[redacted]

Hon Dr Steven Miles
Deputy Premier
Minister for State Development, Infrastructure, Local Government and Planning
Minister Assisting the Premier on Olympics Infrastructure
c/- Director, Development Assessment Division - Planning Group
Department of State Development, Infrastructure, Local Government and Planning
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Dear Hon Steven Miles

Re: Wanless Recycling Park (Ministerial Call-in Ref: MBN2272) Submission (Objection) Application for Development Permit for a Material Change of Use & Development Permit for an Environmentally Relevant Activity & Development Permit for a Reconfiguration of a Lot – Located at: 82A, 82B, 82C, 82D, 82E, 82F & 82H Lanes Road, Ebenezer QLD 4340; Lot 312 & Lot 1 (under road licence) Coopers Road, Ebenezer QLD 4340; 266-304 & 350 Coopers Road, Willowbank QLD 4306; 166-198 & 202-282 Bergmans Road, Ebenezer QLD 4340; Lot 257 Unnamed Road, Ebenezer QLD 4340

On behalf of our client, [redacted] trading as [redacted] please accept this correspondence as a submission (objection) to the abovementioned development application which you have exercised your ministerial powers under the *Planning Act 2016* to call in, reassess and decide. This Submission (Objection) is a *properly made submission* having regard to:

a) is signed by each person (the submission-makers) who made the submission	As provided for at the end of this submission
b) is received during the period fixed under this Act for making the submission	The submission has been made during the public notification stage
c) states the name and business address of all submission-makers	As indicated above
d) states its grounds, and the facts and circumstances relied on to support the grounds	As provided for below in this letter of submission
e) states 1 postal or electronic address for service relating to the submission for all submission-makers	[redacted]
f) is made to the assessment manager, for a submission about a development application	As addressed above – for Ministerial Call-in Ref: MBN2272

Background:

[redacted] This facility utilises "best practice" bioreactor technology to rapidly stabilise waste whilst capturing environmentally damaging methane and converting it into electricity. The [redacted] facility also incorporates regulated waste treatment and composting facilities. The [redacted] facility is **directly adjacent** to the proposed Wanless Recycling Park Pty Ltd development (Wanless project) and located directly to the east of Lanes and Ironbark Pits; and to the south of the Tailings Dam – all of which are proposed by the Wanless project for conventional landfill.

[redacted] made seven (7) submissions (including specialists reviews) to Ipswich City Council (Council) and the State (as represented by SARA[1] and DES[2]) during the original development application public notification and assessment. Copies of the submissions are provided at ***Attachment 1*** to this letter.

Pursuant to Section 53 (7) of the *Planning Act 2016*, original submissions made about the application remain effective for the (second) public notice given under the Development Assessment (DA) Rules. On that basis, *submission-makers* expect **previous submissions** to be taken into account, **in addition to this submission** for the second public notice of the development application – this being of particular relevance given the landfill components of the original application were **refused** by Council and (in part) **not fully supported** by SARA[3].

Pursuant to s.115 (4) of the *Environmental Protection Act 1994* this properly made submission should be taken to be a properly made submission about the application for the environmental authority. The Minister is requested to ensure that the Department of Environment and Science (DES) take into consideration all relevant matters contained in this submission as part of any (potential[4]) re-assessment of the prescribed ERAs.

[redacted] further maintains that significant shortcomings in the original development application (identified in submissions at **Attachment 1**) remain unresolved and without any substantive response to or additional information provided by the applicant (including as part of the Call-in process), as was clearly reflected in Council's previous decision on 16 September 2021, wherein Council approved the *reconfiguring a lot* and *resource recovery facility* however **refused** all other aspects of the development relating to landfilling the mining voids (Lanes and Ironbark Pits) and the Tailings Dam.

Whilst [redacted] was satisfied with Council's decision of 16 September 2021 (with [redacted] having previously joined the now defunct P&E Appeal 2715/21), the proposal for an *additional* major landfill **directly adjacent to** the existing [redacted] facility remains of significant concern in regard to potential adverse impacts on [redacted] existing ongoing waste management operations. This includes previous objections relating to environmental nuisance and safe operations at RAAF Base Amberley, particularly given the lack of comprehensive management measures which deal with wildlife attractants within the buffer area to Amberley Air Base, including those **cumulative** effects from the Wanless project on existing waste management activities operating at [redacted]

[1] State Assessment and Referral Agency
[2] Department of Environment and Science
[3] SARA conditions prevented, via conditions, landfill of the Tailings dam from being carried out
[4] It remains unclear whether the environmental authority (EA0002905) is (or can be) reassessed as part of the Call-in process, pending the Minister's consideration of two missed referrals detailed in the submission.

The Wanless project has the potential for negative outcomes associated with solid waste disposal for the City of Ipswich, including potential environmental and amenity impacts and negative connotations of Ipswich as a 'dumping ground' for SEQ and other regions. [redacted] currently also pay significant ongoing financial contributions for *Local Environmental Improvements* (pursuant to the P&E Judgement BD3265 of 2005), with contributions utilised for community and environmental improvements across the City - targeted to environmental and social programs. Approval of the landfill components of the Wanless project fundamentally undermine and/or make redundant such contributions, which (if removed) would represent a significant economic loss to the Ipswich LGA – i.e. where a second waste management facility is established adjacent to [redacted] site, there would be limited need for ongoing contributions to continue, given the intent of the original condition imposed via the Judgement would no longer reasonably apply (solely) to the [redacted] facility.

Ongoing regulatory concerns as to how the State will be able to differentiate environmental nuisance or environmental harm between two separate, but directly adjacent, waste disposal operations are questionable. This would extend to matters including: emissions from landfill activities (i.e. determining point source noise and odour emissions); surface water management (i.e. determining point source impacts on water quality values in Ebenezer Creek); potential groundwater contamination (i.e. determining point source impacts on any groundwater contamination, with filling plans by Wanless proposed below the existing water table); traffic and pavement impacts along Champions Way (including cumulative adverse impacts on the Willowbank (Ebenezer) motorsports and events precinct and conflicts with heavy vehicle verses passenger vehicle movements).

[redacted] also note that the Minister has previously stated[5]:

We are working within the planning system to identify ***waste and recycling precincts*** *away from residential neighbourhoods where we can cluster these projects together, and it may well be the case that this project could be an anchor in one of those precincts. However, we also need to consider the needs of inland rail which has identified that as one of the possible locations for an intermodal terminal and that may well mean that the elements of the Wanless proposal that have been approved may not be suitable for that location because that land may be required for the state and national interests of supporting inland rail*

[redacted] has significant concerns with regard to the prospect of identifying the Willowbank / Ebenezer district as being suitable for a *waste and recycling precinct*. This would be at odds with a range of other strategic planning considerations – including impacts on RAAF Amberley Airbase and the Ipswich Motor Sports Precinct, as well as limiting other 'industrial park' or 'aeronautical based' developments aligned with these core activities in the region.

The concept of 'clustering' waste and recycling activities has already occurred in the Swanbank area, causing significant community concerns and ongoing State and local regulatory issues, as evidenced by the establishment of the *Odour Abatement Taskforce*[6] and ongoing non-compliance issues currently being experienced. Any intent to 'cluster' waste and recycling projects within the Ebenezer / Willowbank area would be considered premature and would clearly require extensive consultation with Federal and State government agencies, Ipswich City Council and broad community engagement - in consideration of the range of significant conflicting land uses, national interests in supporting inland rail, environmental

[5] Record of proceedings - First Session of the Fifty-Seventh Parliament - Wednesday, 23 February 2022
[6] https://www.qld.gov.au/environment/management/monitoring/air/odour-abatement

management concerns and amenity issues – rather than the suggestion of the Wanless project being a 'anchor' for encouraging further concentration of waste and recycling activities throughout the Ebenezer / Willowbank industrial area without such strategic planning.

[redacted] are further concerned that the information request by the Minister during the Call-in process did **not** include a request for detailed consideration of Council's extensive reasons for refusal of the landfill components of the originating application – matters which otherwise would have been addressed in significantly more detail had the application been considered by the P&E court.

Given the significant shortcomings, inconsistencies and conflicting information; and the lack of credible and coherent information provided in the support of the development application, as evidenced in this and previous submissions, approval of the development application in its entirety is **not** justified. The Minister is therefore respectfully requested to confirm Council's original decision, by **approving** the *reconfiguring a lot* and *resource recovery facility* and **upholding the refusal** of all landfill components of the development application.

This submission also includes a review prepared by ATC Williams (***Attachment 2***) of the additional engineering documentation submitted, in the context of the whole of the development application – supporting the view that there is insufficient technical background and engineering assessment to support elements of the proposed landfill development, and that there is no confidence that any level of conditioning or related approvals documentation will manage the risks that emerge from the development approach by Wanless.

SUBMISSION (OBJECTION)

The following represent the grounds, and supporting facts and circumstances relied on to support the grounds, in the making of this Submission (Objection) by [redacted] Services (Australia) Pty Ltd & [redacted] [redacted] ABN 67 450 387 919:

1. SUBMISSION (OBJECTION) GROUNDS:

Chief executive missed referral – *Schedule 10, Part 10* of the *Planning Regulation 2017 - Koala habitat in SEQ region*.

Referral to the Chief executive and assessment under the relevant SDAP provisions under *Schedule 10*, *Part 10 Koala habitat in SEQ region* of the *Planning Regulation 2017* was triggered during the original DA process by two separate change applications however was not identified or completed, with this matter remaining outstanding as part of the assessment of the current Ministerial Call-in.

SUPPORTING FACTS AND CIRCUMSTANCES:

- The applicant sought *changes* to the development application on 6 May 2020 and 10 December 2020, on the basis that the *changes* met the definition under *Planning Regulation 2017* for a *minor change.*
- At the time of making those *change* applications, the definition under *Planning Act 2016* for a *minor change* required (inter alia) that: *if the application, including the change, were made when the change is made would* ***not*** *cause: …*

  (C) referral to extra referral agencies; or

(D) a referral agency, in assessing the application under section 55(2), to assess the application against, or have regard to, a matter, other than a matter the referral agency must have assessed the application against, or had regard to, when the application was made

- The *changes* made to the application however triggered (at the time the change application was made) *Assessable development*[7] *- development interfering with koala habitat in koala habitat areas outside koala priority* and hence should **not** have been considered *minor changes* to the application, in the context of the definition of a minor change to an application under the *Planning Act 2016* - i.e. owing to approximately +0.49 ha of development impacted area (*Melaleuca irbyana* community) being mapped as *Core koala habitat area*[8] in Champions Way – refer to *Figure 1* - **Attachment 3**.

- The effect of 'other' changes (Section 27 of the DA Rules) makes it clear that for a change that is **not** a *minor change*, the development assessment process stops on the day notice of a change is received by the assessment manager, and starts again at the beginning of the assessment manager's confirmation period. Whilst a notice should therefore have been given by Council (for the first or second change application), it must now be given by the Minister - in consideration of the construct of the *Planning Act 2016* and DA Rules and missed referral.

- Referral to the Chief executive and assessment under the relevant SDAP provisions pursuant to *Part 10 Koala habitat in SEQ region* of the *Planning Regulation 2017* therefore should have been be required and remains outstanding as part of the application and assessment of the current Ministerial Call-in.

- Of relevance to the above, SARA's original information request (18 February 2020) additionally required the applicant to: '*Provide confirmation of lodgement of the required EPBC Act*[9] *referral to the Department of Agriculture, Water and the Environment* [DAWE]. *The outcomes of this referral should be provided to DES in support of the EA application*.'

  To date, the applicant has **not** responded to the above matter.

- It is further noted that DAWE (Ref: 2021/9036) on 12 December 2021 made a decision under section 75 and section 87 of the EPBC Act that the Wanless project is a ***controlled action*** requiring assessment and approval under the EPBC Act before it can proceed. On 12 February 2022 the koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) was further listed as *endangered* under the EPBC Act.

- The above events further emphasise the significance of appropriate (and statutory) consideration of impacts on *Core koala habitat areas* and need for detailed assessment of the relevant State assessment benchmarks under State code 25: *Development in South East Queensland koala habitat areas*. Any decision by the Minster to approve the Wanless project in its entity should be further postponed

[7] Schedule 10, Part 10, Division 3, Subdivision 1, Section 16B of the Planning Regulation 2017
[8] The mapped Core koala habitat area also includes other mapped MSES in Champions Way that would be required to be assessed under State Code 25.
[9] Environment Protection and Biodiversity Conservation Act 1999

pending the outcome of the EPBC referral, given the effects such decision may have on the current development application, including the State's outstanding assessment required under State code 25.

- The above matters represent significant shortcomings in the current application, raising questions as to the competency of the application.

2. SUBMISSION (OBJECTION) GROUNDS:

Additional information provided by the applicant during the Call-in process included only **partial responses** to the Minister's Information Request (MIR) dated 21 February 2022 and SARA's Information Request (SIR) dated 16 March 2022.

These partial responses are inconsistent with the applicant's intent of the Call-in, which sought for approval of the whole of the development and are inconsistent with the balance of the responses to the MIR and SIR information requests, with the application lacking credibility in the context of the applicant seeking a development permit (previously refused by Council) for all landfill components.

SUPPORTING FACTS AND CIRCUMSTANCES:

- Council refused all aspects of the development for landfill of Lanes and Ironbark Pits and Tailing Dam, with SARA (and DES under the environmental authority) previously conditioning the approval to ensure the Tailings Dam could **not** be utilised for landfill. The Tailings Dam however remains a significant part of the development application, constituting around 60.4% of the total proposed landfill void space, proposed to operate over an estimated lifespan of 56 to 60 years.

- Without the Tailings Dam, Lanes and Ironbark Pits further have significantly less landfill void space and a significantly shorter lifespan (12 years), which likely adversely impacts on the economic assumptions provided in RFI Responses prepared by MRA Consulting and the Economic Needs Assessment prepared by Location IQ. These assessment should be updated on the basis of removal of the Tailings Dam from the proposed development and reviewed by an independent waste expert and economic consultant.

- The applicant's original request to Call-in this application (30 September 2021 - Urbis) had stated:

    - *The application in its current form, as approved by Ipswich City Council, is unable to proceed on the basis of economic viability of the project. It is necessary* ***for the proposed development to proceed in its entirely****, allowing for the disposal of residual waste on the same site.*

    And

    - *The approval includes* conditions *that restricts the movement of coal tailings from the previous mining activities on the site* ***until the management of the tailings is fully resolved*** *which by virtue of the condition* ***does not permit waste filling the occur within the Tailing's Dam under the current development application****.*

- The call-in therefore provided an opportunity for the applicant (after more than two years of planning) to provide sufficient information to the Minister that would justify ***the proposed development to proceed in its entirely***.

- Environmental concerns regarding the management of Tailing's Dam were subsequently reflected in the Minister's and SARA information requests.

- The applicant's information responses however state (despite this information having been *requested* more than two years ago[10]) that the applicant was **'unable'** to carry out the following:
  - A **Tailings Management Plan** which clearly identifies how the tailings waste will be managed, within acceptable standards and limits (Item 4.2 of MIR; and Issue 2 of the SIR); and
  - A **Void Dewatering Proposal** that aligns with the Tailings Management Plan (Issue 3 of the SIR).

- The balance of the information responses by the applicant to the MIR and SIR are further in **conflict** with the applicant's response concerning the Tailings Dam - predicated on the 'whole' of the development proceeding.

- As mentioned previously, the effective removal of the Tailings Dam from the proposal has significant implications to the Wanless project, particularly given all other supporting technical documentation (i.e., Economic Needs Assessment, Engineering Reports, Landfill Engineering Plans and Site Based Management Plan etc.) has been prepared by the applicant based on the Tailings Dam being utilised for landfill.

- Given the above, the application therefore remains incoherent and lacks credibility, wherein the applicant on one hand is seeking a development permit for **all aspects of the development** and yet is **'unable'** to provide crucial engineering and environmental assessments necessary to justify utilising the Tailings Dam for landfill in the first instance – again, despite having well over 2 years to develop those engineering and environmental management strategies and plans.

- The fact that the applicant has been aware of the need for the Tailings Management Plan and Void Dewatering Proposal for over 2 years further brings into question whether landfill of the Tailings Dam is in fact viable.

- The effective *removal* of the Tailings Dam from the Wanless project reasonably invalidates arguments provided concerning economic viability – given economic viability is predicated on all aspects of the development being approved. The Wanless project, as it currently stands, otherwise risks being commercially unviable in 12 years, when landfilling of Lanes and Ironbark Pits would cease.

- A further review of engineering aspects of the landfill, including the practicality of landfilling of the Tailings Dam, has also been prepared by ATC Williams (***Attachment 2***). ATC Williams review supports the belief that there is insufficient technical background and assessment to support elements of the proposed landfill

[10] SARA Information Request (2001-15045 SRA) dated 18 February 2020

development, and that there is no confidence that any level of conditioning or related approvals documentation will manage the risks that emerge from the development approach.

- To suggest that the applicant be granted a development permit that includes landfill of the Tailings Dam - in absence of detailed and rigorous assessments of the environmental effects of development, including the potential threat of serious or irreversible environmental damage - is contrary to advancing the Planning Act's purpose and should **not** be supported by the Minister.

- Consistent with the anticipated submission to be made by Council[11], [redacted] further agrees that where the Minster chooses to rely on commercially viability as a deciding factor, the Minister should then seek an independent waste expert and economic consultants to undertake a peer review of the modelling that has been provided – this being particularly important considering the complexity of this issue and its relationship to the broader market and other economic levers in place and under consideration by the Queensland Government – including the fact that the Planning and Environment Court is yet to make a decision on three (3) other landfill appeals, which if approved would result in a significant increase in landfill lifespan in SEQ.

3. SUBMISSION (OBJECTION) GROUNDS:

There is a lack of comprehensive wildlife management measures which deal with wildlife attractants within the buffer area to Amberley Air Base that have not been assessed in the Wanless project, including cumulative effects that would result from a second landfill operation adjacent to the existing waste management and disposal facility operating at [redacted]

SUPPORTING FACTS AND CIRCUMSTANCES:

- [redacted] has significant concerns regarding the lack of understanding and need for expertise in the form of a bird and wildlife management expert when planning for a major waste management facility, particularly given the proximity to a major Defence Airport and existing [redacted] waste management and disposal facility.

- Wanless has provided for **no** environmental assessments in terms of bird and wildlife management impacts on the RAAF Base Amberley, including **no** consideration of cumulative impacts from the development on the existing [redacted] facilities, in terms of the proposed development creating an ecological 'sink', attracting significant species and increasing the numbers of birds within the 3-8km buffer zone to RAAF Base Amberley.

- Since 2001, Griffith University has provided ongoing monitoring and research associated with bird and wildlife management at the [redacted] facility. The current Bird Management Plan[12] for the [redacted] facility is further considered one of the more sophisticated management plans of its type internationally and would be at

[11] Ipswich City Council Ordinary Meeting Thursday, 30 June 2022

[12] 'Bird Management Plan, for Proposed Ti Tree Waste Management Facility' dated June 2001

significant risk given the lack of detailed consideration of bird and wildlife management impacts from the Wanless project.

