Workshop	Environs Kimberley Information Session		
Project	Regional Resource Recovery Park Community Review 2021	**Date**	19/03/2021
Client	Shire of Broome	**Author**	Talis Consultants

Introduction

The Shire of Broome (**The Shire)** is planning for the closure of the Buckley's Rd Waste Management Facility and the establishment of a new Regional Resource Recovery Park (**RRRP**).

This project includes a community engagement process, which is designed to create awareness of the RRRP, present results of the site investigations conducted to date, and to gather feedback from the community on the project and the proposed locations for the Community Recycling Centre (**CRC**) and Class III Landfill.

A three-hour workshop was held for Environs Kimberly (**EK**) Board, Members and Staff on Wednesday 3 March 2021, forming part of the community review. The session format was a question and answer presentation forum facilitated by The Shire, whereby questions were able to be asked throughout and content was tailored based on the interest shown by the 12 attendees that were present.

Responses

The following notes capture the questions asked and responses provided. In some instances, the Shire/Technical Consultants have added information or clarification to the questions raised. Some information discussed during the workshop is not captured within these notes. That information is available in the Information Pack and supporting reports on the project website **www.rrrp.com.au**.

Next Steps

Participants were encouraged to take away the information packs and fact sheets and were provided information about the additional engagement sessions being run by the Shire. Participants were also invited to provide a response to the online survey that is open until 27 March 2021.

Question	Response
1. Who are the investors in the project?	• The RRRP is the Shire's project and will be funded by the Shire. The Shire will therefore own and operate the RRRP. Talis has assisted the Shire with concept design, site selection and environmental investigations to date through a contract endorsed by Council in November regarding RFQ19-76 Broome Waste Facilities Site Investigation Project.
2. What is the Shire's plan to further reduce waste to landfill going forward?	• The Shire has been committed to sustainable waste management practice and the diversion of valuable resources away from landfill for many decades now. The Shire was one of the first councils in the north west to implement a kerbside recycling services for its rate payers both domestic and commercial. In addition, the Shire provide the community with a variety of recycling options at Buckley's Road. • The CRC to be developed at Site D2 will further expand on the sustainable waste management practices provided in line with modern best practice standards. The CRC will include a Tip Shop for the reuse of suitable goods including furniture, household items and sports equipment. There will also be a range of recycling and recovery options for various materials from cardboard through to scrap metal as well as household hazardous waste materials. The CRC will also include an Education Centre to facilitate workshops with community and school groups on the important of recycling and how to participate with the Shire's recycling initiatives. • The Shire has recently completed a Strategic Waste Management Plan as required by the State Government. This plan assesses a variety of future sustainable waste management options for the Shire to further divert materials away from landfill. The CRC at Site D2 will be a critical piece of waste infrastructure to support the future expansion of the Shire's resource recovery initiatives and already includes a variety of provisional spaces for future facilities.The RRRP is the Shire's project and will be funded by the Shire using reserves from waste fees and charges. The Shire will therefore own and operate the RRRP. Talis has assisted the Shire with the site selection process and environmental investigations to date under the contract RFQ19-76 Broome Waste Facilities Site Investigation Project that was endorsed by Council in November 2019.
3. There is a need for greater waste education. What is the Shire's plans on this?	• Waste education is an important element of successful resource and waste management systems. The Shire will include a waste education program as part of the development of the RRRP. The CRC will also include an Education Centre to assist with improving community awareness of sustainable waste management practices, as well as educating the community on the use of the facility. The centre will include a multifunctional room with displays, IT equipment for presentations and associated parking for visitors and school bus tours.
4. Is the Shire aware that the Cable Beach north bores are not used?	• Cable Beach north are now on the public drinking water scheme and therefore do not use their bores for potable water supplies. The Shire is of the understanding that the bores are used for irrigation and gardening purposes

