LOCAL AUTHORITY WASTE MANAGEMENT ADVISORY COMMITTEE

Issue: APRIL 2022

MACKAY REGIONAL COUNCIL

Educational MRF Garden



Mackay Regional Council has installed 7 raised garden beds at its MRF to remind students visiting the facility for waste education tours how waste management and environmental stewardship go hand in hand.

Three of the raised garden beds are Plastic Forests models with another three being Replas models, all being made from recycled soft plastics. An old tractor tyre has also been repurposed as a raised garden bed with the Genoa Fig planted in it thriving.

Three of the raised garden beds have been planted with vegies such as tomatoes, beans and corn to provide stress relief for the staff at the MRF and also the truck drivers who are driving up to 4 hours each way to the facility.

The other four raised garden beds have been planted out with herbs whose strong smells and tastes are intended to stimulate memory association with what the students have learned during their waste education tour. Herbs selected include stevia, chocolate mint, apple mint, Vietnamese mint, holy basil, Mexican tarragon, parsley, and dill.

In addition to the raised garden beds, 30 endemic flora species of the Mackay region

> grown at Council's Mackay Natural Environment Centre were planted in the MRF gardens. Plants include Native Mulberry, Finger Lime, Native Ginger and Native Hibiscus. This promotes sustainability through the diverse selection of endemic plants for increased insect biodiversity. The increased insect biodiversity also magpie encourages larks sparrows that peck at the recycled glass pile to stay outside in the

garden. Since being planted, brush-stone curlew have moved into the garden with insects not previously observed now present.



The MRF's hedges have also been pruned into turtles and pythons for the student visitors.

New look newsletter COMING SOON -LAWMAC Inc have engaged a designer for branding and website and our new look is being worked out as this edition is published. WATCH THIS SPACE!

RESOURCE INNOVATIONS

Checking into Rehab....

It's the time of year, where you need to consider your addiction to waste and whether your landfill rehabilitation provision needs some therapy. On a serious note, any Council that operates a landfill or has a unrehabilitated legacy landfill needs to declare the future costs of the landfill "make good" as part of Council's annual financial reporting. Over the past few years, the Queensland Audit Office (QAO) have increased scrutiny over whether costs for rehabilitation future are accurate and reasonable.

Council can ask themselves a few questions that will help identify the suitability of their provision and answer any audit questions:

What evidence can you provide that your provision covers all active and legacy landfill capping costs and post-closure aftercare costs? It's important that legacy landfills and aftercare costs are included for the aftercare period stated in your licence.

What design standard are you applying for capping? Is it consistent with your licence or the

Department of Environment and Science (DES) landfill guideline?

How did you calculate the capping costs? Was it based on current market rates and does it reflect the design standard?

Do you have a position paper that documents all of the above and can be provided to the auditor to substantiate the provision?

When did you last review your estimate? Ideally, this would be an annual exercise to review all assumptions and see what has changed. If it has been more than 3 years since your last review or your landfill or licence has changed significantly, it's worthwhile taking a deeper dive into the detail.

Typically, Council's finance need to complete the provision by July each year, so you've still got some time to check yourself out. Want help with rehabilitation provisions? Resource Innovations can help. Go to resourceinnovations.com.au





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HAPPY EASTER

NAMING CHALLENGE

Name Matt's Office Pet



During a recent video conference meeting, Matt McCarthy (Townsville) and Sandi (newsletter editor) discovered they both have a "pet" ibis in their offices. Sandi's bin chicken is named Barry, but Matt's is not named yet. If you have a great suggestion for Matt's Townsville Tip Turkey, shoot through an email to him. He will let us know the name he chose next edition.



Matthew.McCarthy@townsville.qld.gov.au

MORE TOYS



Lego-like
Bin Chickens
We found these at
GreyNerds
Paradise



TOWNSVILLE CITY COUNCIL

Strategy to Guide Investment in Waste & Resource Recovery Infrastructure



Townsville City Council has endorsed a new strategy to guide investment in waste and resource recovery infrastructure through to 2040.