- Griffith University previously provided an assessment of the development application (refer to **Attachment 1**) and concluded the following:
  - *The applicant, Wanless Recycling Park Pty Ltd, should be required to submit a comprehensive wildlife management program and measures, including the cumulative effect of the proposal on [redacted] and any other surrounding existing or proposed waste management facilities i.e., in terms of the development creating an ecological 'sink', attracting significant species and increasing the numbers of these birds within the facilities and the buffer zone to the Base.*
  - *Given the absence of sufficient supporting scientific certainty and lack of any preventive actions detailed in the application in the face of that uncertainty, the burden of proof remains with the proponents of the activity to demonstrate that the proposal will not have adverse impacts on operational airspace in the vicinity of RAAF Amberley or adversely impact on the existing activities at [redacted]*
  - *Council should therefore exercise precaution in its decision making and not approve the proposal in the absence of sufficient supporting information.*
- **No** consultation with qualified bird and wildlife management experts was provided with the development application.
- **No** detailed management measures which deal with wildlife attractants within the buffer area to Amberley Air Base, or assessment by a qualified bird and wildlife management expert providing details of how such measures would be implemented, have been submitted in support of the development application.
- **No** assessment of the cumulative effects of wildlife attractants from the development proposal on the [redacted] facility (or any other surrounding existing or proposed waste management facilities) was provided with the development application.
- **No** referral to the Department of Defence or RAAF Base Amberley appears to have been undertaken by the Minister as part of the Call-in process.
- **No** consideration of the potential for ongoing strategic expansion at RAAF Amberley Airbase has been considered during the assessment of the Wanless project.
- This lack of detailed assessment and measures is contrary to State Planning Policy (SPP) Guidance material (*Strategic airports and aviation facilities state interest*) which anticipates measures to reduce the potential to attract wildlife in consultation with the airport operator and qualified bird and wildlife management experts.
- Given the absence of sufficient supporting scientific certainty and lack of detailed preventive actions in the application in the face of that uncertainty, the burden of proof remains with the proponents to demonstrate that the proposal will not have

adverse impacts on operational airspace in the vicinity of RAAF Base Amberley or adversely impact on the existing and approved activities at the [redacted] facility.

- The Minister should therefore exercise caution in its decision making and refuse the proposal in the absence of sufficient supporting and technical information on these matters.

- [redacted] also acknowledge that non-compliance with any aspect of the [redacted] Bird Management Plan or agreed Implementation Strategy under conditions of the Judgement for the [redacted] Bioreactor may result in the [redacted] facility immediately closure – as required under current conditions applicable to the [redacted] facility. Where these matters are not appropriately considered in the assessment of the application and where the application is approved and site developed for the Wanless project in absence of same, [redacted] will be forced to take all necessary and available steps to preserve its legal rights and seek to recover any loss or damage incurred in the event that [redacted] is forced to close as a result of the proponents operations - owing to any non-compliance with Condition 3.7 of the current Judgement BD3265 of 2005 caused by the Wanless project.

4. SUBMISSION (OBJECTION) GROUNDS:

Approval of the landfill component will not advance the government's stated waste recycling targets and could act as a disincentive for further investment in the circular economy in South-East Queensland.

SUPPORTING FACTS AND CIRCUMSTANCES:

Waste recycling targets not met

- Approval of the landfill component does not facilitate the achievement of waste reduction targets such as 'net zero waste' and discouraging landfill.

- The Queensland Government's Waste Management and Resource Recovery Strategy sets out a vision that *'Queensland will become a zero-waste society, where waste is avoided, reused and recycled to the greatest extent possible. Strategic investment in diverse and innovative resource recovery technologies and markets will produce high-value products and generate economic benefits for the state'*

- The applicant states that *'90% of waste received on site will go through a recycling process*', however in reality the company's commitment to recycling is only 45% of all material received on site, which is only equivalent to the Qld Government's 2018 baseline. Whilst an aspirational target of 60% recycling may be proposed, there remains no commitment to this in the application.

- The 45% recovery goal for the facility comprises:
  - 6% for general waste (putrescible);
  - 49% for C&I (targeted), household bulky waste (kerbside collections and self-haul) and C&D (from commercial properties);
  - 50% for C&D (mixed general waste bins).

- Even long term, the proponent advises that the intention of the facility is to reach a medium to long term recycling target of 30% of general/ municipal waste with a 50% medium to long term recycling target associated with the dry waste – again these targets being aspirational rather than committed.
- The Wanless project facilities short-term and long-term goals still fall well short of the Government's overall recycling rate target of 60% in 2025 rising to 75% in 2050 including:
    - 55% for MSW in 2025 - rising to 95% in 2050
    - 65% for C&I in 2025 - rising to 95% in 2050
    - 75% for C&D in 2025 - rising to 85% in 2050

Overt focus on landfill

- The applicant has made it very clear that the entire landfill component (including Tailings Dam) is a fundamental part of the development proposal.
- The applicant's Town Planning Report stated that: *'the proposed development is initially focused around the landfilling on site, however also includes resource recovery and recycling on site. As initial targets for the site, a total of 30% of General Waste and 50% of the Construction and Demolition waste are to be recovered on site. The proposed development is intended on increasing the recycling that occurs on the property as the project matures. A goal of the site is to divert waste from landfill, however, landfill is an essential part of this, given not everything can be recycled.'*
- The applicant has provided limited details of the recycling component including future staging of associated recycling industries - which is not part of the proposed development.
- Targeted waste streams additionally have been assumed to be waste already being disposed direct to landfill. In reality, targeted waste streams inevitably are likely to include waste streams which already are subject to a proportion of pre-sorting, recovery and recycling – this fact eroding the MRA Consulting and Location IQ responses provided to the Minister on economic need.

Disincentive to further circular economy investment

- The landfill component of the proposed development does **not** promote resource recovery and will act as a disincentive for resource recovery.
- Approval of the landfill components of the Wanless project is a disincentive for establishing other 'stand-alone' recycling developments – many of which have been the subject of the State's *Resource recovery industry development program*[13]. The State has already approved (in the first three rounds), funding for projects across Queensland and the South East which are focused on resource recovery and without the need for reliance on landfill options – with the following provided as examples:

[13] Resource recovery industry development program

- *ResourceCo BRRF Pty Ltd (South East Brisbane) - Establish a resource recycling facility to process commercial and industrial and mixed construction and demolition waste streams primarily into process engineered fuel;*
- *Downer EDI Works Pty Ltd (Brendale) - Establish a new facility to process road sweepings and other detritus to recover sand and aggregate for use in asphalt;*
- *Impact Washing Pty Ltd (Stapylton) - Expand the volume and capacity of the existing plastic waste reprocessing plant to meet demand for processing of high-density polyethylene plastics from material recovery facilities and industrial sources to a clean raw material.*
- *Rosenlund Constructions (Pinkenba) - Establish a waste management facility with a fixed recycling line for mixed construction and demolition waste and dedicated plant for melting styrene construction waste to allow export for remanufacturing.*
- *Rowcon Recycling Pty Ltd (Sunshine Coast) - Establish a mixed construction and demolition recycling facility and an enclosed, purpose built industrial building to house co-mingled construction and demolition waste pre-sorting activities, sorting and processing equipment.*
- [redacted] *Service Australia Pty Ltd (Swanbank) - Purchase mobile plant and equipment to increase recovery of mixed construction and demolition waste.*

- Given the scale and longevity of the proposed development (60 years) and the absence of any detail as to the source of the various waste streams that would be targeted by Wanless, including what proportion of waste accepted on site is practicable for recovery (and when), the proposed resource recovery rates at the facility risks cutting across Queensland's ability to meet the targets adopted by the Queensland Government for decades into the future.
- There is a need to ensure that easy availability of landfill does not result in an outcome where landfilling of waste becomes cheaper (economies of scale / supply and demand), which would continue to make the transport of wastes (including across borders) the most appealing option. This outcome would stifle innovation, waste avoidance, resource recovery and recycling and is of particular relevance given the Planning and Environment Court has yet to make a decision on three (3) landfill appeals, which if approved would result in a significant increase in landfill lifespan in SEQ and the Ipswich LGA.

5. SUBMISSION (OBJECTION) GROUNDS:

Landfilling of the southern portion of Lanes and Ironbark Pits is proposed to be completed using with *clean earthen material* or *clean fill* – as referred to in the Ministerial RFI Response prepared by MRA Consulting and the completion of the TLPI Assessment Benchmark Assessment prepared by Urbis.

The submitted Site Based Management Plan and engineering plans (Taft Engineering) makes no reference to the southern void space or *clean earthen material* or *clean fill.*

Clean earthen material or *clean fill* are **not** defined under the Environmental Protection Regulation 2019 (EP Regulation). The only material exempt from requiring an EA for ERA 60 is *clean earth*, as defined under the EP Regulation.

Disposal of *clean earthen material* or *clean fill* in the southern voids is further inconsistent with the TLPI Regulated Buffer Area and triggers an additional requirement for ERA 60 for the southern void space – which was not incorporated into the development application.

SUPPORTING FACTS AND CIRCUMSTANCES:

- Matters relating to disposal of on-site contaminated areas from past mining activities, the Tailings Dam and other potentially contaminating uses remain unanswered in the application, with significant concern that potentially contaminated wastes or wastes **other than 'clean earth'** (as defined under the EP Regulation) may be considered by the applicant for disposal in the southern (*clean fill*) areas of Lanes Pit and Ironbark Pit within the TLPI Regulated Buffer Area. This triggers a requirement for ERA 60 for the southern voids.

- The Wanless project relies on landfill (as regulated by DES under ERA 60) being limited to the northern portion of Lanes and Ironbark Pits and the Tailings Dam – i.e., where located within the *Waste Activity Area* under the TLPI.

- The applicant's however is proposing waste disposal in the southern areas of Lanes Pit and Ironbark Pit (within the TLPI *Regulated Buffer Area*) with *Clean earthen material* or *clean fill* - intended to be disposed of from on-site excavation and earthworks, with these activities **not** intended to be regulated by DES.

- The submitted RFI Response prepared by MRA Consulting and the TLPI Assessment Benchmark Assessment prepared by Urbis rely on a definition for '*Clean Earthen Material*' or '*Clean fill*' by way of reference to the former TLPI and *Waste Reduction and Recycling Regulation 2011*.

- In particular, the TLPI Assessment Benchmark Assessment prepared by Urbis has stated: *The proposed Clean Earth to be utilised for the Restoring the Void will be sourced at the commencing of operation. Material from the site will be prioritised, and where a shortfall is realised, external Clean Fill will be sourced.*

- Definitions for '*Clean Earthen Material*' and '*Clean fill*' however have **no** relationship to the definition for '**clean earth**' under the EP Regulation and hence would be considered 'general waste' – the disposal of which requires an ERA 60 to be lawful.

- The applicant and their consultants continue to demonstrate a clear misunderstanding of the nature of waste management and landfill ERAs in Qld.

- In consideration of the above deficiencies in the application, the land uses to which the applicant has relied upon for the southern void areas within the TLPI *Regulated Buffer Area* are therefore questionable.

- [redacted] additionally note that waste levy changes from 1 July 2023, will remove the levy exemption for ***clean earth*** disposed to landfill, with disposal of *clean*

earth to landfill charged at the general waste levy rate. This start date allows business and industry time to build capacity and processes to divert this resource away from landfill[14].

- The Wanless project would be heavily reliant on *clean earth* being disposed of to a large portion of the southern parts of Lanes and Ironbark Pits (located within the TLPI Waste Activity Buffer Area).

- The ***clean earth*** disposal is an integral part of the engineering design for the general waste disposal in the balance of both Lanes and Ironbark Pits. Approval of the development in its entirety would be wholly inconsistent with the State interests as they relate to discouraging disposal of *clean earth* to landfill.

6. SUBMISSION (OBJECTION) GROUNDS:

The need for and economic sustainability of the landfill component has not been demonstrated.

SUPPORTING FACTS AND CIRCUMSTANCES:

Need not demonstrated

- Whilst it may be convenient for the operator to collocate the proposed uses, the resource recovery component (which was approved by Council) does not justify the need for the landfill components of the development.

- The landfill components have **minimal** economic benefits that meaningfully contribute to: building economic opportunities through the circular economy; diversity of industry in Ipswich and SEQ; or employment.

- There is already an adequate supply of landfill airspace in Ipswich and in SEQ. Approximately 105M m^3 of approved landfill capacity is currently available in SEQ, which equates to about 20 years of landfill airspace supply (greater where waste to landfill rates reduce over time, which is expected as the State progresses to Zero waste in 2050). A majority of this landfill capacity is additionally within the Ipswich City Council area.

  There are additionally three (3) other waste-related (landfill) development applications currently on appeal before the Planning and Environment Court (a decision on these Appeals is imminent in 2022). It is understood that if these appeals are upheld, this would add an additional 20+ years of land fill supply. Approval of the Wanless project therefore has the propensity to extend landfill capacity well beyond the Queensland Government 2050 target date for 'zero waste'.

- Based on available information, the Wanless project therefore seeks to add an additional 40 years of landfill supply. This estimated is also based on current landfill rates – rather than a diminishing rate of landfill that is expected to achieve zero waste by 2050. The Wanless project would therefore effectively negate the

[14] https://www.qld.gov.au/environment/pollution/management/waste/recovery/disposal-levy/about/from-1-july-2022

State's zero waste timeframe of 2050, given the longevity of the development and potential oversupply of landfill capacity.

- The above must be considered also in the context that Council's assessment of the proposed development which determined that: *'the applicant has not adequately demonstrated the need for the landfill component of the proposed development'*. The Independent Decision Review Panel Report also concluded that *'it is unclear that there is a need for additional landfill in general, at this time'*.

Economic viability is questionable

- The applicant has stated that the recycling component is <u>not financially viable</u> without all landfill components.

- As part of its Response, SARA, on behalf of the Department of Environment and Science (DES) conditioned the approval that, for significant environmental reasons, *'Tailings waste within the Tailing Dam must **not** be dewatered or removed'*.

- The Tailings Dam however represents a significant part of the proposed landfill component – i.e., 60.4% of the total landfill void space and proposed to operate over an estimated lifespan of 56 years (although the applicant's Town Planning Report (Urbis, 2019) and Site Based Management Plan state 60 years).

- Exclusion of the Tailings Dam by way of conditions (and owing to the lack of supporting information) calls into serious question the economic viability of the proposed operation and the risk that it could fail and not meet its environmental monitoring, rehabilitation and other maintenance obligations – particularly over the longer term.

- The above risks are also noted in the context that site rehabilitation obligations for the Mining Voids and Tailings Dam are already secured by the State - under the current Mining Environmental Authority (EA) – which secures at completion of mining activities under EA EPML00594013 that the *'Tailings Ponds' 'Dams and ponds'* and *'Active Pit'* areas would be rehabilitated for **'Water Storage** / **Fauna Habitat'**. Rehabilitation opportunities required under the current Mining EA have been ignored in economic assessments, as an 'alternative' to the proposed development by Wanless Recycling Park.

- Hours of operation and labour force requirements for the development, particularly the landfill, are inconsistent / incoherent in the application and supporting information – i.e.:

  - The original Town Planning Report stated: *Resource Recovery and Landfill operations are intended to occur between the hours of 6am to 6pm 7 days a week; Delivery of waste operating hours to and from site is proposed to be unrestricted*; and with *50 staff members on site;*

  - The Environmental Noise and Air Quality Assessments however stated operating hours: *Resource Recovery Facility: 24 hours per day, 7 days per week. Landfills: 06:00-18:00, 7 days per week;*

- The applicant's information response to the Minister now suggests different operating hours and staffing: …*the operation is expected to facilitate 52 jobs across 2 daily shifts, which will result in up to 100 direct employment positions;* and
- The current submitted Site Based Management Plan states: *Site operating hours will be:6am – 6pm Monday to Sunday; The site will not be operated and waste will not be received on Sundays or Public Holidays unless approved by Ipswich City Council.*

- The above demonstrates clear confusion within the application and supporting documents in terms of both hours of operation and staffing requirements for the Wanless project.

- Wanless further state that **only 4 staff members** per shift are required for landfill operations (including one Supervisor; and one Labourer), with equipment operators limited to one x Loader and one x Compactor. [redacted] consider this estimation as naïve, reflecting the lack of experience required for landfill operations of this size and scope. Typically, for a facility accepting ~500,000t of waste to landfill per annum year, it would be expected to have a higher staff ratio for landfill and at least 3 x Frontline landfill machine operators (if machines are sized suitably, if undersized 4-5 would be necessary), as well a grader/general operator for routine site maintenance tasks and water truck.

- There are also **no** calculations provided which demonstrate actual EPs generated by the development for onsite sewerage disposal. The latest change to the application, in terms of 100 staff, includes no consideration of onsite effluent requirements and/or possible requirements for ERA 63 Sewage treatment.

7. SUBMISSION (OBJECTION) GROUNDS:

The landfill component risks significant environmental, amenity and traffic impacts which the proponent has not demonstrated can be safely managed

SUPPORTING FACTS AND CIRCUMSTANCES:

General impacts

- The landfill component of the proposed development is contrary to the planning principle that development should not *'cause (or have the potential to cause) contamination or other adverse environmental impacts'*

- It has not been demonstrated that the landfill component of the proposed development will not have an impact on the environment.

- Council's assessment of the proposed development determined that *'the landfill component …..…is unacceptable having regard to matters of landfill design and ongoing management and presents unacceptable environment impacts or risks'*

- This is particularly important given Wanless do **not** have a track record of operating landfills in Queensland – particularly one of a scale and complexity as

this one – with the nature of waste streams in Queensland being different to that experienced in Sydney.

- In addition, landfills are significant contributors to CO2 emissions. Establishment of a new landfill will make achievement of the Government's CO2 emission targets more difficult. Additional landfill approvals will compromise achieving the state emission target of reducing emissions by 30% on 2005 levels by 2030, and zero net emissions economy by 2050, and also compromising the ambition of Brisbane 2032 Climate Positive Games[15].

Geotechnical and landfill design

- It has not been demonstrated that the proposed landfill design will appropriately address the risk of total and differential settlement.

- The application material indicates that some of the landfill liner will be built above existing mine spoil with the overall depth of the landfill to be approximately 50 metres.

- Council's assessment of the development application determined that:

  '… the applicant has not proven up the adequacy of the landfill liner (for the Lane's and Ironbark Pit) … the applicant has not assessed the degree of settlement (landfill will be over existing mine spoil) or tensile strains that may occur on the liner system …the degree of settlement and tensile strains that may occur on the liner system is critically important. This is evidenced by the Queensland Department of Environment and Science Guideline – Landfill siting, design, operation and rehabilitation that requires landfill liners to be supported by a 'well consolidated' sub-base and the fact that liner manufacturers will require that their products are supported by an 'unyielding' sub-base'

  'The degree of settlement beneath the liner and the tensile strains that may occur are unknown, there is a risk the settlement could result in a failure of the liner which may result in co-mingling of leachate, groundwater and surface water thereby increasing risk of environmental harm.'

Groundwater/ surface water contamination / leachate collection

- Council's assessment of the development application determined that:

  …it has not been demonstrated that the landfill component of the proposed development will not result in impacts to groundwaters now and into the future …'

  'it has not been demonstrated that the dewatering of the void will not have impacts on the receiving environment …'

  'the success of the proposal would rely almost entirely on necessary systems and measures that cannot be guaranteed in perpetuity. Each of the necessary systems and measures, individually and collectively, are complex and would require careful attention and management on an ongoing basis. They are individually subject to various failures, human errors and other risks.'

