. (1994) estimate that the percentage of polyethylene terephthalate (PET) containers recycled in 1993 was about 80% in states with deposit systems (excluding California), 70% in California, but only 53% nationally. A 1990 GAO study found that almost two-thirds of the glass recycled in the United States came from the deposit states, excluding California, even though these states made up only 18% of the U.S. population. If California is included, the 10 states accounted for more than 80% of this country's recycled glass. All deposit states also report return rates on aluminium cans that exceed the national average. http://yosemite.epa.gov/ee/epa/eerm.nsf/vwAN/EE-0216B-06.pdf/\$file/EE-0216B-06.pdf

A related phenomenon is the relatively high market share for refillable containers in states with deposit schemes. In the case of beer containers, for example, all nine deposit states (excluding California) exceed the national average for market share of refillables. McCarthey (1993) calculated that the unweighted average for these nine states was 15% in 1990, which was three times the national average. A comparison of deposit systems and curbside recycling programs by McCarthey (1993) found that deposits generally resulted in higher percentages of materials returned and less contamination of collected materials. Among states with large curbside programs but no deposit systems, the study found that none had attained a recovery rate equal to that of states with deposit schemes. Moreover, glass collected through curbside programs is much more likely to break before it can be sorted by colour. Such breakage makes it difficult to recycle not only glass bottles but also other recyclables that may be contaminated with glass. The largest user of recycled polyethylene terephthalate reported that more than 90% of the PET it purchased came from states with deposit schemes because of its concerns over contamination.

http://yosemite.epa.gov/ee/epa/eerm.nsf/vwAN/EE-0216B-06.pdf/\$file/EE-0216B-06.pdf

McCarthey (1993) found evidence suggesting that "local governments would achieve a greater diversion of solid waste from disposal at a lower cost per ton if both a bottle bill and a curbside collection program were in place." One difference between the two approaches is that the costs of deposits are borne by manufacturers and distributors, who in turn pass on some costs to consumers, whereas the curbside programs are often funded by general revenues or waste levy fees.

http://yosemite.epa.gov/ee/epa/eerm.nsf/vwAN/EE-0216B-06.pdf/\$file/EE-0216B-06.pdf

In QMDC's opinion a full accounting cost benefit analysis of a deposit-refund system for Queensland is urgently needed to compare administrative costs and the costs imposed on consumers with the benefits of reduced disposal costs, energy savings, reduced rubbish, and other environmental benefits. Studies have already indicated that deposit-refund systems are best suited for products whose disposal is difficult to monitor and potentially harmful to the environment. When the used product has economic value, the private sector may also invest and work with government to design and implement waste management programs.

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3.0 Specific comments

3.1 Waste levy removal clauses

QMDC believes the removal of the waste levy, the weighbridge requirement for smaller waste disposal sites and the reduction in reporting and planning by the State government undermines objects (a), (b), (d) and (e) of the *Waste Reduction and Recycling Act 2011* (the Act).

Section 3

The objects of this Act are the following—

(a) to promote waste avoidance and reduction, and resource recovery and efficiency actions;

(b) to reduce the consumption of natural resources and minimise the disposal of waste by encouraging waste avoidance and the recovery, re-use and recycling of waste;

(c) to minimise the overall impact of waste generation and disposal;

(d) to ensure a shared responsibility between government, business and industry and the community in waste management and resource recovery; (e) to support and implement national frameworks, objectives and priorities for waste

(e) to support and implement national frameworks, objectives and priorities for waste management and resource recovery.

Consequentially the proposed changes also do not support the policy objectives of the Act or actions to best achieve the abovenamed objects, namely sections 4(1); 4(2)(b)(i) and 4(2)(b)(ii).

Section 4

(1) If, under this Act, a function or power is conferred on a person, the person must perform the function or exercise the power in a way that best achieves the objects of this Act.

(2) Without limiting subsection (1), the achievement of the objects of this Act must if practicable be guided by—

(a) the waste and resource management hierarchy; and

(b) the following policy principles (the waste and resource management principles)— (i) the polluter pays principle;

(ii) the user pays principle;

(iii) the proximity principle;

(iv) the product stewardship principle.

All clauses associated with the removal of the waste levy are not supported and should be rescinded.