5. What are the assumptions about the amount of waste to be generated and landfill at the facility? And how will future recycling and resource recovery initiatives impact on the size of the landfill?	• Future waste volumes estimates were modelled based on the current Shire's waste data, projected waste and population growths sourced from Australian Bureau of Statistics (**ABS**) over a period of 70 years and assumptions based on future waste growth rates. • The landfill concept design has been based on the waste generation projections to ensure that there is sufficient void space for the foreseeable future. The landfill will be delivered in a phased approach across its life with cells designed and constructed to cater for a 2-3 year capacity of the Shire disposal requirements. During detailed design of new cells, waste projections will be reviewed and the sizing and capacity of the cells determined. This will happen across the life of the facility and therefore any further resource recovery initiatives or reduction in waste generation can be catered for and the landfill cells appropriately sized. The Shire objective is to minimise the void of waste disposed of within the landfill and therefore preserving the valuable void space within this community infrastructure asset.
6. It is not clear in the information pamphlet what infrastructure is to be located at Site D2 and Site G1?	• The RRRP includes a Community Recycling Centre and Class III landfill. The proposed location for the CRC is Site D2 as this location provides a facility that is conveniently located for the community and will assist in encouraging the reuse and recycling of materials. The site investigations have concluded that Site D2 is a suitable location for the CRC. The landfill may be located at either Site D2 (the preferred site) or Site G1 which is subject to a future Council decision.
7. Why can't the Shire undertake recycling at Buckley's Road landfill or the other site along Buckley's Road?	• Buckley's Road Waste Management Facility (**Buckely's Road**) is rapidly running out of void space. To provide an additional 3 years of void space, the existing recycling activities at Buckley's Road will be relocated to the new CRC allowing expansion of the existing landfill until the relevant approvals are obtained to construct a new landfill. • The Shire also use Lot 400 Buckley's Road for the storage of bulky waste materials for further recycling including greenwaste, scrap metal, etc. The Shire currently leases this land from DevelopmentWA on a short term lease and there is no option for the Shire to purchase Lot 400 longer term.
8. Will the Shire implement the Container Deposit Scheme (CDS)?	• The Shire submitted an application to become a CDS refund point to the State Government however were unsuccessful with the application. The CRC includes provisional space for a future CDS area should the Shire choose to include this program either by themselves or via a relationship with a third party in the future.
9. What happens to the sediment accumulated in the leachate ponds?	• Leachate is collected from the landfill through the leachate collection system and transferred into lined ponds for evaporation. Evaporation is normal process for leachate management. Typically, there is no sediment remaining from the evaporation process.
10. What happened at the motor cross (in regards to Greater Bilbies)?	• The Broome Motor Cross Project has been a project developed by DevelopmentWA. Flora, fauna and heritage surveys would need to have been undertaken on site prior to seeking approval to clear the vegetation and develop the site. Any evidence of Bilbies will have required management plans and actions created to rehouse and protect Greater Bilbies on site.