[15] https://www.des.qld.gov.au/climateaction/emissions-targets

'The applicant had advised that the estimated life for as leachate collection system is in the order of 90 years which is of concern considering DES has conditioned a post filling maintenance period of 100 years after landfilling activities have ceased'

ATC Willaims landfill engineering review

- A review of engineering aspects of the landfill, including the practicality of landfilling of the Tailings Dam, has also been prepared by ATC Williams (***Attachment 2***).
- The key areas of concern from the review of the available documentation include the following:
  - Development across emplaced coal tailings
  - Void dewatering
  - Embankment construction (within the void for separation of waste disposal areas)
  - Batter lining
- In summary, the ATC Williams review supports a view that there is insufficient technical background and assessment to support elements of the proposed landfill development, and that there is no confidence that any level of conditioning with the Environmental Authority (EA) or related approvals documentation will manage the risks that emerge from the development approach.
- Despite the assertion in Taft (2022b) that the level of engineering related to the landfill is "concept" and that a forward program of engineering works is proposed, this cannot over-shadow the need for fundamental understanding of key development constraints associated predominantly with the condition of the voids in which the landfill facilities are to be sited.
- A very likely outcome therefore is that the development in its current form will not be "completable", and that any development undertaken will potentially result in unacceptable human health and/or environmental impacts, and/or impacts on local and regional amenity.

Site Based Management Plan review

- Typically, a Site Based Management Plan (SBMP) for a major and complex landfill operation should demonstrate integration of quality, health and safety, risk management, emergency response and environmental management issues into a document which can be practically applied at an operational level.
- The SBMP (May 2022 – Taft Engineering) submitted with the information request is rudimentary at best, lacking credibility, with insufficient cohesion and consistency with the balance of the application, reflecting a lack of experience required for landfill operations of this size and scope.
- Multiple sections of the submitted SBMP remain incomplete, with many sections **missing** (i.e., SBMP Sections 3.5; 3.6; 6.31; 6.5.1; 6.5.3; and 6.12 are all marked up as ***'TBA'***). Missing sections include critical environmental considerations

relating to *Fauna and Flora* and *Vegetation / Land Management* - with **no** reference to any of the submitted environmental assessments that support the development application contained in the SBMP.

- A list of twenty nine (29) *'Site Operating Procedures'* (SOPs) are referenced at *Appendix B* of the SBMP - without a single *SOP* being included with the application.

- The SBMP further provides for **no** commentary or environmental controls associated with the *'clean fill'* area proposed in the southern portions of Lanes and Ironbark Pits (see Item 5 of this Submission) – noting that 'clean fill' is **not** defined under Qld environmental legislation for the purposes disposal and would otherwise be regulated under the EP Regulation (i.e., requires ERA 60).

State and Federal environmental matters

- The application warranted referral to the State for Core koala habitat areas. This has not been undertaken as yet by the applicant - as discussed in Item 1 of this submission.

- As also discussed in Item 1 of this submission, the project is a 'controlled action' because of its impact on Koalas (threatened species) and has been referred to the Federal Government for assessment and approval under the EPBC Act. Information on the referral and outcomes was requested by (but not provided to) SARA.

- Notwithstanding the Department of Defence (DoD) response, there remains a lack of comprehensive management measures in the development proposal that deal with birds and wildlife attractants within the buffer to the nationally important Amberley Air Base - as discussed in Item 3 of this submission.

Amenity impacts/ rehabilitation

- Council's assessment of the application determined that:

  'the proposed development will have unacceptable impacts on the general amenity of the area including visual amenity and will also impact on the sense of place and community perception of the locality and of the local government area.'

  'it has not been demonstrated that the landfill component …… presents an opportunity to significantly improve long-term amenity outcomes for surrounding sensitive uses, and the wider community generally, than would be the case if the existing rehabilitation obligations in Environmental Authority (EA) EPML00594013 were carried out, as required.'

- Landfilling is <u>not consistent</u> with the existing mining rehabilitation requirements for the site under the existing Environmental Authority (EA). If the landfilling component was approved, the community would lose 81Ha of recontoured land suitable for grazing, 54Ha of water bodies to be retained and used for water storage fauna habitat, and 32Ha of the site to be used for fauna habitat.

- Further, Council's assessment of the application determined that: *'It has not been demonstrated that there are any benefits from either partially backfilling the*

mining voids or filling them with waste material as proposed. In particular it has not been demonstrated that any benefits of either partially filling the former mining voids or filling them with waste material outweigh the existing mining rehabilitation obligations for the site under Environmental Authority EPML00594013 such that they justify approval of the proposed development.'

Traffic impacts

- Access to the proposed development is via Champions Way which is inconsistent with Council's preferred access of Seppanen Road, as set out in the Council's Ebenezer Regional Industrial Area Guidelines.

- Seppanen Road was not properly investigated, nor was any assessment of the existing pavement condition in Champions Way carried out, or consequential impacts on Queensland Raceway and surrounding Motorsport Precinct race day and day-to-day operations and traffic safety.

- Champions Way currently carries an average of approximately 750vpd. The facility proposes an additional 450vpd (390vpd will be heavy vehicle) i.e., a 60% increase, which is significant in the context of the (State controlled) Champions Way / Cunningham Highway intersection.

- Heavy vehicle haulage routes are also located fully within the TLPI's Buffer Area as opposed to the Waste Activity area.

- The use of Champions Way for access is inappropriate and contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent and mixed-use development within the Willowbank / Ebenezer Ipswich Motorsport Precinct.

- [redacted] has serious concerns with the operational integrity of the Willowbank (Ebenezer) motorsports and events precinct, in the event of two major landfills sharing access with that mixed-use precinct;

- The Minister should seek to protect the operational integrity of the Willowbank (Ebenezer) Ipswich Motorsport Precinct and events precinct which represents a significant tourism, sporting and major event facility and attraction in the Region, which would be compromised in terms of amenity and safety were allowing a second major landfill to utilise heavy vehicle access along Champions Way, particularly where alternate access is available.

- The Independent Decision Review Panel Report confirmed that *'no holistic and detailed traffic engineering report has been provided to adequately address key considerations with respect to traffic and transport impacts of the development proposal and design horizon.'* The Report also noted that *'responses produced in reports … do not provide a detailed consideration of the impacts to safety or traffic operations on the surrounding road network due to the proposed development'* and recommended that Council may wish to *'consider some form of consistent monitoring of the development and its impacts to traffic and transport on the surrounding road network.'*

- SARA conditions (dated 2 July 2021) additionally stated: *At all times - Vehicular traffic is not permitted to enter or leave the subject site between the hours of 06:00 - 08:00 and 15:00 - 17:00.*

- The applicant's consultants had (23 June 2021 - prior to the Call-in) previously responded to the above condition, stating: *In our view, the condition is hard to enforce and is impractical. The condition is not practical for this type of use as it involves a variety of contractors delivering materials from all over South East Qld. As an example, if a truck delivering material gets stuck in traffic and arrives at the site a 3.05pm they would be required to wait on the side of the road until 5pm to enter.*

- DTMR subsequently responded (28 June 2021 - prior to the Call-in) to the applicant: *DTMR have reviewed the applicant's request to amend the traffic condition concerning the time periods the development restricting accessing the site. Should the applicant wish to replace this condition they need to demonstrate an alternative approach on how they will mitigate their impacts on the state controlled road network, noting that the site development's generated traffic has been demonstrated to impact state controlled intersections that currently experienced significant congestion and known safety issues during both the AM and PM peak periods.*

- The above matters demonstrate significant congestion and known safety issues at the State controlled road intersection; as well as the applicant's admission of the impracticality of compliance with the State's requirements. It is unclear why the applicant has not raised these issues as part of the Call-in process.

8. SUBMISSION (OBJECTION) GROUNDS:

Approval of the landfill component could compromise the future development of the regionally significant Ebenezer business and industry investigation and Motorsport Precincts along with the potential of the nationally significant Inland Rail Project

SUPPORTING FACTS AND CIRCUMSTANCES:

Compromises regionally significant existing and future development

- The site is included in the Ipswich Regional Economic Cluster (a regionally significant enterprise and industrial area – s.3.7.28 of Council's draft *Strategic Framework*) and it has not been demonstrated that the landfill component of the proposed development will produce a final landform able to be used for industrial purposes.

- It has not been demonstrated from an engineering, environmental and landfill rehabilitation perspective, that it is appropriate for future industrial uses to be established above the proposed landfill.

- Further, the location, scale and longevity of the proposed landfill component has the potential to negatively 'set the tone' for the Willowbank and Ebenezer locality well into the future.

- Approval of the landfill component would be a 'tipping point' that puts at risk optimisation of the significant current and future economic development, job creation and future investment opportunities that the Ebenezer Regional Industrial Area (including the Willowbank Industrial Park), Willowbank Motorsports Precinct (including the Queensland Raceway and Willowbank Raceway) and current Inland Rail strategic investments present.
- The Federal Government is currently building the Inland Rail Project – a $14.5B nationally significant transport infrastructure project that involves a 1700 km freight corridor between Melbourne and Brisbane (via regional Victoria and New South Wales). Initial project construction will be a single-track dual-gauge railway, with crossing loops to accommodate double stacked freight trains up to 1,800m long. Components of the construction will include infrastructure to accommodate possible future augmentation and upgrades of the track, including a possible future requirement for 3,600m trains.
- The Calvert to Kagaru section of the Inland Rail Project ($1.2B project) traverses the Willowbank / Ebenezer area and is proposed to abut or be in proximity to the proposed development on its southern boundary. The Project is currently undergoing a detailed environmental assessment (which will determine the final corridor alignment) by the State and Federal governments and has a current commissioning timetable of 2025.
- The Inland Rail Economic Impact Assessment Technical Report states that this section of the Inland Rail *'has the potential to unlock the construction of ancillary and complementary infrastructure, industrial development and logistics operations within the local area. Specifically ... (this section of the Inland Rail Project) ... may act as a significant catalyst for development in the planned and existing industrial areas at the Ebenezer Regional Industrial area, Willowbank Industrial Estate and Bromelton State Development Area (SDA). Key activities will likely relate to rail-dependent industries and support industries associated with transport, freight handling, warehousing and logistics.'*
- The Technical Report also states that the economic benefits are of the order of $166.22M – the majority of which (i.e., $126.76M) is attributed to freight benefits (i.e., travel savings, operating cost savings, improved reliability and availability).
- In addition, Council undertook a Social and Economic Impact and Benefits Study in 2020 for a potential Ebenezer Intermodal Terminal (located in proximity to the Inland Rail Corridor) that indicates the Intermodal Corridor will unlock 3500 full time equivalent jobs across diversely skilled and high-value industries including manufacturing, transport, postal and warehousing.
- Economic Development Queensland (EDQ) – a commercialised planning and development entity of the Queensland Government - owns 548 hectares of strategic industrial land (purchased in 1993) which is also part of the Ebenezer Regional Industrial Area and is located immediately south of the proposed Inland Rail corridor and is earmarked for future major industrial development.
- Willowbank Motorsport Precinct is a State and nationally important motor sports complex with future plans to expand (these development intents are reflected in

the SEQ Regional Plan and Council's town planning documents) and contributes a significant amount to the local, regional and state economies.

- The Wanless application has not considered the implications of the development proposal in the context of the above opportunities which may disincentivised by establishing a second major landfill project in the Willowbank / Ebenezer industrial area – which compromises regionally significant existing and future development opportunities.

9. SUBMISSION (OBJECTION) GROUNDS:

The landfill components of the application conflict with State, regional and local government strategies, policies, guidelines, discussion papers, direction papers and development programs and insufficient justification has been provided to justify its approval despite the conflicts

SUPPORTING FACTS AND CIRCUMSTANCES:

STATE CONFLICTS

Land use planning documents

- Council's assessment[16] of the proposed development determined the landfill components be refused on the basis that the proposal does not advance the purpose of the Planning Act.
- The proposal further conflicts with Temporary Local Planning Instrument (TLPI) No. 1 of 2021 – the TLPI's purpose which is to *manage new or expanded Waste Activities within the TLPI Boundary to ensure:*

  (a) the regionally significant economic areas are developed appropriately to provide economic benefits to the City and local area;

  (b) facilitate and manage the restoration of areas affected by past mining operations;

  (c) Sensitive Receiving Uses are protected from adverse impacts associated with waste activities; and

  (d) the immediate and long-term protection and improvement of the natural environment.

- Significant areas of the landfill component, including heavy vehicle haulage routes, are located within the TLPI's Buffer Area as opposed to the Waste Activity area.
- Further, Council's assessment of the proposed development (under the previous TLPI No. 2 of 2018) determined that *'it has not been demonstrated that the landfill component of the proposed development is well-located having regard to …the TLPI'*
- The applicant's MIR further confirms additional non-compliance with the current TLPI No. 1 of 2021 and states that: '*the proposed development* ***does not wholly comply with the current iteration of the TLPI*** *and was designed to algin with the*

[16] Council Ordinary Meeting - Item: 15.6- 16 September 2021

TLPI that was in effect at December 2019 when the initial development application was lodged with Council. The two non-compliances with the Specific Outcomes relate to the engineering design of the landfill system and the siting of landfill in relation to groundwater in the area.

- Further consideration of the above concerns is reflected in the Review by ATC Williams provided at **Attachment 2**, as previously discussed, which being into serious question the 'completability' of the Wanless project.

Waste management/ environment documents

- Council assessed the development proposal against the Queensland Resource Recovery Industries 10 Year Roadmap and Action Plan; State Infrastructure Plan (Part B – dealing with resource recovery); Waste Management and Resource Recovery Strategy; Transforming Queensland's Recycling and Waste Industry Directions Paper; Queensland Government Response to the Honourable Peter Lyons, QC - Investigation into the transport of waste into Queensland; Resource Recovery Industry Development Program; Energy from Waste Policy Discussion Paper and Queensland Climate Transition Strategy and determined that*: '… the proposed development is in conflict with the intent of these policies/ documents.'*
- The applicant's MIR has not provided any substantive additional information that addresses the identified conflicts with the intent of these policies / documents.

State landfill guideline

- Council's assessment of the development application against the Department of Environment and Science (DES) Guideline – Landfill siting, design, operation and rehabilitation (ESR/2015/1627, Version 4.01, Effective 23 November 2018) determined that: *'... the proposed development does not achieve the outcomes sought by the … Guideline …'*

REGIONAL CONFLICTS

South East Queensland Regional Plan 2009-2013 – former Regional Plan

- Council's assessment of the proposed development determined that: *'... the landfill component … is inconsistent with Desired Environmental Outcome 1 – Sustainability and climate change and Desired Regional Outcome 2 – Natural environment.'*

2017 Regional Plan (ShapingSEQ) – current Regional Plan

- The proposed development is located in the *Ipswich Regional Economic Cluster* and identified as a Major Enterprise and Industrial Area (M29 Ebenezer). These areas are intended for medium and high impact industries and are important drivers of economic growth and provide for industry and business clusters of regional and state significance. Strategies within the Regional Plan require such unique and important areas to be protected from incompatible land uses.
- The adjoining Willowbank Motorsport Precinct (incorporating the Queensland Raceway and Willowbank Raceway – major national and international motor sport facilities) is also identified as a Major Motor Sports Centre.

- Establishment of a major and long-term landfill within the Ipswich Regional Economic Cluster (including the Willowbank Motorsport Precinct) has the potential to stigmatise the locality and subsequently have a deleterious impact on the nature and extent of existing and future investment and development of this important area.

LOCAL CONFLICTS

Current planning scheme

- The site is included in the Regional Business and Industry Investigation Zone (RBIIZ). While a 'Special Industry' use is a potentially consistent use within the RBIIZ, that is subject to important qualifications that development is of a 'type and scale appropriate for the prevailing nature of the area and the particular circumstances of the site and its surrounds ...'

- Council's assessment of the proposed development determined that *'the proposal fails to satisfy this suite of requirements and is therefore considered to be an inconsistent use'.*

- Other planning scheme provisions confirm the need for 'resolution of applicable constraints'. Council's assessment of the development determined that *'the proposal does not resolve applicable constraints on this site.'*

- Further Council's assessment determined that: *'The landfill component of the proposed development is contrary to the planning intention in the Ipswich Planning Scheme 2006 that the land be rehabilitated for the intended future land uses, as the completed landfill is unlikely to be suitable to accommodate future industrial land uses'* and *'it has not been demonstrated that the landfill component is well located having regard to (amongst other things): ... incompatible uses in the locality … community expectations … environmental risks and impacts, and amenity impacts'*

'New' planning scheme

- The draft planning scheme has undergone community consultation on the Statement of Proposal (early stage of the plan making process), including the draft Strategic Framework (sets out the strategic direction for the developing plan)

- The site and use are subject to broadly similar zoning and development controls as those in the current planning scheme but importantly includes and additional control; which creates a hierarchy of waste management, and a specific requirement to consider need in the context of new landfill approvals.

- Council's assessment of the landfill component of the proposed development determined that it *'does not comply with the draft scheme as it does not encourage resource recovery, the need for additional capacity has not been sufficiently addressed, the height of the landfill extended beyond the top of the former mining void and the development will have unacceptable environmental impacts'*

Other local documents

- Council adopted a Waste and Circular Economy Transformation Policy Directive on 3 December 2020
- Council's assessment of the proposed development determined *'the landfill component … does not align with the … Directive … In particular … 'Strategic and Sequential Remediation' … (and) …'Protect Our Residential Amenity' …'*
- Under the 'Protect our Residential Amenity' part of the Directive, *'new waste industry developments in close proximity to residential areas should be discouraged where it is clear the development impacts will not be manageable onsite and will negatively detract from amenity'*

Approval not justified

- Given the significant conflicts identified, Council's assessment of the development application determined that:
  - *'there are not strong land use planning, waste management, economic, social or environmental grounds to justify approval of the landfill component of the development'*
  - *'Amongst other things, the proponent has not undertaken detailed studies into the viability of the proposed landfill liner system nor the impacts of the increased number of heavy vehicles proposed to both enter and exit the site'*
  - In addition, the Independent Decision Review Panel Report states that *'the landfill component …. raises several issues of concern … for example the use of voids and tailing dams for landfill operations, groundwater systems and potential detrimental impacts; leachate management and treatment systems, clay lining systems and ongoing rehabilitation of the site that remain in question'*\

Given the significant shortcomings, including the lack of credible, incoherent and conflicting information provided in the development application and response to the Minister's and SARA's information requests, as evidenced in the above and previous submission, approval of the Wanless project in its entirety should **not** be supported.

The Minister should therefore uphold the original decision of Ipswich City Council - by **approving** the reconfiguring a lot and resource recovery facility and **refusing** all other aspects of the development relating to landfilling the mining voids (Lanes and Ironbark Pits) and the Tailings Dam.

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours Faithfully

[redacted]

ATTACHMENTS

1. **Originating Submission**
2. **ATC Williams Review of Additional Documentation**
3. **Figure 1 - Impact Area – Core koala habitat area**

ATTACHMENT 1

Original Submissions 10674/2019/CA

[redacted]

3 June 2020

Ipswich City Council
Development Services
Email: plandev@ipswich.qld.gov.au
Att: Assessment Manager - Sandeep Nanjappa

Dear Sir / Madam

Re: Submission (Objection)	**S53.6 of the Planning Act 2016**
Development Application No.:	**10674/2019/CA**
Property Location:	**82A- 82F & 82H Lanes Road, Ebenezer Qld 4340; Lot 312 Coopers Road, Ebenezer Qld 4340; 266-304 & 350 Coopers Road, Willowbank Qld 4306; 166-198 & 202-282 Bergmans Road, Ebenezer Qld 4340; Lot 257 Unnamed Road, Ebenezer Qld 4340; Lot 1 Coopers Road, Ebenezer Qld 4340 (under road licence)**
Legal Description:	**Lot 2 SP 167885, Lot 231-230 & Lot 240-243 CH 3132, Lot 1 RP 24569, Lot 1 SP 167885, Lot 254 CH 31200, Lot 257 CH 31247, Lot 312 CH 31969, Lot 2 RP 24570, Lot 1 RL 8701**
Development Type:	**Development Permit for Reconfiguring a Lot - Boundary Realignment - 13 into 5 Lots; Development Permit for Special Industry (Waste Activity - Landfill and Rehabilitating a Mining Void, Resource Recovery) and ERA 54, 60 and 62[1]**

Note [1]: The description in the **amended DA Form 1** submitted by the applicant on 06 May 2020 is further described *differently* in Council's Notice of Change Application dated 8 May 2020 and in the public notification of the development. The public notification of the development application also incorrectly describes ERA 54 - 2(c) as Mechanical Waste Reprocessing (in a year) 10,000 tonnes of **Category 1 regulated waste -** whereas this threshold allows for mechanically reprocessing **general waste** only.