Mayor Jenny Hill said waste was no longer viewed as rubbish to be discarded. Instead, it is now recognised as a valuable resource able to deliver economic and environmental benefits to the community.

"For years, the waste network has been focussed largely on waste management using landfills," Cr Hill said.

"However, in recent years we have seen innovative solutions developed to divert waste away from landfill and instead using it to deliver economic growth and employment.

"As a result, we have seen waste management in Queensland change, with the waste disposal levy introduced by the State Government providing a price signal to incentivise waste diversion from landfill.

"In Council's 2021-2026 Corporate Plan, which was endorsed last year, we set ourselves the goal of establishing a circular economy that advances business and moves toward zero waste.

Work to Start on New Landfill Cells

Construction of one of the biggest landfill cell projects ever undertaken by Townsville City Council will start in the coming weeks.

Council is investing \$10.6 million in the two new landfill cells at the Stuart Waste Facility, with local business Mendi Construction to undertake the work.

Townsville Water and Waste Committee chairperson Russ Cook said the two new cells would help create enough capacity to dispose of the region's waste for the next five years.

"Cells 3B and 3C will have 900,000 cubic metres of capacity, or the equivalent of 360 Olympic-sized swimming pools, to help responsibly dispose of the city's waste," Cr Cook said.

"The contractor will complete specialised civil earthworks and line the cells with multiple layers of a geosynthetic lining to contain leachate and contaminates within the cell and prevent them from leaching into the environment."

"The current cell was built in 2020 and is due to reach capacity within the next 12 months," Cr Cook said.

"The community can help extend the life of the cells by ensuring they are disposing of rubbish correctly.

"Residents can do some simple things around the home by throwing out fewer groceries, composting more and ensuring they recycle right.

"We also offer free drop off of recyclables and green waste at all our resource recovery facilities all year round.

"If we all take these steps, we can maximise the life of these cells as Council works to its goal of creating a circular economy that advances business and moves towards zero waste," Cr Cook said.



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ROCKHAMPTON REGIONAL COUNCIL



"Our Waste Management Facility Excursion Recount"

Kelly Smith, Waste Education Officer for Rockhampton Regional Council has recently shared some great recounts from Grade 4 students from a local School who attended a site tour of the Lakes Creek Road Waste Management Facility in Rockhampton.

Grade four and the education officer of the Rockhampton Waste Management Facility, Kelly went on an excursion to the Rockhampton Waste Management Facility to learn more about sustainability for our HASS subject. The ride on the bus was great, and I sat with xxxx and xxxx. The date of the excursion was 16/3/22, at 8:45. We were planning to go to the Rockhampton Waste Management Facility for about two or three weeks and on Monday I think it was Mr. Smith who gave the class to go on the excursion. In HASS we are learning about sustainability all year round, as grade four is the grade which makes an example for the St. Peters bin chicken organisation.

On Wednesday both grade four classes went on the class bus, and I sat with XXXX. On the ride there, we picked up Kelly from the Bird Observatory. We stepped off the bus and stepped into the education room, which smelled of cleanliness and we watched a video about the Waste Facilities all around

Then the students and I had a look at the push pit, where people put their rubbish to be pushed into a large truck tip, to be carted to the Rubbish Facility. We got on the bus and had a look at the landfill piles. The glass pile was the most surprising, and all the students thought the pile was a pile of sand that was actually powdered glass! It turns out there's a whole street road made out of powdered glass called Murray Street. Then we had a look at the weighbridges which weigh people's cars to see how many kilos of rubbish they're bringing in so that they can charge them

for how much rubbish they have, because there is only a certain height that they can exceed. Then Kelly showed us about the store of things that people donated to the Facility. And then we just went back to school and when we got back, it was halfway through our playtime!