11. What is the lifespan of the High Density Poly Eurethane (HDPE) liner?	• The lifespan of HDPE is highly dependent on material properties (physical, mechanical, durability and performance), other materials it is used with and the environment in which it is installed. A variety of factors such as temperature, the types of chemicals substances it comes into contact with, exposure to air and ultraviolet light can alter the lifespan. Geofabrics is a provider of HDPE in Australia who source their material from Solmax. Solmax suggest that its HDPE has a lifespan of 69 years up to 446 years based on the properties of the material alone. Further information can be found at **https://www.solmax.com/en/blog/the-expected-operational-life-of-solmax-geomembrane-liners**. • As part of the approval process, the Shire will be required to assess the potential impact if there was a breach of the lining system and ensure that there is not a significant impact on downstream receptors. These works have been completed by the Shire's consultancy team and have returned favourable results.
12. Can the leachate ponds manage a 1 in 200 year rainfall event?	• The final design and capacity of the leachate management system will be determined during the detailed design stage however it is anticipated that it will be designed to mitigate 1 in 100 or 1 in 200 year events. During flood events that exceed the adopted rainfall event, the leachate pumps can be turned off to leave the leachate within the landfill cell or if required, leachate can be transferred back into the cell(s) to prevent over topping of the leachate ponds. • The leachate management system will be regularly inspected to ensure it is operating effectively. Inspections include checking the leachate level in the pond, the leachate collection sump and leachate flow meter/pumping records. Heavy rainfall events and cyclonic activity will be closley monitored as required.
13. Has the Shire considered the potential impacts to Buckley's Plain if Site D2 was utilised for a landfill.	• The Shire and the Project Team have determined that Buckley's Plain is a downstream receptor from the potential landfill to be developed at Site D2. This is based on the determination of the groundwater flows below Site D2 to be in a south westerly direction. Buckley's Plain is located approximately 2.37km west of the boundary of Site D2. Buckley's Plain is recognised as a downstream receptor and therefore was subject to a risk assessment. • Based on a calculated seepage velocity of 21 m/year (or groundwater flow rate), in the unlikely event that the lining system was compromised, the estimated travel time for a potential contaminant (plume front) to reach the mapped boundary of Buckley's Plain is approximately 112 years. Groundwater modelling works undertaken confirmed that any potential leaks from the landfill would return to background concentration by the time it reached any of the downstream receptors including Buckley's Plain. • The Shire is committed to delivering a fully lined landfill facility with construction quality assurance and leak detection testing to ensure there is no holes in the lining system prior to completion of the construction works. In addition, the Shire will have an extensive monitoring system surrounding the landfill and leachate ponds that will be sampled and tested across the life of the facility. • The overall risk to Buckley's Road is considered to be a low risk. • The Shire and Project Team are also of the belief that relocating the landfill away from Buckley's Road which abut the southern boundary of Buckley's Plain will further reduce the risk to Buckley's Plain. The key reasons for this include:

	○ The Buckley Road facility is an old unlined landfill and published reports suggest groundwater from the site can flow north towards Buckley's Plain; ○ Site D2 will be a modern, fully lined facility with leachate extraction and continuous monitoring requirements; ○ Site D2 is 2.37km from Buckley's Plain which is significantly greater than the current Buckley's Road Facility which shares boundaries; ○ This increase distance will further reduce the potential impact to groundwater below Buckley's Plain; and ○ The current Buckley's Road landfill is clearly visible from Buckley's Plain, particularly the southern portion. While the landfill at Site D2 will not be visible at ground level from Buckley's Plain • Based on the above analysis, the movement of landfilling operations away from Buckley's Road to Site D2 will have a reduced level of risk to Buckley's Plain.
14. Who is the DWER?	• The Department of Water and Environmental Regulation (**DWER**) is the State Government body that is responsible for the regulation of water and the environment. One of the roles of DWER is to assess approval applications for the construction and operation of Prescribed Premises (i.e. waste management infrastructure such as landfills and CRCs). DWER is responsible for the regulation of Prescribed Premises under Part V of the Environmental Protection Act 1986. Certain industrial premises with significant potential to cause emissions and discharges to air, land or water are classified as 'Prescribed Premises' and triggers regulation under the Environmental Protection Act 1986. Those activities that are considered to be Prescribed Premises, and their associated production or design thresholds, are listed in Schedule 1 of the Environmental Protection Regulations 1987. • As part of the Works Approval assessment process, DWER will assess whether the engineering controls designed for the RRRP are appropriate and that any potential impacts during the construction works are minimised to the appropriate standards. If satisfied of the above, DWER will issue a Works Approval, which will contain a variety of legally binding conditions. DWER will then assess the operational risks as part of a Licence application. The licence includes a variety of conditions on the performance standards, environmental management measures, monitoring and reporting requirements for the operation of the facility.
15. There are already problems with illegal dumping and waste blowing off trailers when driving to tip site. What is the Shire proposing to do to manage this?	• Illegal Dumping is an ongoing issue that the Shire is investigating and will be dealt with regardless of the location of the landfill. Education on covering waste loads will be included within the Shire's future waste education program.
16. Can Environs Kimberley see the Peer Review (by Golder Associates)?	• On Friday 19 March 2021, the Peer Review Report was released to the community via the resource page on the project website **rrrrp.com.au** following a collegial review process.

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