On behalf of our client, [redacted] trading as [redacted] located at 55 Champions Way, Willowbank, please accept this correspondence as a submission (objection) to the assessment manager in regards to the above-mentioned application, pursuant to S53 (6) of the *Planning Act 2016*.

This Submission (Objection) is a *properly made submission* in regard to the following:

a) is signed by each person (the submission-makers) who made the submission	As provided for at the end of this submission
b) is received by Council during the	The submission has been made during the

period fixed under this Act for making the submission	public notification stage
c) states the name and business address of all submission-makers	As indicated above
d) states its grounds, and the facts and circumstances relied on to support the grounds	As provided for below in this letter of submission
e) states 1 postal or electronic address for service relating to the submission for all submission-makers	[redacted]
f) is made to the assessment manager, for a submission about a development application	As addressed above – for development application 10674/2019/CA

Background:

[redacted] Waste Management Facility ([redacted] [redacted] is located at 55 Champions Way Willowbank QLD 4306 and identified as Lot 3 SP167885, with a total site area of 212.9ha. [redacted] operate a waste management facility at the above site and have the requisite planning and environmental approvals for the operation of its Waste disposal facility and associated activities, including the respective prescribed ERAs.

[redacted] has a common boundary with part of the land the subject of the development application for Wanless Recycling Park (ICC Ref: 10674/2019/CA), with the Wanless Recycling Park proposed resource recovery facility and landfills located directly adjacent to the north and west of [redacted] waste management facilities.

The significance of [redacted] facility is acknowledged in *section 3.7.28* of Council's recent *draft Strategic Framework* for the new Ipswich City Council Planning Scheme, which includes the existing [redacted] Facility as being part of an emerging regionally significant major enterprise and industrial area at Ebenezer and forming part of the Ipswich Regional Economic Cluster (REC).

The introduction of an *additional* major waste management facility within that cluster (and directly adjacent to the existing [redacted] facility) has not been justified by the applicant under the current planning scheme provisions, TLPI or environmental legislation and would jeopardise Council's future strategic framework, particularly given the multiple impacts from the proposed Wanless Recycling Park on the existing [redacted] operations, as discussed in this submission.

Submission (Objection):

The following represent the grounds, and the facts and circumstances relied on to support the grounds, in the making of this Submission (Objection) by [redacted] Services (Australia) Pty Ltd & [redacted]

1 Inconsistencies with and misrepresentation of the proposed land uses and staging of the development:

Submission (Objection) Grounds:

There is insufficient detail provided in the development application to determine the legitimacy of the applicant's intent to **recover waste *with only residual waste disposed of into the landfill on site***, given there is no detail of how the multiple components of the development are intended to be staged.

[redacted] has significant concerns that the applicant will develop the **landfill** component(s) of the development **without or prior to** full development of the Resource Recovery Facility (RRF) – which would be inconsistent with how the proposed development has been presented in the development application and to the public – i.e. being proposed as a Resource Recovery Facility with only *residual waste* disposed of into the landfill on site.

Waste recovery targets in the application are additionally well below the Queensland's waste recovery targets, which does not support the applicant's contention that the development is primarily for resource recovery with only a *residual component* going to landfill.

The submitted supporting documentation in the development application does not support approval of the application in its current form and there are no good town planning or environmental reasons which would otherwise justify approval of the application.

Facts and circumstances:

The development application purports to be designed to focus on **resource recovery** of general wastes which would otherwise largely be disposed of to landfill in Queensland[1].

This is further stated in the applicant's description of the proposed development in the submitted Town Planning Report[2] – i.e.

- ***More specifically, the main intent behind the proposal is for waste re-use, recycling with residual waste being disposed into the mining voids through landfill.***

The applicant however appears to provide a higher degree of focus in the overall development application on the **landfill** component - with substantial parts of the application[3] providing insufficient detailed assessment of the proposed Resource Recovery Facility (RRF) and its timing in the scheme of the overall development, with waste recovery targets for the Wanless Recycling Park also being inconsistent with the Queensland Government's waste recovery targets.

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[1] MRA Consulting Group, 24 April 2020

[2] Urbis, 19 December 2019

[3] including the Wanless Recycling Park Site Based Management Plan – Ref 2019004-Rev0 January 2020

It is apparent from the supporting information that the applicant likely intends to develop the landfill ***prior to*** the full development of the RRF, which would be contrary to the intent of the submitted development application – i.e. given the RRF (in its entirety) is a component that is clearly **integral to the operation of the development as a whole** and should therefore be fully completed and operational *before* any waste disposal is permitted to occur on site.

Waste recovery targets in the application are additionally **well below the Queensland's waste recovery targets**, which does not support the applicant's contention that the development is primarily for resource recovery with only a *residual component* going to landfill.

This is evident in that no staging is indicated on submitted plans (other than for the Stages of the landfill). The RRF should be the primary focus of the development, given the Queensland Government's Strategic priority to force a fundamental shift in the way waste is managed in Queensland and thereby supporting a transition to a zero-waste society.

The above concerns are emphasised by clear discrepancies and misrepresentations in the applicant's submission of the *Waste Industry Management Expert Report* (MRA Consulting Group, 24 April 2020). Waste recovery rates for the Wanless Recycling Park included in the Expert Report are misleading and **below** the waste recovery targets set under Queensland's new *Waste Management and Resource Recovery Strategy*[4] – i.e.

- Municipal Solid Waste (MSW) recovery proposed in the DA is **6%**.

  The QLD target for 2030 is however significantly higher at **60%**.

- Commercial & Industrial (C&I) waste recovery proposed in the DA is **49%**.

  The QLD target for 2030 is however significantly higher at **60%**.

- Construction & Demolition (C&D) waste recovery proposed in the DA is **50%**.

  The QLD target for 2030 is however significantly higher at **80%**.

There is no evidence therefore that the proposal will *maximise* recycling, with the proposed waste recovery rates for the facility being well below those targets adopted by the Queensland Government.

The above figures additionally demonstrate a high level of reliance on **waste disposal** (contrary to Queensland's Waste Management and Resource Recovery Strategy) and are indicative of an intent by the applicant to primarily rely on **waste disposal to landfill** for a significant portion of waste received to the site – rather than resource recovery which the applicant has otherwise suggested and which should be the primary use proposed for the site.

[4] https://www.qld.gov.au/__data/assets/pdf_file/0028/103798/qld-waste-management-resource-recovery-strategy.pdf

[redacted] [redacted] therefore consider there is **insufficient** justification for approval of the development application in its current form.

Should Council and the State however approve the proposed development, it would be expected that Council require the establishment of the Proposed Resource Recovery Facility (RRF) **in its entirety and before allowing for any waste disposal to occur** on the site - consistent with the applicant's description of the proposed development in the submitted Town Planning Report (Urbis, 19 December 2019) – being a proposal for ***'waste re-use, recycling with residual waste being disposed into the mining voids through landfill'.***

2 Need for the development has not been demonstrated:

Submission (Objection) Grounds:

There is insufficient detail provided which demonstrates need for the development of an additional waste disposal facility in the Ebenezer / Willowbank or Ipswich City Council local government area.

There has been no assessment of lost economic opportunities – in regard to the value of existing resources within the Mining Lease (ML4712) - see also Point 3 of this submission below to which the grounds and fact and circumstances remain relevant to demonstrating need.

There has been no assessment of the lost environmental opportunities – in regard to the value of the Ironbark and Lanes Pit and Tailings Dam which are required to be rehabilitated under the current Environmental authority (EPML00594013) for water storage / fauna habitat – see Point 4 of this submission below to which the grounds and fact and circumstances remain relevant to demonstrating need.

The submitted supporting documentation in the development application does not support approval of the application in its current form and there are no good town planning or economic reasons which would otherwise justify approval of the application.

Facts and circumstances:

The *Waste Industry Management Expert Report*[5] statements made regarding 'landfill capacity' within the Ipswich LGA have been based on estimated lifespans for the majority (7 out of 8) of existing landfills being stated as '**Unknown'**.

That Expert Report further states that the estimated landfill capacity in Queensland and more specially in SEQ is '**not known definitively'**.

The Expert Report additionally states and that there are proposed landfills and landfill extensions within the Ipswich City Council jurisdiction which are '**not captured in the numbers'** presented within that Expert Report.

[5] MRA Consulting Group, 24 April 2020

The Needs Analysis (Prepared by Location IQ, April 2020) relies heavily on information from the *Waste Industry Management Expert Report* to which there is considerable doubt as to the veracity of that Expert Report – given the above statements made by MRA Consulting - when considering the need for the proposed development.

Given the above statements, any conclusions made in regard to determining the capacity of landfills within the region are therefore dubious and unconvincing in terms of both the Waste Industry Management Expert Report and hence the Needs Analysis.

Given the above clear shortcomings, there can be very limited reliance on the conclusions stated in the Needs Analysis.

A review of the Needs Analysis was additionally undertaken by [redacted] Pty Ltd (**Attachment 2** to this submission) which includes a range of other inaccuracies such that question the veracity of any figures and conclusions deducted in the Need Analysis.

The Needs Analysis should therefore be treated with extreme caution.

3 The value and viability of extraction of existing mineral resources within ML4712 has not been addressed:

Submission (Objection) Grounds:

There has been no assessment of potentially lost economic opportunities in regard to the existing resources within the Mining Lease (ML4712), which would be quarantined as a consequence of the development proposal.

This matter also remains relevant to 'need', as discussed in Point 2 of this submission - in regard to the 'value' of potentially lost economic opportunities from future extraction of resources - otherwise quarantined as a consequence of the development proposal. This should have also been included as part of the Needs Analysis.

The submitted supporting documentation in the development application does not support approval of the application in its current form and there are no good town planning or economic reasons which would otherwise justify approval of the application based on need.

Facts and circumstances:

Zedemar Holdings Pty Ltd are the current holders of Mining Lease (ML4712). Zedemar Holdings Pty Ltd had sought extensions to the current ML4712 premised on winnable resources being held with the current Mining Lease. It needs to be acknowledged that the Mining Lease, when last renewed for a term of 15 years, was premised on (inter alia) there being winnable resources within the current Mining Lease, as referenced in the following extracts from *Wright & Bright v The Minister for Employment, Skills & Mining [2012] QSC 112*[6]*:*

[6] https://www.queenslandjudgments.com.au/case/id/77099?mview=&u=

Should the Minister have satisfied himself independently that the land still contained workable quantities of mineral or mineral bearing ore?

[35] Section 286A(1)(b) requires the Minister to be satisfied that the land the subject of the lease still contains workable quantities of the mineral or mineral bearing ore. The applicants' criticism in respect of this issue was that the Minister had simply accepted the statement by Zedemar that there were workable quantities of coal still on the land. The submission was that simply accepting the word of the applicant was not good enough and that the Minister should have made some independent investigation to satisfy himself of the facts.

[36] It is not immediately obvious to me why the Minister should not accept the statement of the applicant for renewal. ***There is little incentive for an applicant for renewal of a mining lease to pursue such a course unless it is satisfied that there is ore worth mining in the area of the lease. Zedemar's information provided to the Minister referred to reserves of more than 12,000,000 tonnes****. One of his ministerial briefing notes said that technical assessment by the Department of Employment, Economic Development and Innovation had revealed a high degree of coal resource within the "Bremer View Coal Deposit (MVL172)" and that there were approximately 30,000,000 tonnes of coal remaining on the mining lease area which was described as "a stand alone viable coal mining operation."*

[37] The mining registrar had also noted that the ***lease exhibited coal seams*** *within the pit walls while other information had been provided to the Department and to the Minister from the third respondent, OGL Resources, which had briefed him on its proposal to develop the coal resources on the leased area.* (see also https://www.qt.com.au/news/mining-giants-us50m-boost-funds-set-to-start-flowi/1603473/)

[38] ***There seems to me to have been ample evidence to satisfy the Minister that there was further coal on the land and that he was justified in reaching such a conclusion****.*

The site is under a current Resource authority with apparent significant resources (based on the above) which were accepted in the Supreme Court, Brisbane (in 2012 and 2013) to be representative of '*ore worth mining in the area of the lease'*.

It remains unclear as to why an economic assessment of the value and viability of extracting those resource has not been undertaken or required by the State, given the approval of the current Wanless Recycling Park will clearly result in the quarantining of those resources and surrender of the Mining Lease permanently.

4 Value and loss of environmental opportunities from site rehabilitation requirements under environmental authority EPML00594013 has not been assessed:

Submission (Objection) Grounds:

There has been no assessment of the loss of environmental opportunities in regard to the rehabilitation requirements that currently existing under Environmental authority (EA) EPML00594013, which would be forgone a consequence of the development proposal.

There are conditions of the current EA EPML00594013 and a community expectation that the holder of that authority was to rehabilitate Tailings Ponds; Dams and ponds; and Active Pit areas for Water Storage / Fauna Habitat purposes that will be otherwise lost to the community should the application be approved.

This matter also remains relevant to 'need', as discussed in Point 2 of this submission - in regard to the 'value' of lost environmental opportunities as a consequence of the development proposal. This should have also been included as part of any Needs Analysis.

The submitted supporting documentation in the development application does not support approval of the application in its current form and there are no good town planning or economic reasons which would otherwise justify approval of the application.

Facts and circumstances:

The site is subject to a current environmental authority (EA) EPML00594013 which contains specific *Rehabilitation landform criteria* pursuant to Condition F1 and Table F1 (*Final land use and rehabilitation schedule*) of the EA[7].

There was a community expectation, secured by way of the Condition F1 and Table F1 of the EA, that at completion of mining activities under EA EPML00594013, the *'Tailings Ponds' 'Dams and ponds'* and *'Active Pit'* areas would be rehabilitated for **'Water Storage / Fauna Habitat'**.

These areas intended for water storage / fauna habitat represent a significant contribution to the local community and would contribute to the environmental values of the area in the longer term – given the total surface area of such water storage / fauna habitat would equate to around 86ha - or around 24% of the total surface area of the Mining Lease (based on the stated areas in Table F1 and total surface area of ML4712[8]).

Rehabilitation opportunities in regard to the environmental / habitat aspects required under the current EA have been ignored as an 'alternative' to the proposed development by Wanless Recycling Park – being an alternative to which the community would have otherwise expected when accepting the original Mining Lease and historic resource

[7] https://apps.des.qld.gov.au/env-authorities/pdf/epml00594013.pdf

[8] *ML 4712 Resource authority public report* identifies the total surface area of the Mining Lease 357.8000 Hectares

https://myminesonlineservices.business.qld.gov.au/Web/PublicEnquiryReport.htm?permitType=ML&permitNumber=4712

extraction from the site - especially given those rehabilitation requirements are already secured by way of issue of the environmental authority by DES, should the development proposal not proceed or be refused.

It should be acknowledged that those 'other' areas of the site (i.e. *excluding* areas rehabilitated for water storage / fauna habitat under the EA) that might otherwise be suitable for industrial development would benefit greatly by the retention of a permanent water storage / fauna habitat. Retention of such water storage / fauna habitat features within the Ipswich Regional Economic Cluster would value add significantly and be an asset to the emerging regionally significant major enterprise and industrial area at Ebenezer.

As the above matters are not given any consideration in the submitted development application, the applicant should be required to provide a detailed assessment of the values arising from the environmental opportunities under the existing EA, to determine and value those lost environmental opportunities that will occur as a result of the development – i.e. which we reiterate are otherwise already secured by way of an existing approval which ensures final landform and environmental uses conform to those rehabilitation obligations under the current environmental authority.

Refer also to Point 20 of this submission, which is of significant concern relating to the applicant's intent to dewater the Tailings Pond and Active Pit areas, which is contrary to the abovementioned rehabilitation requirements under the existing environmental authority.

5 Lack of comprehensive management measures which deal with wildlife attractants within the buffer area to Amberley Air Base have not been assessed, including cumulative effects from the existing waste management activities operating at [redacted]

Submission (Objection) Grounds:

No detailed management measures which deal with wildlife attractants within the buffer area to Amberley Air Base, or assessment by a qualified bird and wildlife management expert providing details of how such measures would be implemented, have been submitted in support of the development application.

No assessment of the cumulative effects of wildlife attractants from the development proposal on the [redacted] facility (or any other surrounding existing or proposed waste management facilities) has been considered in the development application.

Given the absence of sufficient supporting scientific certainty and lack of any detailed preventive actions in the application in the face of that uncertainty, the burden of proof remains with the proponents of the activity to demonstrate that the proposal will not have adverse impacts on operational airspace in the vicinity of RAAF Base Amberley or adversely impact on the existing activities at the [redacted] facility.

Council should therefore exercise caution in its decision making and not approve the proposal in the absence of sufficient supporting information.

The submitted supporting documentation in the development application does not support approval of the application in its current form and there are no good town planning or economic reasons which would otherwise justify approval of the application.

Facts and circumstances:

Griffith University (Environmental Futures Research Institute) currently provide ongoing monitoring and research associated with wildlife management for the [redacted] facility. Their involvement with the [redacted] facility is historic, originating with a wildlife management expert report[9] undertaken by Darryl N Jones in 2001, in support of the original development application / Judgement D2686 of 2001 for the waste management facility.

The 2001 expert report was a major issue in securing development approval for [redacted] and one which was not accepted by all parties until agreement was reached, with Expert reports submitted to or sought by parties as part of the originating development application and Judgement for the [redacted] facility. This included the aforementioned expert report by Darryl N Jones, as well expert reports prepared on behalf of Ipswich City Council and the Department of Defence. The current Bird Management Plan for the [redacted] facility is currently considered one of the more sophisticated management plans of its type internationally.

Tree [redacted] therefore have significant concerns regarding the lack of understanding and need for expertise, in the form of a wildlife management expert, when planning for a major waste management facility, particularly one in proximity to an operational facility such as [redacted] This is considered a significant failure by the applicant and their consultants and with regard to planning of the application to date – regardless of the responses to the application by Department of Defence received by Council.

[redacted] is additional concerned in regard to the failure of the Department of Defence to adequately consider the effect of the development on the operations of and implementation of the Bird Management Plan already in place at [redacted] – a matter which appears to have not been taken into consideration as part of the third party response submitted to Council.

Wanless Recycling Park has provided for 'zero' environmental assessment in terms of wildlife management impacts on the RAAF Base Amberley – let alone having not bothered to consider the possible effects from the development on the existing Bird Management Plan at [redacted] - i.e. in terms of the proposed development creating an ecological 'sink', attracting significant species and increasing the numbers of these birds within the facilities and the buffer zone to RAAF Base Amberley.