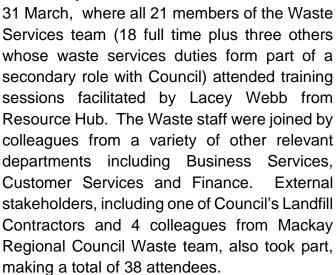
ISAAC REGIONAL COUNCIL



HELPING TO ENERGISE THE WORLD

Annual Staff Training

An annual training exercise for all Waste Services staff has been held each year since 2019. This year, training was carried out at the Moranbah Community Centre from 28 to



The annual training program has evolved from an overview of Council's Mandalay waste data system in 2019. Some long-term staff remarked at that time that this had been the first training they had received. In 2020 this was refined, and a new competency framework was introduced, where all staff were taken though a more structured program culminating in a competency sign-off by the trainer. This continues to be supported by the Waste Services Leadership team, who carry out an annual refresher.

By 2021, it had been identified that there was a need for training to provide more context, and so considerable effort was placed upon translating the team's Mandalay skills into practical application on the sites, examining real-world scenarios and how these impact on what happens behind the scenes within the Mandalay system, how this affects Council's

Waste Levy payments, and why it's important that transactions are recorded correctly at all times.

For this year, following on from the popularity of the 2021 program, the context was widened to include State and National considerations: Federal

and State Waste Management Strategies and how Isaac's Strategy fits in. The team also looked at Chain of Responsibility within the National Heavy Vehicle Legislation, and there was an in-depth look at the Queensland State Waste Levy including upcoming changes. The team was introduced to the concept of what happens to a landfill when it reaches the end of its life. Finally the trainer had asked all attendees to carry out some research into waste sites within other Australian Local Government Areas, including sites as far away as the NSW/Vic border and WA. Each attendee shared his or her findings with the rest of the group which created an opportunity to learn about what other Councils do. One Waste Team member produced 7 pages of learnings from her research!

In summary the 2022 annual training exercise has been a huge success which was very well received. Everyone learned something new and the team is already thinking about the 2023 program — including a Councillors' session perhaps?



RESOURCE HUB

Responsible Management of End-oflife Solar Panels



Mayor Nev Ferrier and Chris Welch (Banana Shire Council) with Joe Agostino (SRC)

As the global energy sector rapidly transforms to renewable energy systems the management of end-of-life infrastructure becomes increasingly important. Many jurisdictions are prohibiting e-waste, including solar panels, from being disposed of in landfill facilities. Solar Recovery Corporation is using world's best technology to fully recover valuable materials from end-of-life solar photovoltaic panels and to facilitating the production of new, high value products from the recovered materials

Facilities in Biloela and Townsville are now accepting panels for collection, SRC will establish materials recovery technology in coming months at both locations. See: https://srcorp-drop-off-portal.com/

Additionally, the SRC road map has identified solar panel collection centres to be established in SEQ, New South Wales and Victoria in coming weeks, with the same model approach being used as has been implemented and refined in Townsville and Biloela.

We appreciate the support provided by both Banana and Townsville - plus added support from the surrounding councils of:

Central Highlands, Isaac Regional Council, Livingstone Shire Council, Rockhampton Regional Council, Gladstone Regional Council.

Burdekin, Hinchinbrook, Charters Towers, Whitsunday Regional Council, Cassowary Coast Regional Council, Cairns Regional Council, Palm Island, Tablelands Regional Council. (only list these guys if they HAVE given support of started chatting to you....)

The importance of support from Councils and ROC's is paramount to diverting solar panels from landfill and redirecting the recovered materials into important manufacturing streams, and regional collaboration to this end is critical. Our focus is to work closely with the local communities and become part of the family network. And then next target is opening the large format recycling operation in these key regions in the ner future. Watch this space for coming announcements!

Solar Recovery Corporation would like to thank you all for the support. Sam and Joe Agostino will be in attendance at Lawmac in April to update members on the establishment of solar panel collection centres at Biloela and Townsville.



The Solar Panel deframing components arrive in Biloela!