QMDC is concerned that the proposed repeal of the waste levy will lead to perverse outcome e.g. landfill in south-east Queensland will become a more attractive proposition for some operators in northern NSW; materials that would have gone to recycling facilities will end up in the landfill, potential revenue that could have assisted waste management education of the community and industry will be lost; opportunities for research into new innovative waste management technologies and strategies funded from levy revenue will be lost.

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In 2010-11 the Northern Sydney Regional Organisation of Councils (NSROC) diverted 114,500 tonnes to landfill which equated to \$9.4 million of levies contributed from the region to state government.

During a review of the NSW levy earlier in 2012, NSROC (<u>www.nsroc.com.au</u>) found that there did not appear to be any evidence of an expansion of recyclable sector as a result of the waste levy. Some of the NSROC councils observed however a reduction in the amount of Construction and Demolition waste which may have been attributable to the levy. NSROC councils found that the levy has not significantly influenced household behaviour. They believe households are relatively detached from the levy.

Based on their findings NSROC concluded that if the "intention of the levy is to increase diversion its effectiveness will depend on the ability of councils to educate their residents and choose high recovery waste disposal options, if they are available".

NSROC councils are considering options for system enhancements and innovative waste materials management, which may extend to collective (regional) bundling of management and operations and/or associated infrastructure development of waste management facilities.

QMDC has been advocating for the same type of development in the QMDB region for several years.

In 2011 NSROC councils agreed to the development of a Regional Waste Project and member councils are considering collaborative options for system enhancements and innovative waste materials management for the region.

QMDC supports NSROC's view that collaboration of waste management will potentially increase the diversion rate and also offer environmental benefits from reduced transportation, improved range of waste service options and direct community participation.

QMDC believes there is a need for regional training to address a lack of expertise about new waste markets and systems. Waste must progressively be viewed in the QMDB as a resource rather than a liability, and valued for its potential to be recycled, re-used or used to generate energy.

QMDC supports NSROC's general view that the waste levy needs to be fully designated back to local government. In NSW currently approximately two thirds goes to consolidated revenue and a third goes back to the Office of Environment and Heritage and councils via the Waste and Sustainability Improvement Payment (WaSIP) program. These WaSIP funds are further fragmented into broader sustainability related projects.

NSROC argue that the waste levy funding should be refocused into larger scale projects and issues and that the State Government should be using the waste levy to "fund research and development into new waste processing technologies, such as energy to waste, or set up partnerships with the private sector and assist in the development".

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Revenue from the levy could therefore offer broad financial and government support for waste infrastructure investment from local government and the private sector. Local government have clearly articulated that they do not want to be locked into waste facilities for a long term contract with unproven technologies.

Councils in the QMDB region do not have the resources to invest in the range of the expertise needed for extensive research and for the complex project management that will be required for future waste management infrastructure. The development of strategic partnerships will increase resource availability by facilitating wider stakeholder engagement, promoting regional solutions and encouraging collaboration across councils.

NSROC stated that the WaSIP program significantly enhanced Council's ability to deliver sustainability outcomes for the community. Revenue from the levy allows the WaSIP program to provide a discrete pool of funds within the annual Council budget for sustainability projects and programs. This is proving to be a "reliable source of funds", important for "planning effective and efficient sustainability project/programs". NSROC state that their long term preference is that "the waste levy is fully hypothecated back to waste initiatives and that funds be directed into larger scale programs, research, and infrastructure projects that councils find difficult to do individually".

QMDC asserts removing the levy undermines two key components of waste management - the need for sustainability programs and the need for facility development. A waste levy could help fund a program that relates to long term

environmental outcomes and performance assessment; and provide another program that funds expert advice and financial assistance for the establishment of waste infrastructure in Queensland.

4.0 Way forward

As a part of its role as a NRM organisation, QMDC is keen to work with the Queensland Government to pilot a "case management" approach in relation to the development of a regional solution for waste management. QMDC believes land planning is a critical issue for future local and regional resource recovery and recommends that the State Government examine:

- national and international land use planning instruments which will enable effective planning of collection points and Alternative Waste Treatment and energy to waste facilities that are appropriate to the diverse regions throughout Queensland; and
- business models to shift the focus from waste source to waste type processing e.g. place-based waste management; and
- future development, design and waste approaches which enhance and complement source separation needs in future dwellings and local supporting infrastructure.

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