[9] 'Bird Management Plan, for Proposed [redacted] Waste Management Facility' dated June 2001

Griffith University (Environmental Futures Research Institute) were engaged to provide an assessment of the supporting information with the current development application for Wanless Recycling Park (refer to **Attachment 1**) and concluded:

- *The applicant, Wanless Recycling Park Pty Ltd, should be required to submit a comprehensive wildlife management program and measures, including the cumulative effect of the proposal on* [redacted] *and any other surrounding existing or proposed waste management facilities i.e. in terms of the development creating an ecological 'sink', attracting significant species and increasing the numbers of these birds within the facilities and the buffer zone to the Base.*
- *Given the absence of sufficient supporting scientific certainty and lack of any preventive actions detailed in the application in the face of that uncertainty, the burden of proof remains with the proponents of the activity to demonstrate that the proposal will not have adverse impacts on operational airspace in the vicinity of RAAF Amberley or adversely impact on the existing activities at* [redacted]
- *Council should therefore exercise precaution in its decision making and not approve the proposal in the absence of sufficient supporting information.*

Where this matter is not appropriately considered in the assessment of the application (i.e. by way of submission of a comprehensive wildlife management program and measures, including the cumulative effect of the proposal on [redacted] and any other surrounding existing or proposed waste management facilities) and where the application is approved and site developed for the Wanless Recycling Park in absence of same, [redacted] [redacted] will be forced to take all necessary and available steps to preserve its legal rights and seek to recover any loss or damage incurred in the event that [redacted] is forced to close as a result of the proponents operations owing to non-compliance with Condition 3.7 of the current Judgement BD3265 of 2005.

6 Significant errors and inconsistencies in the design and proposed operation of the Wanless Recycling Park, including contradictions in specialist assessments, lack of sufficient detail and inadequate engineering design, including environmental assessment:

Submission (Objection) Grounds:

There are significant errors and inconsistencies in the design and proposed operation of the Wanless Recycling Park - including contradictions in specialist assessments, with a lack of sufficient detail and inadequate engineering design, including environmental assessments such that question the veracity of the supporting information submitted.

The submitted supporting documentation in the development application does not support approval of the application in its current form and there are no good town planning or economic reasons which would otherwise justify approval of the application.

Facts and circumstances:

An assessment of specialist assessments submitted with the application were reviewed by [redacted] Pty Ltd in conjunction with ATC Williams – refer to **Attachment 2**, with the contents of the attachment in full being additional facts and circumstances relied upon for this submission.

The review includes specific comments made in respect to the following submitted specialist assessments by the applicant as part of the original application and more specifically the information response to Council / SARA:

- *Appendix C – Waste Industry Management Expert Report;*
- *Appendix D – Economic Needs Analysis;*
- *Appendix E – Landfill Project Engineering Report;*
- *Appendix F – Landfill Engineering Plans;*
- *Appendix G – Site Based Management Plan;*
- *Appendix H – Receiving Environment Management Plan;*
- *Appendix J– Air Quality Assessment;*
- *Appendix N– Traffic Response;*
- *Appendix O – Flood & Stormwater Management Plan;*
- *Appendix P – Amended Civil Engineering Plans;*
- *Appendix R – Preliminary Geotechnical Investigation.*

Overall, the review and comments in regard to the abovementioned specialist reports makes clear that there are substantial shortcomings in the supporting information such that it would be considered dangerous for Council to support the application without significantly more detailed assessment by the applicant across the full range of specialist assessments.

It should additionally be noted that the above Site Based Management Plan & Receiving Environment Management Plan (Appendix G and Appendix H submitted with the information responses) did not provide any commentary or detail with respect to the operations of the Resource Recovery Facility or the construction of those facilities.

There has additionally been no consideration of the effects from the development during the construction phase. Given the potential critical environmental effects from construction required for the landfill units in the Tailings Dam, Lanes Pit and Ironbark Pit, it would be appropriate that the applicant provide a Construction Environmental Management Plan (CEMP) as part of the assessment.

The submitted supporting documentation in the development application does not support approval of the application in its current form and there are no good town planning or economic reasons which would otherwise justify approval of the application on engineering or environmental grounds, including impacts on the Ipswich Motorsport Precinct.

7 Access proposed via Champions Way is not supported and contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct:

Submission (Objection) Grounds:

The access via Champions Way is not supported by the current Planning Scheme, TLPI No. 2/2018 or draft Ipswich Planning Scheme, which require new uses (and change/expansion to existing uses) in the surrounding area to be located, designed and operated to not jeopardise the current/future operation of the Ipswich Motorsport Precinct.

Council does not support the use of Champions Way as the primary access to the proposed development.

The applicant has not appropriately responded to Council's information request.

The submitted traffic reports have identified that the proposed development will have an adverse impact on the state-controlled road network (per SARA Advice Notice).

The proposal does not address development impacts by proposing any mitigation measures, as required by the Department of Transport and Main Roads (DTMR) Guide to Traffic Impact Assessment (GTIA) (per SARA Advice Notice).

Council should therefore exercise caution in its decision making and not approve the proposal in the absence of sufficient supporting information.

The submitted supporting documentation in the development application does not support approval of the application in its current form and there are no good town planning or economic reasons which would otherwise justify approval of the application on traffic grounds, including impacts on the State-controlled road network and obvious impact on the Ipswich Motorsport Precinct.

Facts and circumstances:

Access via the extension of Champions Way is not supported, as was clearly stated in the information requested made by Ipswich City Council: i.e.

As the current Planning Scheme, the Temporary Local Planning Instrument (TLPI) No. 2/2018 (Waste Activity Regulation) and the draft Ipswich Planning Scheme all require new uses (and change/expansion to existing uses) in the surrounding area to be located, designed and operated to not jeopardise the current/future operation of the Ipswich Motorsport Precinct, ***Council does not support the use of Champions Way as the primary access to the proposed development.***

In light of such, the applicant is requested to demonstrate a suitable alternate access to the development. The alternate access/s to the development should be generally consistent with Implementation Guideline 32 Ebenezer Regional Industrial Area Implementation Guideline and Local Framework - Area 27 Ebenezer, Willowbank, Jeebropilly, Mount Forbes, Mutdapilly of the draft Ipswich Planning Scheme.

SARA issued an Advice Notice on 22 May 2020 which further clarifies (inter alia) that:

*The response to SARA's information request (IR), including the submitted traffic reports have identified that the proposed development will have an **adverse impact on the state-controlled road network** including the following intersections:*

- *Cunningham Highway / Champions Way*
- *Cunningham Highway / Cooper Road*
- *Cunningham Highway / Ipswich-Rosewood Road.*

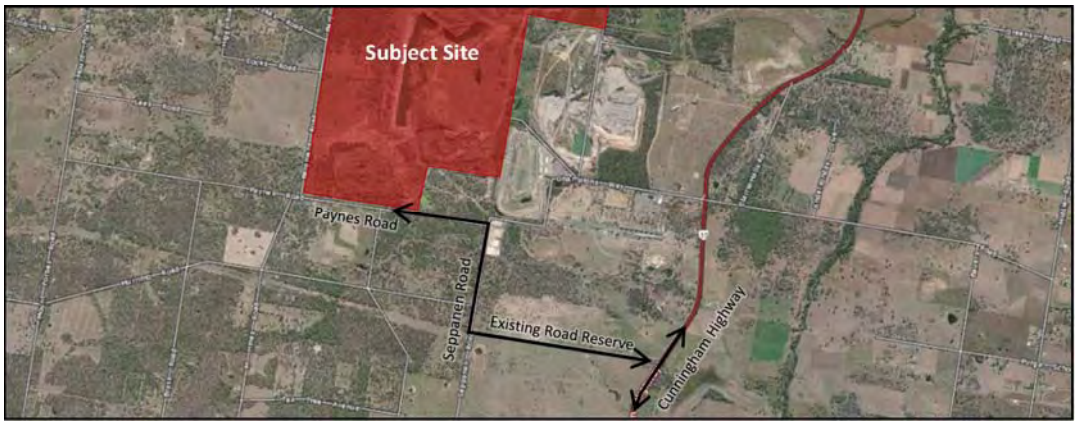
***The proposal does not address development impacts by proposing any mitigation measures**, as required by the Department of Transport and Main Roads (DTMR) Guide to Traffic Impact Assessment (GTIA)...*

The proposal, including the applicant's responses to information requests from Council and SARA, have additionally been reviewed by Bitzios Consulting (refer to **Attachment 3** to this submission), with the following summary noted:

In summary, the proposed Wanless Recycling Park proposal does not adequately consider and mitigate traffic related impacts to the surrounding road network. There are a number of items that need to be addressed from a traffic engineering perspective, including:

- *Site access proposed via Champions Way would appear contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct. Furthermore, it is inconsistent with Council's Implementation Guideline No. 32 and Figure 5a (ERIA Transport and Access Network Plan) which includes access via Seppanen Road as being within the preferred strategic road hierarchy and network within the ERIA;*
- *Ensuring the access route is suitable to accommodate B-Double access to the site;*
- *Demonstrating that there will be no impacts on the safety, operation or amenity of the Ipswich Motorway Precinct;*
- *Updating intersection modelling to reflect network conditions;*
- *Providing mitigation measures at key areas where "High" risk scores have been identified (i.e. where turning movement delays exceed thresholds), regardless of the existing operating conditions, as per the GTIA;*
- *Providing mitigation measures where intersection delay exceeds 5%, regardless of operating conditions, as per the GTIA;*
- *Conducting a Road Safety Audit on relevant state-controlled sections.*

Bitzios Consulting have additionally identified that the response prepared by TTM indicates that there are 'no viable alternative routes' between the site and the Cunningham Highway, due to the requirement for private land to complete connections. No consideration was however given to access routes south-east of the site via Seppanen Road, as illustrated below:



This route directly connects Paynes Road (frontage to site) and the Cunningham Hwy and is consistent with Council's Implementation Guideline No. 32 – Ebenezer Regional Industrial Area (ERIA) and Figure 5a (ERIA Transport and Access Network Plan) which includes this route as being the *'preferred strategic road hierarchy and network within ERIA'*. This route contains road reserves along the full length (i.e. no private property required to facilitate route connections) and (based on QLD Globe), the road reserve appears to be 20m wide, which is suitable to accommodate an Industrial Access Street as per Council's Standard Drawing (SR.03).

[redacted] Pty Led have additionally reviewed aspects of the proposed access along Champions Way (refer to **Attachment 2** to this submission), with the following additional salient points noted:

- Champions way will need to be reconstructed adjacent to raceway and as such will prevent the raceway from being able to operate normally for the duration of that construction;
- The applicant's Traffic Response (TTM) states that Champions Way will not have direct access to the highway, but rather the existing intersection will be maintained with an underpass to the upgraded highway. The service road will connect to the proposed interchanges to the north and south of Champions Way. This statement needs to have some context provided, given no planning horizon for the provision of those works has been given by the applicant.

  Note: SARA Advice Notice (22 May 2020) additionally states that the Department of Transport and Main Roads (DTMR) has confirmed that any potential upgrade works identified along the corridor are *unapproved and unfunded*.
- The applicant's Traffic Response (TTM) does not appropriately consider the existing conditions within Champions Way i.e. there is no mention of undertaking a pavement condition assessment and structural investigation of the existing road – i.e. to ascertain its present condition and expected life with the additional traffic volumes (over an expected 60 year life for the proposed Wanless Recycling Park). Where such assessment is not undertaken, it is likely Council will be faced with the need to maintain / reconstruct / repair Champions Way road in the short and longer term - for damage that would likely be caused by the heavy vehicle movements associated with the development.

- The applicant's Traffic Response (TTM) suggests that there is a scattering of development along Paynes Road, with no assessment provided for major development (including the Motorsport Precinct) anticipated in the area under the planning scheme, which would further affect growth in vehicle numbers using Champions Way well beyond the development traffic volumes submitted;
- The applicant's Traffic Response (TTM) suggests that the interplay of trucks and traffic from the raceway will not create a safety concern. This is considered to be somewhat blasé and unrealistic (given no specific assessment is provided). Likewise, TTM suggest that another lane between Paynes Road and the carpark access may be feasible – this however would not be possible given the existing road reserve is of insufficient width to cater for such vehicle separation.

Given the above, there remains significant issues and concerns with regard to traffic impacts and the site access proposed via Champions Way – which would appear contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct.

It would be considered dangerous for Council to consider approving the development with access via Champions Way.

The applicant should be further required to revisit the alternate access to the south-east via Seppanen Road, consistent with Council's Implementation Guideline No. 32 – Ebenezer Regional Industrial Area (ERIA) and Figure 5a (ERIA Transport and Access Network Plan) which includes this route as being the '*preferred strategic road hierarchy and network within ERIA'*. Necessary trunk infrastructure should be provided by the applicant to service the development, rather than the applicant avoiding the need to provide for such infrastructure in the development proposal.

8 Potential for significant residual impact on MSES, MNES and inadequate ecological assessment provided:

Submission (Objection) Grounds:

The application form for the environmental authority specifically stated that the carrying out of the proposed ERA(s) would **not** have a significant impact on a MNES – without having undertaken sufficient studies.

SARA have previously requested confirmation of lodgement of the required EPBC Act referral to the Department of Agriculture, Water and the Environment which is of relevance to MNES - the outcomes of the referral which need to be provided to DES in support of the EA application.

Council and the State should exercise caution in its decision making and not approve the proposal in the absence of sufficient supporting information on significant residual impacts on MSES and MNES.

The submitted supporting documentation in the development application does not support approval of the application in its current form and there are no good town

planning or ecological reasoning which would otherwise justify approval of the application given the unknown impacts on MSES and MNES and other ecological features of the site – including those identified in Point 4 of this submission.

Facts and circumstances:

The applicant has stated in the Ecological Assessment (*Appendix L* to the information response to Council) that:

- *It should be noted that the project is being referred to the Department of the Environment and Energy (DoEE) under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) and all matters of national environmental significance (MNES) identified on-site will be assessed through this mechanism.*

  And

- *It should be noted that an analysis of whether the proposed development will significantly impact on the TEC will be undertaken through formal referral of the project under the EPBC Act. A determination of the proposed action and if it is to have a significant impact on MNES will be decided by the Department of the Environment and Energy.*

As of the date of submission of the information response to Council, there has been no apparent referral of the project completed to the Department of the Environment and Energy (DoEE) for the above. The lack of referral of the proposal under the EPBC raises concern in terms of how the Department of Environment and Science can appropriately consider the impacts on MSES and/or any offsets that may be applicable – i.e. in absence of any referral to DoEE having occurred or decision from that department on whether there is a *Controlled Action* for matters of MNES.

An Ecological Review (**Attachment 4**) has been prepared on behalf of [redacted] with the following comments concerning the above and other deficiencies in the ecological assessments submitted by the applicant, with the contents of the attachment in full being additional facts and circumstances relied upon for this submission:

The deficiencies of this assessment, in my opinion, relate to critical analysis of ecological datasets and inadequate consideration given to assessment of impacts arising from the development footprint and impact mitigation, particularly regarding requirements for ecological offsets. Comments relating to these deficiencies are made in the following sections.

1 Seasonality of Assessment (Section 1.5)

The on-ground ecological assessment was undertaken in November. November is considered a late dry season survey, and the 30 ml of rainfall in the month preceding survey would not have initiated any strong rebound in visible floristic diversity. While I do not believe that this would have affected the findings of the threatened flora assessment, wet season surveys will be necessary to adequately describe habitat condition and inform ecological offset requirements.

2 Field Verified Vegetation Communities and Regional Ecosystems

There is no description or delineation of non-remnant and remnant eucalyptus woodland-open forest areas in the report and there has been no attempt to reclassify or amend the existing regional ecosystem mapping produced by DNRM. Remnant areas of eucalyptus woodland-open forest have not been allocated to a RE code and consideration as to whether some areas constitute High Value Regrowth has not been made clear.

In the Impact Assessment (Section 5) it is stated that 5.4 ha of non-remnant / remnant eucalyptus woodland-open forest will be impacted, but it is not stated what portion of this area is remnant and non-remnant, nor the relative proportions of the various regional ecosystems. This detail will be required to inform requirements for ecological offset.

3 Matters of State Environmental Significance – Regulated Vegetation

For MSES associated with watercourses, it is unclear as to whether VM Act Watercourses have been mapped and whether appropriate buffer distances surrounding a watercourse have been applied to fully inform offset requirements. Buffer distances applied to VM Act Watercourses is specified in Appendix 3 of the Environmental Offset Policy V1.4.

4 Terrestrial Fauna – Likelihood of Occurrence Assessment

It is not clear why species rated with a "moderate" likelihood of occurring (being previously recorded in proximity to the site and with potential habitat typologies or resources present on site) are not given further consideration in the impact assessment. Section 4.1.6 – Threatened Fauna determined two threatened fauna species listed under the EPBC Act and/or NC Act, as having a moderate or higher likelihood of occurring on the WRP site, however at least 6 other species are listed in Appendix B as having a "moderate" likelihood of occurrence. Further reasoning for their exclusion from the impact assessment is required. Analysis within Appendix B provides some reasoning for the exclusion of several species (having no records with some suitable habitat present), however some species which have either nearby records or potentially suitable habitat on site require, as per Appendix B, require further consideration including:

- *Red Goshawk;*
- *Australian Painted Snipe;*
- *Grey-headed Flying Fox;*
- *Black faced monarch; and*
- *Latham's Snipe.*

5 Impact Assessment

The impact assessment section lacks adequate detail to accurately evaluate the short and long-term impacts of the Project. The impact assessment does not include a risk matrix which should include the likelihood of occurrence of key impacts and the consequence of these impacts. This is required for each MSES and MNES known

or likely to occur on site, in the context of the total project area and the development footprint area (a comprehensive summary of areas of impact to MNES and MSES has not been provided in the document).

Council and the State should exercise caution in its decision making and not approve the proposal in the absence of sufficient supporting information on significant residual impacts on MSES and MNES and the lack of appropriate assessment of ecology. This necessarily extends to an appropriate ecological assessment of the current waterbodies on the site within the Tailings Dam, Lanes Pit and Ironbark Pit, which (as stated in Point 4 of this submission) are intended to be maintained at post-closure of the Mining Lease for 'Water Storage / Fauna Habitat' purposes.

9 Clearing of vegetation in Champions Way does not reasonably meet the test for a 'Relevant Purpose' determination under section 22A of the Vegetation Management Act 1999:

Submission (Objection) Grounds:

The application relies on a *Relevant Purpose* determination by DNRME dated 5 December 2019 for the clearing of vegetation in Champions Way, however the application was changed, rendering that determination potentially invalid.

An *alternate access* is possible to the development site from the south-east via Seppanen Road (as discussed in Point 7 of this submission), consistent with the preferred strategic road hierarchy and network within the Ebenezer Regional Industrial Area, hence the development for the road infrastructure can be *reasonably avoided or minimised* rendering any agreement for a Relevant Purpose determination by DNRME not possible.

Facts and circumstances:

The extension to Champions Way requires clearing of regulated vegetation in the road reserve, which (refer to Point 8 of this submission above) has yet to be considered under the EPBC or information responded to SARA in consideration of the required referral of the project to DoEE.

The proposed development to clear vegetation in Champions Way also would not meet the definition for the purpose of Relevant Infrastructure under section 22A of the *Vegetation Management Act 1999* because an alternate access to the site is possible (as discussed in Point 7 of this submission) yet not appropriately considered by the applicant.

DNRME original decision (5 December 2019) was based on a development proposal and information submitted to the department on 27 November 2019 and the circumstances at the time of that determination.

As to whether the clearing of vegetation reasonably meets the test for a 'Relevant Purpose' determination under section 22A of the *Vegetation Management Act 1999* for the clearing of native vegetation on Road Reserve is now questionable, given the original determination was based on a different development and that it remains highly

questionable that the clearing for the development for the road infrastructure cannot be *reasonably avoided or minimised* – given the outcomes of the above Traffic review by Bitzios Consulting regarding an alternate access to the south-east via Seppanen Road (as discussed in Point 7 above of this submission).