QLD Waste Levy - 2022 reapplications for On-Site Operational Purpose exemptions

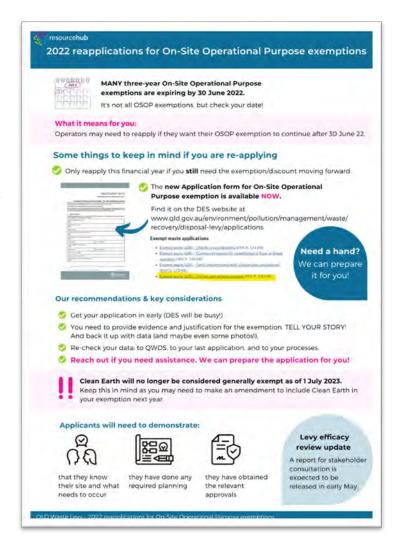
MANY three-year On-Site Operational Purpose exemptions are expiring by 30 June 2022 in Queensland.

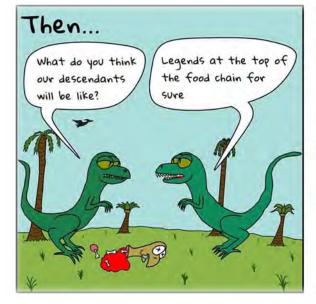
It's not all OSOP exemptions, but check your date, as operators may need to reapply if they want their OSOP exemption to continue after 30 June 2022.

Recommendations & key considerations:

- Get your application in early (DES will be busy!)
- Help
- Re-check your data: to QWDS, to your last application, and to your processes.

Download your own copy of the document Resource Hub have prepared at https://resourcehub.com.au/2022-re-applications-for-on-site-operational-purpose-exemptions/











Members involved in Clean Up Australia Day across Regional Queensland



Cassowary Coast Regional Council roadside cleanup group

The **Cassowary Coast** community stepped up and braved the heat to clean up 13 different locations across the region. With 11 groups registered, they collected over 6,540kg of waste.

Gladstone Regional Council had 24 registered sites throughout the region representing Baffle Creek, Miriam Vale, Boyne Island, Tannum Sands, Calliope, Facing Island and Gladstone.



Council staff and community volunteers Cr Glenn Churchill (front left), Mayor Matt Burnett (second from right) and Cr Rick Hansen (third from right – behind Mayor Burnett).

The site supervisors report back directly to Clean up Australia day so we do not have the data of waste collected across the region. For the several sites located in Gladstone itself, the waste was collected by Council for disposal and there was approximately 700kg of rubbish collected from those sites central to Gladstone.

Rockhampton Regional Council assisted with 14 registrations from community groups and schools and just shy of 0.4t officially



MASKS!

returned to landfill, but more loads brought in by private participants also.

Clean Up Australia
Day made
headlines in the
local paper for
Rockhampton
also.

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LAWMAC Chair, Cr Neil Fisher, Deputy Mayor of Rockhampton Regional Council, doing his bit for Clean Up Australia Day.

Winton Shire Council



Winton Shire Council Deputy Mayor Cr Tina Elliott and LAWMAC Chair Cr Neil Fisher

NEWSLETTER DEADLINES

Next edition articles deadline **end of May 2022**. Article submissions to:

Mary Field LAWMAC Secretary

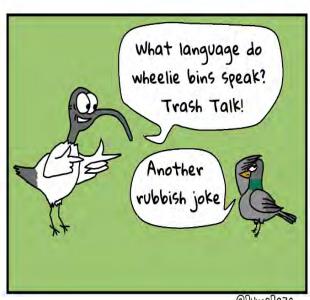
e: lawmacsec@bigpond.com

Previous editions:

http://www.lawmac.org.au/newsletters

2022 MEETING DATES & HOSTS

- 21 & 22 April 2022
 Townsville City Council
- 16 & 17 June 2022 Livingstone Shire Council
- 18 & 19 August 2022
 Isaac Regional Council
- 17 & 18 November 2022 Cassowary Coast Regional Council