10 Land uses under the TLPI and prescribed ERAs applied for are unclear, in particular as they would relate to filling the southern void areas under the TLPI no. 2 / 2018 (Waste Activity Regulation) with clean fill:

Submission (Objection) Grounds:

The proposed land uses under the TLPI and prescribed ERAs applied for are unclear, in particular as they would relate to filling the southern void areas under the TLPI No. 2 / 2018 (Waste Activity Regulation) with 'clean fill'.

The application is flawed in terms of the applied proposed uses and prescribed ERAs and should not have been allowed to proceed without the application making clear what uses under the planning scheme are proposed and what ERAs are required.

Facts and circumstances:

Matters regarding whether ERA 60 will or is intended to extend to the southern (clean fill) areas of Lanes Pit and Ironbark Pit (within the TLPI Buffer Area) remain unclear in the application.

The application otherwise appears to rely on only the areas of landfill in the Tailings Dam and Lanes and Ironbark Pit within the Waste Activity Area under the TLPI to be regulated by DES under ERA 60, with an apparent expectation that waste disposal in the southern areas of Lanes Pit and Ironbark Pit (within the TLPI Buffer Area) will not be regulated by DES, with only 'clean fill' intended to be disposed of from on-site excavation and earthworks.

Matters relating to the intended place of disposal of on-site contaminated areas from past mining activities, the Tailings Dam and other potentially contaminating uses however remain unanswered in the application, with significant concern that potentially contaminated wastes or wastes other than 'clean fill' (as defined under the *Environmental protection Regulation 2019*) may be considered by the applicant for deposition in the southern (clean fill) areas of Lanes Pit and Ironbark Pit within the TLPI Buffer Area. This in itself would trigger a requirement for ERA 60 for the southern voids.

The submitted Waste Industry Management Expert Report (MRA Consulting) additionally (and incorrectly) relies on a definition for 'Clean Earthen Material or Clean fill' for the southern pit area - by reference to the *Waste Reduction and Recycling Regulation 2011*. This definition however has no relationship to the definition for 'clean earth' under the *Environmental Protection Regulation 2019* (or for that matter to any of the waste definitions under the Regulation that relate to waste management) and shows a clear misunderstanding of the nature of waste management and landfill ERAs in Qld.

SARA Advice Notice (22 May 2020) has also acknowledged this deficiency in the application as follows:

- *It is proposed to use soil material **already on site in the current overburden areas and within the void sections which require excavation**. No information has been provided to characterise such soil materials to ensure they meet the definition of 'clean earth' as per the Environmental Protection Regulation 2019 **clean earth means any natural substance found in the earth that is not contaminated with waste or a hazardous contaminant. Examples— clay, gravel, loam, rock, sand, soil**. All of the proposed soil material on site which is to be used to filling the voids within the "Waste Activity Buffer Area" must meet the above definition to ensure the requirement for ERA 60 is not triggered.*

In consideration of the above deficiencies in the application, the land uses to which the applicant has relied upon are therefore questionable.

The applicant has applied for a range of land uses under the planning scheme / TLPI including the following material change of uses in the TLPI areas:

	Ebenezer / Willowbank / Jeebropilly Waste Activity Area	**Ebenezer / Willowbank / Jeebropilly Buffer Area**
1	Waste Activity Use involving Landfill (Combination of Construction & Demolition, Commercial & Industrial & Putrescible Waste)	Waste Activity Use involving Rehabilitating a Mining Void
2	Waste Activity Use involving Waste Recycling, Reprocessing and Disposal (Special Industry) including Waste Transfer Station: operating a waste transfer station which receives waste at the rate of 20,000 tonnes or more per year	Waste Activity Use involving Waste Recycling, Reprocessing and Disposal (Special Industry) including Waste Transfer Station: operating a waste transfer station which receives waste at the rate of 20,000 tonnes or more per year
3	Waste Activity Use involving Waste Recycling, Reprocessing and Disposal (Special Industry) including operating a facility for recycling, reprocessing, storing, treating or disposing of regulated waste	Waste Activity Use involving Waste Recycling, Reprocessing and Disposal (Special Industry) including operating a facility for recycling, reprocessing, storing, treating or disposing of regulated waste
4	Waste Activity Use involving Crushing, milling or grinding (Special Industry) including screening, washing, crushing, grinding, milling, sizing or separating in works producing 5,000 tonnes or more per year	Waste Activity Use involving Crushing, milling or grinding (Special Industry) including screening, washing, crushing, grinding, milling, sizing or separating in works producing 5,000 tonnes or more per year

Under the TLPI:

Rehabilitating a mining void means:

(a) the filling of a mining void involving only 'clean earthen material'

Clean Earthen Material means

(a) bricks, pavers, ceramics or concrete that does not contain embedded steel reinforcing rods, and no piece has any dimension of more than 300mm; or

(b) clean earth that has trace elements and contaminant levels within the interim ecologically-based investigation levels for urban land use under the document 'Schedule B(1) – Guidelines on the Investigation of Soil and Groundwater', forming part of the National Environment Protection (Assessment of Site Contamination) Measure 1999

The applicant has yet to demonstrate that filling for the voids within the Ebenezer / Willowbank / Jeebropilly Buffer Area meet the above definitions - sufficient to warrant the use definition for *Rehabilitating a mining void*. This has been made clear in the SARA Advice Notice (Issue 14 Clean earth definition) which has yet to be responded to by the applicant.

Even where the applicant seeks to use the definition for *Rehabilitating a mining void* under the TLPI, in doing so this may still trigger a requirement for ERA 60 being applied to the void spaces i.e. where *Clean Earthen Material* in part (a) is applied[10]; or where the applicant fails the to demonstrate clean earth that has trace elements and contaminant levels within the interim ecologically-based investigation levels for urban land use under the stated document in part (b) of the definition.

The applicant additionally and clearly stated in its response to the SARA information request (27 April 2020) that:

- *The clean fill area to the south of Lanes and Ironbark Pits are is to be filled used soil material on site. In this,* ***soil that is located on site in the current overburden areas as well as areas within the voids that require excavation to create stable walls are proposed to be used as the clean fill in this area.*** *It is noted that no material external to the site is proposed to be used as "clean fill" for the purposes of remediating the areas outside of the Waste Activity Area under Ipswich City Council's Waste Activity TLPI No. 2 of 2020.*

That the applicant can achieve Rehabilitating a mining void by way of use of Clean Earthen Material from within the site has not been demonstrated by the applicant, which may invalidate the whole of the application in applying for use which is not feasible to be carried out on site under the TLPI definition for Rehabilitating a mining void.

[10] Part (a) of the Clean Earthen Material definition under the TLPI also does not constitute 'clean fill' under the Environmental Planning Regulation 2019

The above considerations further extend to the applicant's inability (to date) to provide sufficient evidence that 'clean earth'[11] as defined under the *Environmental Protection Regulation 2019* will be used for the southern of Lanes and Ironbark Pits. It is further considered unrealistic that the applicant could source some 6.7 million cubic meters of 'clean fill' from within the site, with no quality assurance given in respect to ensuring that 'clean fill' only is utilised within the southern areas of the voids. This is a significant failure of the application, with significant concerns now raised where contaminated materials may be intended to be used to fill void spaces within the Buffer Area.

Other definitions utilised by the applicant (including those which relate to recycling, reprocessing, storing, treating or disposing of regulated waste) are of significant concern, given these activities generally include a requirement for other waste management ERAs which have **not** been included in the application. This would potentially 'open the door' for the applicant to seek additional prescribed ERAs at a later stage without requiring an appropriate assessment under the planning scheme.

The description in the **amended DA Form 1** submitted by the applicant on 6 May 2020 is further described *differently* in Council's Notice of Change Application dated 8 May 2020 and in the public notification of the development. The public notification of the development application incorrectly describes ERA 54 - 2(c) as Mechanical Waste Reprocessing (in a year) for **Category 1 regulated waste** whereas this threshold allows for mechanically reprocessing **general waste** only. This simply adds to the confusion over what exactly the applicant has applied for, including the land uses and ERAs.

Council and SARA should ensure the applicant is making application for the correct land uses under the planning scheme / TLPI and have included the correct prescribed ERAs as they apply to the activities proposed, given to date it remains confusing for any reasonable person to comprehend the true nature of the proposed development application - in terms of understanding exactly what the applicant is intending with regard to the required land uses and/or prescribed ERAs.

11 Noise impacts not adequately addressed:

Submission (Objection) Grounds

Insufficient supporting information on noise impacts have been addressed for existing and future development within the Ebenezer Regional Industrial Area (ERIA) and Ipswich Motorsports Precinct.

Facts and circumstances:

A peer review of the noise assessment for the proposed Wanless Recycling Park at Willowbank has been completed by Air Noise Environment (ANE) and is included at **Attachment 5** to this this submission. The ANE peer review concludes the following:

[11] clean earth means any natural substance found in the earth that is **not** contaminated with waste or a hazardous contaminant.

Overall, the assessment addresses the relevant noise issues through the use of noise monitoring and noise modelling. The assessment criteria, noise sources and modelling methodology are generally considered appropriate. However, clarification and justification on the following matters is considered important:

- *Justification on adopting a higher noise criteria during the 6 am to 7 am period;*
- *Clarification on modelling inputs:*
  - *assumptions or source of topographical data for modelled capped landfill area;*
  - *the modelled sources/activities located inside the Resource Recovery Buildings (and sound power levels of these sources);*
  - *assumptions regarding the number of dump truck movements along haul routes.*
- *Further details on the evaluation undertaken to justify that impulsive characteristics would not be discernible;*
- *Apparent inconsistencies with the argument for modelling calm conditions (instead of downwind or temperature inversion conditions);*
- *Justification that the proposed measures (which are detailed only in general terms) are feasible for the proposed operations.*

It is additionally noted that SARA have also identified (post commencement of the public notification on 22 May 2020) that noise exceedances are predicted at residences in Bergmans Road and Wilkes Road Ebenezer.

There has been insufficient assessment of the potential impacts on sensitive receptors for future development within the whole of the ERIA and Ipswich Motorsports Precinct that would otherwise justify approval of the development application.

12 Air quality impacts not adequately addressed:

Submission (Objection) Grounds

Insufficient supporting information on air quality impacts have been addressed for existing and future development within the Ebenezer Regional Industrial Area (ERIA) and Ipswich Motorsports Precinct.

Facts and circumstances:

A peer review of the noise assessment for the proposed Wanless Recycling Park at Willowbank has been completed by Air Noise Environment (ANE) and is included at **Attachment 6** to this this submission. The ANE peer review concludes the following:

A peer review of the air quality assessment for the proposed Wanless Recycling Park at Willow Bank has been completed. Overall, the assessment addresses the relevant air quality issues through the use of air dispersion modelling modelling. The assessment

criteria, air emission sources and modelling methodology are generally considered appropriate. However, there are some areas of uncertainty where clarification should be sought:

- *clarification as to whether the modelling approach represents a worst-case emission scenarios (as required by the DES guideline 'Application requirements for activities with impacts to air');*
- *further justification that the total odour emission rates from the waste transfer building are representative of the proposed operations (see section 'Estimated Odour Emission Rates' of this letter);*
- *clarification on the timing of the gas recovery system, and therefore, the suitability of the gas recovery rates applied for the odour assessment;*
- *clarification regarding the appropriateness of the [redacted] [redacted] facility modelling assessment for the assessment of cumulative impacts (i.e. whether the 2008 modelling inputs are representative of the [redacted] facility in it's current form/stage, including consideration of any odour complaint history).*
- *clarification on the modelled dry deposition parameters (these have not been provided, and can have a significant influence on the TSP, PM10 and PM2.5 outcomes).*

In addition to the above, it is noted the modelling assumes a higher control efficiency of 75% for watering of unsealed haul routes. According to the NPI, this control efficiency is related to a specific watering rate (> 2 L/m2/hour). As the compliant modelling outcomes are partly dependent on this assumption, mitigation measures should clearly state the haul route watering rate required for the site to achieve a 75% reduction, and whether there is sufficient water supply is available for achieving the watering rate.

The Air Quality Assessment (Appendix J to the information response) has also been reviewed [redacted] Pty Ltd who additionally note the following points of relevance (refer to **Attachment 2**):

68. (p25, figures 8 & 9) These figures indicate the location of odour generating activities. However, there is no mention of the proposed open-air leachate dams, even though further in the report (p86, table B3) it refers to an analysis undertaken by Heggies which includes leachate dams as generating odour. As such has this study included all sources of odour and is it correct?

69. (p80, table B1) This table sets out a summary of the activity data used in the modelling. There doesn't seem to be any consideration of air quality during the construction of the proposed facility. This table also confirms that odour from the proposed open-air leachate dams hasn't been included.

It is noted that SARA Advice Notice (22 May 2020) has raised a significant number of additional concerns (Issues 16-29) with regard to the veracity of the submitted documentation in regard to air quality assessment.

There has been insufficient assessment of the potential air quality impacts on sensitive receptors or future development within the whole of the ERIA and Ipswich Motorsports Precinct that would otherwise justify approval of the development application.

13 Potential negative outcomes associated with solid waste disposal for the City of Ipswich, including potential environmental and amenity impacts and negative image connotations of Ipswich as a 'Dumping Ground' for SEQ and other regions

Grounds:

Wanless Recycling Park has the potential for negative outcomes associated with solid waste disposal for the City of Ipswich, including potential environmental and amenity impacts and negative image connotations of Ipswich as a 'dumping ground' for SEQ and other regions.

Fact and Circumstances:

[redacted] currently pay annual Contributions for Local Environmental Improvements pursuant to the originating and amended approvals (Condition 8 of BD3265 of 2005). These contributions are utilised for community and environmental improvements across the City - as determined by Council and having regard to the impacts (whether 'perceived' or 'real') that may arise from the development. Council have additionally indicated that funds from these contributions are targeted to environmental and social programs of work.

Council should be concerned that the approval of the Wanless Recycling Park has the potential for negative outcomes associated with solid waste disposal for the City of Ipswich, including potential environmental and amenity impacts and negative image connotations for the ERIA and for Ipswich as a 'dumping ground' for SEQ and other regions.

Approval of the Wanless Recycling Park may also undermine and/or make redundant such contributions - where a second waste management facility is established adjacent to [redacted] site, there may be limited need for the contribution to continue given the intent of the original condition imposed by Council via the Judgement would no longer reasonably apply to the [redacted] facility.

In the event that the Wanless Recycling Park was to be approved by Council (or subsequently by the Courts), it would seem therefore wholly reasonable and relevant that Council establish the same requirement of the developer of Wanless Recycling Park by way of imposing annual Contributions for Local Environmental Improvements.

14 Reconfiguration inconsistent with Covenant No 719512481

Grounds:

The proposed Reconfiguration is inconsistent with Covenant no 719512481.

Fact and Circumstances:

Covenant No 719512481 restricts dealings over Lot 1 on RL8701, Lots 1 and 2 on RP24570, Lot 1 on RP24569, Lot 10 on SP307771 and Lots 18, 229 to 231 and 240 to 243 on CH3132.

The proposed subdivision cannot be effected unless the Covenant is removed, making any approval potentially inconsistent with the current restriction on titles.

This matter should have been considered in the application.

The applicant should provide an explanation of how the reconfiguration is intended to be completed whilst the covenant remains in place.

This should extend to the closure of the Road Licence area, which was suggested to the applicant by DNRM, and include what discussions or approvals are required from Ipswich City Council (including any compensation required), given Council's vested interest in the Road Licence area – i.e. which was supposed to (on surrender of the Licence) revert to the Council (former Moreton Shire).

Whether owner's consent was required for the inclusion of the Road Licence area is a matter for Council consideration however it is noted that under the Land Act a temporarily closed road (i.e. the Road Licence area) is still a dedicated road for public use even though the public cannot use the road until it is reopened – pursuant to section 106 of the *Land Act 1994*.

In addition, the reference to Lot 1 RL8701 in the development application is a reference to a 'road' and not 'land' (as defined under the *Planning Act 2016*). It is questionable whether a *material change of use* of a 'road' can occur under the planning scheme or the *Planning Act 2016*, given the definition for a 'material change of use' is exclusive to a 'premises' - which includes 'a building or other structure; or land, whether or not a building or other structure is on the land'. This does not extend to a 'road' which has the meaning given in the *Transport Infrastructure Act*, *schedule 6*, *definition road, paragraphs (c) and (d)*. A material change of use of the 'road' would therefore require the 'road' being closed and then a subsequent application for a material change of use made for its use. This matter additionally therefore needs to be resolved by the applicant and Council, given any development approval cannot extend to the 'road', Temporary Closed Road or hence the Road Licence (Lot 1 RL8701).

15 Inconsistency with existing development approvals and other land uses within the development footprint:

Submission (Objection) Grounds:

The validity of existing development approvals (and environmental authorities) and other land uses within the development footprint have not been adequately addressed by the applicant.

Facts and circumstances:

Maxam Australia Pty Ltd currently occupies a lease which relies on access over Lot 1 SP167885 and part of Road Licence area (Lot 1 RL8701). The applicant has stated that the lease will not be renewed however it would be expected that the lease would have to have ceased and use abandoned – otherwise any approval may be in conflict with an existing development permit / lawful use of the land. Similar questions may be raised in regard to the existing use by Bentonite Resources Pty Ltd.

A Paunch area also has historically operated on significant parts of the site and is wholly limited to the rehabilitation requirements of the Mining lease. At the time of any surrender of the Mining Lease, these activities would need to cease or otherwise seek further development approval / environmental authority (for the ERA) from Council / DES.

Land contamination issues associated with previous approvals also would need to be addressed in further detail, given the concerns raised on Point 10 – i.e. in terms of relying on soil located on site in the current overburden areas, as well as areas within the voids that require excavation to create stable walls, being suggested to be used as clean fill in the southern parts of Lanes Pit and Ironbark Pit within the TLPI Buffer area.

The above matters are not sufficiently discussed or dealt with in the development application.

SARA Advice Notice (Issue 30) dated 22 May 2020 has also raised similar concerns in regard to the existing environmental authority EPPR00722613 held by Maxam Australia Pty Ltd – matters which should have been resolved prior to the making of the current development application.

16 Inconsistency with the Regional Business and Industry Zone - Sub Area RBIA1 – Ebenezer Willowbank and Precinct 3, expanded Ipswich Motorsport Precinct and SEQ Regional Plan:

Submission (Objection) Grounds:

The development is inconsistent with the *Regional Business and Industry zone - Sub Area RBIA1 Ebenezer Willowbank* and *Precinct 3, Expanded Ipswich Motorsport Precinct* and there is insufficient justification or good town planning reasons to approve the development.

The development is inconsistent with the *SEQ Regional Plan* and there is insufficient justification or good town planning reasons to approve the development.

Facts and circumstances:

Whilst the site is included within the *Ebenezer / Willowbank / Jeebropilly Waste Activity Area* under the Temporary Local Planning Instrument (TLPI) No. 2 of 2018 (*Waste Activity Regulation*), the TLPI does not replace the Planning Scheme, rather it provides for additional regulation around development within the area.

The site is within *Regional Business and Industry zone - Sub Area RBIA1 – Ebenezer Willowbank* (largely located in *Precinct 3 Expanded Ipswich Motorsport Precinct*) which includes and is supported by the *Ipswich Motorsport Precinct Strategic Planning Study*. That Planning Study was adopted as a planning resource document by Council and intended to be used as a position paper for liaison with the Queensland Government regarding its future support for Motorsport in Queensland, including to identify and elicit support by potential partnerships to develop the Ipswich Motorsport Precinct.

The site is largely located in Precinct 3 (other than for the Tailings Dam) of the Expanded Ipswich Motorsport Precinct, which provides for *new uses and works which support the implementation of the Ipswich Motorsport Precinct Strategic Planning Study.*

The applicant has provided for limited to no assessment of the strategic importance of the Ipswich Motorsport Precinct, the significance of which is supported in the SEQ Regional Plan.

The SEQ Regional Plan provides for sub-regional outcomes identified to implement key ShapingSEQ strategies. These outcomes align with ShapingSEQ's five themes: *Grow, Prosper, Connect, Sustain* and *Live*. The Ipswich Motorsport Precinct is identified under *Outcomes for Prosper* in the SEQ Regional Plan as a *Special Use* – i.e.

- *The Ipswich Motorsports Precinct at Willowbank is a regionally, state and nationally significant motorsport and outdoor recreational facility that hosts a range of national and international events.*

Given the proximity of the proposed development to the Ipswich Motorsport Precinct, including utilising the primary access to that Precinct along Champions Way (and potential conflicts with public users of that access), the applicant ought to have provided a detailed assessment of the impacts on the current and future anticipated development of the Ipswich Motorsports Precinct.

In the absence of any such detailed consideration of the future impacts on the Ipswich Motorsports Precinct, the applicant has failed to demonstrate that the proposal is consistent with the relevant planning scheme provisions applicable to the zone and precinct and the sub-regional outcomes under the SEQ Regional Plan.

17 Inconsistencies with the strategic outcomes of the planning scheme:

Submission (Objection) Grounds:

The applicant fails to demonstrate compliance with the planning scheme strategic outcomes. In particular, the applicant has provided insufficient information to address the following DEOs:

(a) the values of significant natural features, including the principal conservation areas are not compromised;

(b) adverse effects on the natural environment are minimised or prevented with respect to the loss of natural vegetation and associated habitat, soil degradation, air

pollution and water pollution owing to erosion, chemical contamination, acidification, salinity, sewage and wastewater treatment, management and effluent disposal and the like;

(j) the health and safety of people, and the amenity they enjoy, are maximised, particularly in the urban and township areas where different types of uses are located close together;

Facts and circumstances:

The specialist reports submitted do not provide adequate information to be able to adequately address that these DEOs will be achieved, as demonstrated in the overall context of this submission.

The lack of information provided demonstrates that the proposal does not satisfactorily comply with the respective DEOs.

18 Non-compliance with planning scheme codes:

Submission (Objection) Grounds:

The proposal does not comply with the specific outcomes for the Regionally Significant Business and Industry Areas, as a whole in section 6.7 or the specific outcomes for the relevant zone - Regional Business and Industry Investigation Zone (Sub Area RBIA1 – Ebenezer Willowbank).

Facts and circumstances:

A strategic transport network is not provided for the development, with facts and circumstances relied upon in this regard already detailed in Point 7 of this submission.

Carparking is not provided in accordance with the demand generated by uses, based on the gross floor area (GFA) of the proposed development – i.e. GFA for the development would require 216 parking spaces, with the proposal having significantly less capacity at 50 parking spaces.

Uses and works have not been designed to support integrated catchment management, in consideration of the protection and rehabilitation of natural drainage patterns and riparian vegetation, with facts and circumstances relied upon in this regard already detailed in Point 8 and Point 9 of this submission.

Particular attention has not been given to the proposal in terms of protection of Operational Airspace in respect to Wildlife Hazards within 8km of RAAF and the proposal does not comply with the Development Constraints Overlay Code in terms of Defence Facilities and avoiding uses that attract birds and bats within 3km and 13km of the airport runway (i.e. putrescible waste disposal sites are avoided within 13km of the airport runway). Rigorous wildlife management measures to avoid attracting wildlife have not been incorporated in the development proposal, as required under the planning scheme. Facts and circumstances relied upon in this regard have been detailed in Point 5 of this submission.

The development is inconsistent with the *Regional Business and Industry zone - Sub Area RBIA1 Ebenezer Willowbank* and *Precinct 3, Expanded Ipswich Motorsport Precinct* and there is insufficient justification or good town planning reasons to approve the development – with facts and circumstances relied upon in this regard already detailed in Point 16 of this submission.

The submitted supporting documentation in the development application does not support approval of the application in its current form and there are no good town planning, environmental or economic reasons which would otherwise justify approval of the application.

19 Inconsistencies with the planning scheme Implementation Guideline No 32:

Submission (Objection) Grounds:

The applicant fails to take into proper consideration Implementation Guideline No. 32 - Ebenezer Regional Industrial Area Implementation Guideline.

Facts and circumstances:

The following key points with respect to the Ebenezer Regional Industrial Area Implementation Guideline are noted:

2.2 Key Resource Areas

The study area contains known resources, mining leases, mineral development licenses and haul routes as shown on Overlay Map OV2 - Key Resource Areas (KRA), Buffers and Haul Routes.…

The conditions and expiry dates of each mining tenure vary. ***Depending on the particular mining tenure clauses, site rehabilitation may be required following cessation of the mining activity****.*

The development proposal is in clear conflict with the rehabilitation requirements under the existing Mining Lease – with facts and circumstances relied upon in this regard already detailed in Point 3 and Point 4 of this submission.

2.4 Contaminated Land Register and Environmental Management Register

The past and current mining, industrial and rural activities (eg. cattle dips) within the study area have resulted in a risk of contamination to the land. The mining activity contamination issues include a combination of waste mine spoil and potential acid mine drainage.

Various waste materials have historically been used to fill the former mining excavations. These waste materials often were of a putrescible nature having the potential to generate landfill gas that could be explosive and pose a risk to human health.

Full Environmental Management Register (EMR) and Contaminated Land Register (CLR) searches should be undertaken for each allotment within the study area and ***further inspection and detailed audit should be undertaken to determine the potential type and extent of contamination present****. Advice from the Department of Environment and Heritage Protection (DEHP) should be sought for lots recorded on the registers.*

Given the range of mining and other prescribed ERAs which have historically operated on the site, a detailed audit should have been undertaken to determine the potential type and extent of contamination present – particularly given the intent to use onsite spoil and excavations for uncontrolled fill the southern portions of Lanes and Ironbark Pits. Facts and circumstances relied upon in this regard have already been detailed in Point 10 mand Point 16 of this submission.

2.9 RAAF Base Amberley

The Ipswich Planning Scheme contains provisions aimed at ***avoiding direct or indirect conflict between the operations of RAAF Base Amberley and surrounding land uses*** *by providing for the safety and operational efficiency of the Base and compatible development of the surrounding lands.*

The development proposal is in clear conflict with operations of RAAF Base Amberley. Facts and circumstances relied upon in this regard have already been detailed in Point 5 of this submission (objection).

2.18 Ipswich Motorsport Precinct

New uses and works should support the ongoing operation and function of the Ipswich Motorsport Precinct *and could include motorsports and specialist automotive related industrial businesses. Expansion of the Motorsport Precinct should be integrated with the surrounding land uses, infrastructure and greenspace corridors.*

The development proposal is in clear conflict with and does not support the ongoing operation and function of to the Ipswich Motorsport Precinct – with facts and circumstances relied upon in this regard already detailed in Point 7 and Point 16 of this submission.

2.24 ERIA Opportunities

Opportunities also exist in the ERI study area for further motorsport development within the Ipswich Motorsport Precinct and for land uses in proximity to the precinct that are complementary to and associated with motor sports and automotive and related uses that can leverage off the Ipswich Motorsport Precinct.

The ERIA study area also provides opportunities for consolidation and linkage of substantial areas of greenspace (incorporating conservation/rehabilitation/drainage and buffer areas) which also afford potential offset receival sites.

The development proposal is in clear conflict to the ERIA opportunities for further motorsport development in the Ipswich Motorsport Precinct, with no reasonable assessment provided by the applicant on the effects of the development on those future

opportunities - with facts and circumstances relied upon in this regard already detailed in Point 7 and Point 16 of this submission.

In addition to the above matters, in regard to the proposal to utilise Champions Way for access to the Wanless Recycling Park, there has been no consideration by the applicant of the alternate access route south-east of the site - via Seppanen Road, which directly connects Paynes Road (frontage to site) and the Cunningham Hwy. This alternate access is consistent with Council's Implementation Guideline No. 32 – Ebenezer Regional Industrial Area (ERIA) and Figure 5a (ERIA Transport and Access Network Plan) which includes this route as being the ***'preferred strategic road hierarchy and network within ERIA'***. The route contains road reserves along the full length (i.e. no private property required to facilitate route connections) and the road reserve appears to be 20m wide, which is suitable to accommodate an Industrial Access Street as per Council's Standard Drawing (SR.03).

There are additional aspects of non-conformity with the Implementation Guideline No. 32 - Ebenezer Regional Industrial Area Implementation Guideline as whole, including greenscape connections (i.e. waterways, habitat areas, koala habitat and isolated patches of *Melaleuca irbyana*) which will be severed by the proposal to removal vegetation and habitat to utilise Champions Way extension for access to the development.

Overall, the development is in clear conflict with the Ebenezer Regional Industrial Area Implementation Guideline.

20 Avoidance of assessing the environmental impacts from Dewatering of the Tailings Dam and Pits - by way of a proposed amendment of the mining EA that is inconsistent with the rehabilitation requirements of that EA:

Submission (Objection) Grounds:

It is inappropriate to amend the Mining environmental authority (EPML00594013) for the purposes of avoiding assessing environmental impacts from dewatering of the Tailings Dam and Pits (including sludges) that are as a direct result of a 'separate application' a prescribed ERA which has not yet been approved.

The applicant, Wanless Recycling Park Pty Ltd, is not entitled to amend the Mining environmental authority (EPML00594013) which is held by another entity Zedemar Holdings Pty Ltd.

Zedemar Holdings Pty Ltd, the holder of Mining environmental authority (EPML00594013), would have no basis or reasoning for dewatering of the Tailings Dam and Pits (including sludges), given the Tailings Dam and Pits are required for Water Storage / Fauna Habitat under environmental obligations and conditions of that Mining environmental authority (EPML00594013).

Dewatering of the Tailings Dam and Pits (including sludges) is inconsistent with environmental obligations and conditions of Mining environmental authority (EPML00594013).

Facts and circumstances:

SARA original information request (18 February 2020) required the following information to be provided by the applicant in regard to dewatering of the voids:

(a) Provide detailed information about how the voids will be dewatered, including water quality, water quantity, release points and release rates

(b) Take water samples from the voids and water quality data for further assessment

(c) Undertake a detailed risk assessment to assess the potential impacts of the dewatering on the receiving environment (surface water and groundwater) and propose appropriate mitigation measures to prevent or minimise these impacts.

SARA Advice Notices dated 22 May 2020 further states:

Dewatering of the voids

33. Advice:

It is acknowledged that the dewatering of the existing mining voids is proposed to be carried out under the existing EA attached to the mining lease. Providing all void water quality issues are addressed within the mining EA amendment application, no further information on the void dewatering process is required for this landfill application.

The above advice however appears to have been premised on the basis of the applicant's information response to SARA (27 April 2020) which stated:

Dewatering of the mining voids is a condition that exists on the existing Environmental Authority attached to the mining lease.

A review the existing environmental authority (EA) EPML00594013 for the site, which took effect on 28 April 2020[12], makes it abundantly is clear that there is **no condition which requires dewatering of the mining voids**.

The above statement by the applicant's consultants is misleading and fanciful!

The applicant, Wanless Recycling Park Pty Ltd, is further **not entitled** to amend the Mining environmental authority (EPML00594013) which is held by another entity Zedemar Holdings Pty Ltd.

As stated in Point 4 of this submission, the site is subject to a current EA EPML00594013 (28 April 2020) which contains specific *Rehabilitation landform criteria* pursuant to Condition F1 and Table F1 (*Final land use and rehabilitation schedule*). There was a community expectation, secured by way of the Condition F1 and Table F1 of the EA, that at completion of mining activities under EA EPML00594013, the *'Tailings Ponds' 'Dams and ponds'* and *'Active Pit'* areas would be rehabilitated for ***'Water Storage / Fauna Habitat'***. It is therefore impossible to understand how the

[12] https://apps.des.qld.gov.au/env-authorities/pdf/epml00594013.pdf

applicant considers that there could possibly be a condition of the current Mining environmental authority which requires *Dewatering of the mining voids.*

Tailings Ponds, Dams and ponds, and Active Pit areas intended for water storage / fauna habitat further represent a significant contribution to the local community and contribute to the environmental values of the area – given the total surface area of such water storage / fauna habitat would equate to around 86ha - or around 24% of the total surface area of the Mining Lease[13].

Given the above matters, it is unclear how the applicant could be therefore be permitted (given no decision has been made with respect to the current development application) to dewater existing voids, given such approval would be in direct contradiction to conditions and violation of the requirements of the existing EA EPML00594013 and considering the applicant has no jurisdiction under which that environmental authority could be amended.

It is clear that dewatering existing voids is **not** related to EA EPML00594013 and is proposed solely to permit the environmentally relevant activities to proceed under the current proposal.

Zedemar Holdings Pty Ltd, the holder of Mining environmental authority (EPML00594013), would therefore have no basis or reasoning for dewatering of the Tailings Dam and Pits (including sludges), given the Tailings Dam and Pits are required for Water Storage / Fauna Habitat under environmental obligations and conditions of that Mining environmental authority (EPML00594013).

Dewatering of the Tailings Dam and Pits (including sludges) is therefore inconsistent with environmental obligations and conditions of Mining environmental authority (EPML00594013).

It would be considered a breach of the Department's responsibility to allow for dewatering of the existing voids, given the above considerations, without there being an appropriate assessment of the effects on environmental values as a consequence of the proposed dewatering – including how the applicant intends to deal with tailings sludges.

A response to SARA original information request is therefore considered outstanding and SARA should insist on the provision of the information as originally requested.

Concerns with regard to dewatering have additionally been raised in the review of the specialist reports completed by [redacted] Pty ltd and ATC Williams (**Attachment 2** to this submission). In particular, that review acknowledged the following major concerns with the applicant's submitted Receiving Environment Management Plan (prepared by Taft Engineering - Appendix H of the information response to Council):

[13] *ML 4712 Resource authority public report* identifies the total surface area of the Mining Lease 357.8000 Hectares
https://myminesonlineservices.business.qld.gov.au/Web/PublicEnquiryReport.htm?permitType=ML&permitNumber=4712

26. *(p5, Section 3.2) This report states: WRP is proposing landfilling of C&D and dry C&I to occur in the Tailings Dam void which is clearly defined by the topography. As part of the development reprofiling void batters will be undertaken, dewatering and removal of all of the tailings and subgrade improvement works to support the containment system.*

    The proponent proposes to dewater the tailings dam and remove the tailings sludge. Yet there has been no discussion regarding the environmental effects of dewatering and the feasibility of removing the tailings sludge. In fact, the applicant hasn't even undertaken any sampling and analysis of this tailings dam water and sludge. Discussions with the former mining superintendent suggests that the tailings water was comprised of some 20% to 25% of super saturated solids. Further, as discussed in point 12 above, there is some confusion regarding where this sludge could be deposited. Experience shows that the safe removal of tailings sludge to be very difficult. As such it would be reasonable for the removal methodology to be discussed, with a management approach clearly defined (and considered in the feasibility assessment of the proposal).

    Further, the history of the tailings dam development is unknown and not described in the documentation. The drawings suggest the tailings dam is formed within an excavated pit, extending to levels as low as RL-20m.

    The development of the pit used for the tailings dam development has direct relevance to the proposed landfill construction. In particular, excavating a dedicated pit for tailings storage purposes in the times when mining at Ebenezer occurred is uncommon. It would be more likely that the excavation (particularly to the depth indicated) was formed as a pit for coal extraction. In this case, it is also possible that the pit was backfilled to an extent by waste rock. In either case, difficulties with excavation to the pre-tailings dam development profile presents challenges.

    A mining study by Taylor Mining Services is referenced however cannot be found in the documentation for verification purposes.

    Geotechnical investigation would be required to confirm these conditions.

    It is also assumed that the base of the Tailings Dam used for design purposes is based on pre-deposition conditions (i.e. the base of the pit prior to placement of any tailings). This would need to be confirmed as part of planning and design.

29 *(p8, Section 3.3) This report states: As part of the development (LIP[14]) reprofiling void batters will be undertaken, dewatering and subgrade improvement works to support the containment system. There are no details on the dewatering of the LIP. There is a considerable volume of water retained within the pit, that will need to be removed prior to any earthworks or landfill development being possible (controlled by the need to access the base of the void for reprofiling purposes).*

    It cannot be considered to be safe to undertake works in one portion of a pit while another portion holds a depth of water, regardless of the extent of containment or

[14] Lanes and Ironbark Pits

separation. Therefore, it will be necessary to dewater the void to the fullest extent practical from the outset, then maintain ongoing inflows (surface water and groundwater) as the development progresses to ensure that the landfill is not inundated. The quality of water contained within the void is critical to pit dewatering. No baseline water quality data has been provided, although it can be expected that the upper water column would be relatively fresh, however due to the anticipated depth of water in the void, a temperature or salinity controlled interface would likely exist at some depth (possibly as shallow as 1.5m from the surface). It can be expected, particularly due to the period since mine closure and the enclosed nature of the pit, that water quality conditions below this interface would be very poor, likely being saline, anoxic, and with a high organic content. Typically, such water is very difficult and costly to treat to a standard required for discharge to the receiving environment. The required process may require aeration, biological (bacterial) treatment in addition nitrification/ denitrification and possibly reverse osmosis. Such a process would be very costly to establish and operate, with the treatment period likely to extend over a lengthy period, therefore compromising the overall development program. Groundwater is addressed in Section 3.4, however in the absence of a hydrogeological assessment, there is no understanding of the potential groundwater inflows to the dewatered pit, and the effort and cost required to keep the pit dry for landfill development purposes. This will be a long-term issue, until the landfill base rises above any potential groundwater level. In support of this concern, the drawings indicate a groundwater level around the LIP of around RL25m, which is some 35m above the proposed base.

For reasons above, the Receiving Environment Management Plan is considered inadequate and should be reviewed in light of the aforementioned concerns, including a detailed assessment of impacts on environmental values from dewatering of voids and management of tailings pond sludges.

Application may not have been entitled to proceed to Public Notification:

SARA Advice Notice dated 22 May 2020 indicates significant outstanding issues which would indicate that the applicant's information response to SARA was not a 'full response'.

The applicant appears to have been aware of this at a meeting with SARA on 12 May 2020 (and possibly earlier).

The Notice of Intention to Commence Public Notification was given on 11 May 2020, with advertising commencing on 14 May 2020 - after the applicant became aware of these (SARA) significant outstanding issues.

It is of concern, given the scope and significance of the additional issues raised by SARA (i.e. 33 separate points in total), that the applicant proceeded with the public notice - with the knowledge of significant shortcomings in the information response given to SARA.

Whether this warrants a need for re-advertising of the development application will be a matter for Council as the assessment manager to determine, however in the interests of the public, it is expected than Council seek confirmation from SARA as to whether the applicant's

initial response on 27 April 2020 to the SARA information request constituted a 'full response' - in accordance with the Development Assessment Rules - such that the applicant was entitled to proceed to public notification.

Notwithstanding the above, it is clear that not all of the information request items of SARA had been responded to and hence the applicant should not have proceeded with the public notice of the application. The following emphasises this point:

- Item 8 and Item 9 of SARA's information request required confirmation of lodgement of the required EPBC Act referral, with the outcomes of this referral to be provided to DES in support of the EA application.