The Future of Municipal Waste in Regional Queensland - Roundtable



L-R: Cr Sean Dillon (Barcaldine RC), Ms Mary Field (LAWMAC Secretary), Cr Neil Fisher (LAWMAC Chair, Rockhampton RC), Ms Brittany Lauga MP (Member for Keppel & Asst Minister for Education), Mrs Jayne Garnaut, Cr Belinda Hassan (Mackay RC), Cr Shane Latcham (Rockhampton RC), Prof Ross Garnaut AC, Cr Andrea Friend & Ms Leanne Randall (Livingstone SC), Mr Michael O'Keeffe (Rockhampton RC).

LAWMAC Chair Cr Neil Fisher and LAWMAC invited delegates had the pleasure of welcoming Professor Ross Garnaut AC to the Roundtable Discussion hosted by the Rockhampton Regional Waste & Recycling Team at their Waste Education Centre on Friday 25 March 2022.

Professor Garnaut was accompanied by his lovely wife Jayne who expressed her delight at the opportunity of visiting and enjoying a pleasant, scenic drive to the Rockhampton region.

The future for waste management, and in particular, general municipal waste, in regional Queensland in a carbon neutral world was raised for discussion with Professor Garnaut advising that waste management is an integral component in working towards a zero net carbon economy by 2050.

The future of different types of waste being identified as a resource recovery commodity

along with a growing proportion of recycled products being sourced, remanufactured and repurposed in future years will play a huge role in increasing the value of what was once regarded as waste.

Professor Garnaut presented on the benefits of pyrolysis (devolatilization) which is the thermal degradation of an organic substance in the absence of air to produce char, pyrolysis oil, and synthesis gas, for example, the conversion of wood to charcoal.

Responding to the issues of whether the pyrolysis process has been proven as a viable option for general mixed waste Prof Garnaut advised on the current pilot project plant in Collier, plus current trials at Curtin University working towards proving the concept on a commercial scale.

The types of waste within the general mixed waste will inevitably affect the quality of the end product and the addition of waste from sawmills, selected tree and plant species can improve this process for a higher quality biomass or char.

The concept of future implementation of a mobile or centrally located operation was also discussed as a viable economical option for use co-jointly at a range of smaller regional councils in Queensland.

In answer to a question raised regarding the possible use of biosolids in this process Professor Garnaut reported that the pyrolysis process kills all pathogens and is capable of producing a high-quality char for selected future uses.

Current waste types of tyres, plastics, cardboard, paper and metals plus the introduction and opportunities of Food and Organic Waste product along with the purposeful growing of selected plant and tree species will play a crucial role within the future waste management industry working towards a zero net carbon economy by 2050.



CONTAINERS FOR CHANGE

Wave of Change

An environmental education program for primary schools



Queensland's container refund scheme, Containers for Change, has partnered with Plastic Oceans Australasia to offer 300 primary schools free access to curriculum-mapped education resources through the Wave of Change program.

Getting started is easy

When a school signs up for the Wave of Change program, they will receive everything they need, free of charge, to make impactful change, including:

- Child-friendly wheelie bins and other infrastructure
- Free collections from a local container refund point
 - Educational tools, including a detailed school curriculum.



Make change for your cause

The Wave of Change program makes it easy to raise valuable funds for a school community. The refunds received from each collected drink container goes straight back to the school community.

It has never been so easy to fundraise and protect the environment.

Registrations are now open

We want to spread the word and ensure all Queensland schools are being given access to this fantastic opportunity. Do you know a school within your district that could benefit from this program? For any questions or enquires on Wave of Change, please contact waveofchange@containersforchange.com.au. Visit the website -

https://www.containersforchange.com.au/qld/wave-of-change



The Wave of Change Education Program was launched with a special event in late 2021. Students were joined by Environment Minister, The Honourable Meaghan Scanlon MP, Olympian and ambassador Taliqua Clancy and Container Exchange CEO Ken Noye