  There is no evidence of the applicant submitting this this information, which would be critical to assessment of the material change of use and assessment of the environmental authority;

- Item 11 of SARA's information request required information regarding the dewatering process for the Tailings dam, Lanes Pit and Ironbark Pit including how the voids will be dewatered and information on water quality, water quantity, release points and release rates – as well as water samples from the voids and water quality data for further assessment. A detailed risk assessment to assess the potential impacts of the dewatering on the receiving environment (surface water and groundwater) and appropriate mitigation measures to prevent or minimise impacts were also requested.

  None of the above information has been provided, with the applicant stating that "Dewatering of the mining voids is a condition that exists on the existing Environmental Authority attached to the mining lease". This statement is however not true, as detailed in Point 20 of the above submission.

On the basis of the above matters alone, it would be reasonable to conclude that the applicant did not provided a 'full response' to the SARA information request and hence should not have proceeded to public notification of the application.

Properly made submission about the application for the environmental authority:

Pursuant to s.115 (4) of the *Environmental Protection Act 1994* this properly made submission is, to the extent it relates to the prescribed ERAs, taken to be a properly made submission about the application for the environmental authority.

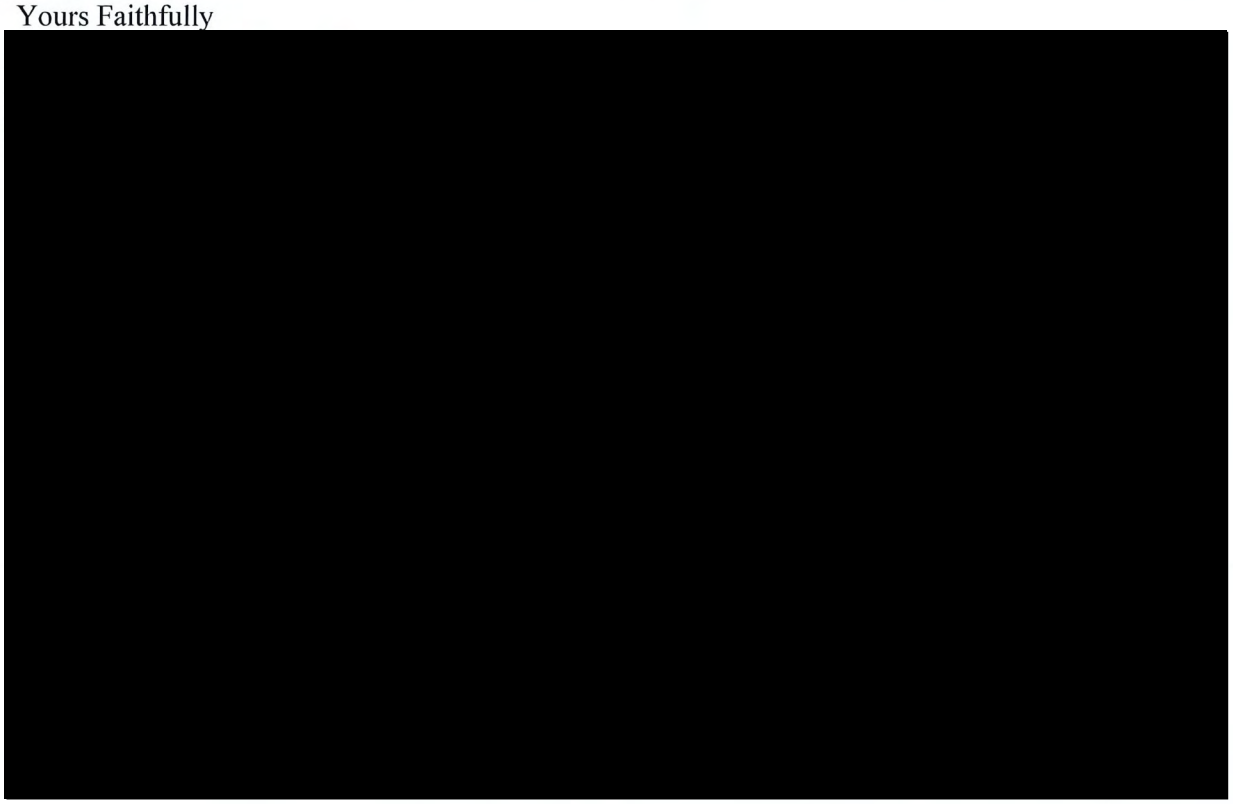
SARA / DSDMIP is therefore requested to ensure that the Department of Environment and Science take into consideration matters contained in this submission as part of its assessment of the prescribed ERAs.

Given significant shortcomings, lack of credible and conflicting information provided in the support of the development application, as evidenced in the above submission, approval of the material change of use for the ERAs and for the environmental authority should not be supported.

END OF SUBMISSION

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours Faithfully



ATTACHMENTS

1. **Griffith University Review**
2. **Specialist Reports Review – Duggan & Hede Pty Ltd and ATC Williams**
3. **Traffic Review**
4. **Ecological Review**
5. **Noise Review**
6. **Air Quality Review**

Attachment 1

Griffith University Review

Darryl Jones

Tom Nealson

5 May 2020

[redacted]

Development Application No.: 10674/2019/CA
Material Change of Use for Special Industry (Waste Activity Use – Landfill and Rehabilitating a Mining Void, Resource Recovery Facility); Development Permit for ERA's 54, 60 and 62; and Development Permit for Reconfiguring a Lot for a Boundary Realignment (13 into 13 Lots)

Griffith University - Environmental Futures Research Institute – have undertaken a review and assessment with regard to shortcomings in respect to the above application, in particular with respect to:

i. **The lack of any management measures which deal with wildlife attractants (given the proposed putrescible waste landfill / transfer station operations) within the buffer area to Amberley Air Base. e.g.-measures should have been developed in consultation with the airport operator (DoD) and a qualified bird and wildlife management expert providing details of how such measures would be implemented:**

Bird Strike Management Requirements

- The Amberley RAAF Base (the Base) buffer zone is defined as an area of 13km radius of the Base. (Ipswich City Town Plan); (Dept., of infrastructure, local Government and Planning, 2016) (Dept. of infrastructure, Transport, Regional Development and Communications, 2019).
- The subject site is approximately 5.9km South West of the Base.
- The subject site is located in an area mapped by the Department of Defence (DoD) as "Bird-strike Group B". The proposed use of waste activities has the potential to increase the risk for bird strike for aircraft operating from the Base (DoD correspondence, 2020).
- Bird-strike, a collision between an aircraft and birds, is a significant safety hazard. Bird-strike usually occurs in the vicinity of the airport during take-off, initial climb, approach, or landing (Civil Aviation Safety Authority, 2019).

- Land use planning decisions and the way in which existing land use is managed in the vicinity of airports can significantly influence the risk of wildlife hazards. Many airports are surrounded by areas which are attractive to wildlife, especially birds. As an example, land uses such as landfill sites can attract a high number of birds which increase the risk of interference with aviation activity (Dept. of Infrastructure, Transport, Regional Development and Communications (DITRDC), 2019).
- Wildlife (especially birds) attracted to land uses around airports can migrate onto the airport or across flight paths, increasing the risk of strikes (DITRDC, 2019).
- The DoD requires that all necessary measures are taken to ensure that wildlife (birds) are controlled on the subject site (DoD Correspondence, 2020).
- Recommendations to mitigate risk from wildlife strikes are found in National Airports Safeguarding Framework (NASF), Guideline C: Managing the Risk of Wildlife Strikes in the Vicinity of Airports. Risk mitigation measures identified in the guidelines include:
    1. A requirement for a wildlife management program.
    2. The establishment of wildlife management performance standards.
    3. Authority for airport operators to inspect and monitor properties close to airports where wildlife hazards have been identified
    4. Consistent and effective reporting of wildlife events in line with Australian Safety Bureau (ATSB) guidelines.

Wanless Site Based Management Plan Assessment

- The proposed Wanless Facility will be approximately 6.2 kms from the Base runway while [redacted] Waste Facility is located approximately 7.1 km from the runway (see figure 1).
- Sec. 6.7.6, P34. of the Wanless Site Based Management Plan (The Plan) mentions bird management strategies which include: waste cover; birds of prey; kites, scarecrows, spinners; and gas guns , however provides no specific details on these proposed measures or how they relate to any wildlife management program.
- The Plan specifies birds as “disease vectors” (Sec. 6.6.2 P.30) but does not recognise birds as a potential bird-strike risk.
- The Plan does not address the above DoD, DITRDC, or NASF concerns regarding potential bird-strike risk.
- There is no information within the Plan regarding monitoring of birds on the Wanless Site and nearby buffer areas. This is essential to monitor the effectiveness of management measures and the risk to the RAAF Base.
- A Site Operating Procedure (SOP-13) for bird management is mentioned in sections 4.2 and 6.7.6 of the Plan. The SOP has not been provided to the client

nor the Ipswich City Council, thus we are unable to assess the adequacy of that procedure in relation to managing bird-strike risks associated with the proposed works or how it relates to any wildlife management program.

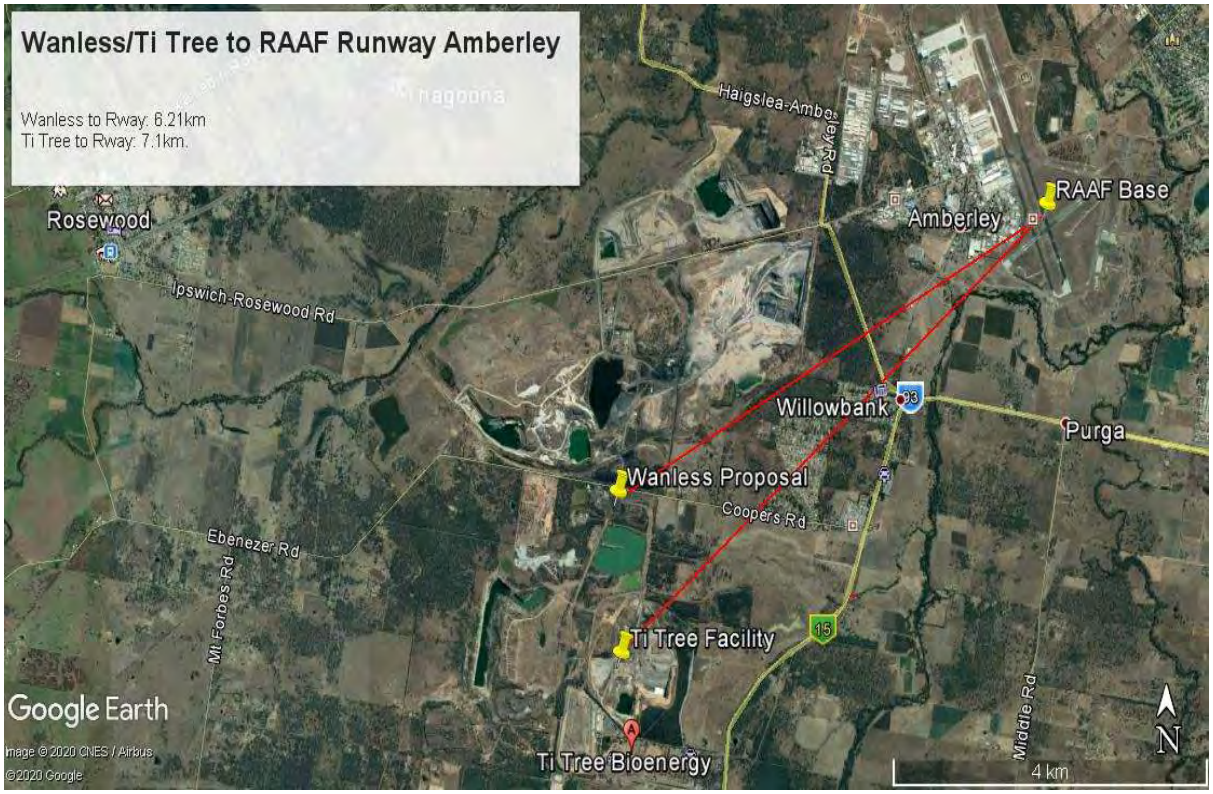


Figure 1: Wanless and [redacted] sites in relation to the Amberley RAAF Base.

ii. Any implications / potential adverse effect of the proposed development on [redacted] operations – e.g. would the proposal have any adverse outcomes on [redacted] current Bird Management Plan.

[redacted] Bird Management Plan

- Due to the close proximity to the Base, the owners of [redacted] ([redacted] Services (Australia) Pty Ltd – formerly Collex Pty Ltd), were subject to strict development and operational guidelines in relation to potential bird-strike risks.
- The [redacted] Bird Management Plan (BMP) was produced by Griffith University's then Suburban Wildlife Management Group's Associate Professor Darryl Jones in 2001 in consultation with the Base, Ipswich City Council and [redacted] operators.
- The [redacted] BMP was initially developed prior to and incorporated as part of conditions of the original P&E Court Judgement (D2686 of 2001). The BMP is ongoing and includes a regular monitoring program.
- The [redacted] BMP details a long-term monitoring plan of "significant species" that may be attracted to the area due to the operation of the [redacted] Facility.

- After conducting a baseline study, the significant species were identified as Ibis, Crow and Birds of Prey (Jones & Nealson, 2003).
- The [redacted] BMP objective is "to ensure that no discernible increase in the numbers of significant species occurs in the area as a direct result of the operation of the [redacted] Waste Management Facility" (Jones, 2002).
- To date, this objective has been met by the operator (Jones & Nealson, 2019).
- In brief, preventative management actions include:
    - Monthly monitoring and reporting of bird activity within the [redacted] Facility, the Base and surroundings up to a 20 km radius from the [redacted] Facility.
    - Minimisation of the working face
    - Effective covering of the waste
    - Minimisation of ponding
    - Minimisation of disturbed areas
    - Revegetation and vegetation management
    - Active Control Measures: Pyrotechnics, gas cannon, cap guns. If large numbers of significant species are present: Utilise shotgun patrols and distress calls.

Potential impacts of the Wanless proposal on [redacted] operations

- Should the Wanless Facility be approved, the operation of two neighbouring waste facilities will increase the availability of putrescible waste in the area.
- The additional waste may create an ecological 'sink', attracting the significant species and increasing the numbers of these birds within the facilities and the buffer zone.
- There is no information within the Wanless DA regarding monitoring of birds on the Wanless site and nearby buffer areas. This is essential for effective management of the numbers of significant species.
- Wanless proposes four methods of managing birds on their site but without any baseline data, assessment or support information and/or wildlife management program:

    1. Waste coverage;
    2. Birds of Prey;
    3. Kites, Scarecrows and Spinners; and
    4. Gas Banger.

- It is not possible to predict how the proposed Wanless development will impact on the current [redacted] bird management practices without there being further comprehensive assessment of the impacts, and preparation of a wildlife management program and measures submitted with the application.

CONCLUSIONS:

- The applicant, Wanless Recycling Park Pty Ltd, should be required to submit a comprehensive wildlife management program and measures, including the cumulative effect of the proposal on [redacted] and any other surrounding existing or proposed waste management facilities i.e. in terms of the development creating an ecological 'sink', attracting significant species and increasing the numbers of these birds within the facilities and the buffer zone to the Base.

- Given the absence of sufficient supporting scientific certainty and lack of any preventive actions detailed in the application in the face of that uncertainty, the burden of proof remains with the proponents of the activity to demonstrate that the proposal will not have adverse impacts on operational airspace in the vicinity of RAAF Amberley or adversely impact on the existing activities at [redacted]

- Council should therefore exercise precaution in its decision making and not approve the proposal in the absence of sufficient supporting information.

References

Australian Government (2019) National Airports Safeguarding Framework Principles and Guidelines: Guideline C Managing the risk of wildlife strikes in the vicinity of Airports. Department of infrastructure, Transport, Regional Development and Communications.

Atkins A, Redpath SM, Little RM, and Amar A. (2017) Experimentally manipulating the landscape of fear to manage problem animals. The Wildlife Society.

Baxter AT, and Allan JR. (2006) Use of Raptors to reduce scavenging bird numbers at landfill sites. Wildlife Society Bulletin Vol.34.4.

CASA (2019), the CASA Briefing - September 2019, https://www.casa.gov.au, accessed 09/03/2020.

Cook A, Rushton S, Allan J, and Baxter A. (2008) An evaluation of techniques to control problem bird species on landfill sites. Environmental Management V.41.

Department of defence (DoD) (2020) Correspondence with Ipswich City Council.

Jones DN (2002) Bird Management Plan for the Proposed [redacted] Waste Management Facility. Australian School of Environmental Studies, Griffith University, Brisbane.

Jones DN & Davis RA (2000) Draft Bird Management Plan for Proposed [redacted] Waste Management Facility. Griffith University, Brisbane.

Jones DN and Nealson T (2003). [redacted] Waste Management Facility Base-Line Study Abundance and Habitat Use of Significant Species. Report for [redacted] [redacted] by Suburban Wildlife Research Group, Griffith University. Pp. 32.

Jones DN & Nealson TJ (2019) [redacted] [redacted] Bird Monitoring Project 2018-19: final Report. Griffith University, Brisbane.

Queensland Government (2016) State Planning Policy- State Interest Guideline, Strategic Airports and Aviation Facilities. Department of Infrastructure, Local Government and Planning.

Attachment 2 –

Review – [redacted] Pty Ltd and ATC Williams

Note: *Headings below are in reference to the Appendices as submitted by the applicant in their response to ICC Information request dated 27 April 2020. The following discrepancies, shortcomings and comments have been prepared by* [redacted] *Pty Ltd and ATC Williams.*

Appendix C – Waste Industry Management: Expert Report

A review of the document titled "Waste Industry Management: Expert Report" by MRA Consulting Group was undertaken by [redacted] Pty Ltd. The points below list a number of inaccuracies, inconsistencies and questions that were found during this review. It is extremely worrying that the supposed waste management expert has made so many questionable statements and assertions.

1. (p1, executive summary*) Wanless propose to target predominately non-putrescible and inert general waste which does not have an established recovery market.*

What mechanisms do they envisage to enable this to happen? Presently the non-local government waste collection is undertaken as Construction & Demolition (C&D) waste and Commercial & Industrial (C&I) waste, not as non-putrescible and inert general waste. The collection industry doesn't undertake business in accordance with their target wastes and descriptions.

The report additionally (and incorrectly) relies on a definition for *'Clean Earthen Material or Clean fill'* by reference to the *Waste Reduction and Recycling Regulation 2011*. This definition has no relationship to the definition for 'clean earth' under the EP Regulation 2019 (or for that matter to any of the waste definitions under the EP Regulation 2019 that relates to ERA 60) and shows a clear misunderstanding of the nature of waste management ERAs in Qld.

2. (p1, executive summary*) A limited amount of putrescible waste would be accepted at site, including household putrescible waste and C&I putrescible waste (but with relatively low food waste composition) therefore increasing the capability of the Resource Recovery Facility to achieve the proposed overall site resource recovery rate of 45%.*

Once again how does the proponent intend to accomplish this? It should be noted that once waste is collected as a mixed load it is virtually impossible to stipulate that the loads will have a low food waste composition - e.g. a front lift truck (C&I waste) may do a run where it collects from restaurants, food market, light manufacturing business and a commercial business.

3. (p1, executive summary*) It is claimed that the project will increase the Queensland landfill diversion from 45.4% to 49.5%.*

Note this is the maximum predicted recovery for the facility. However, this does not paint a true picture as the real breakdown of proposed waste recovery is as shown in the Tables below:

Recycling & Waste in QLD 2018 (QLD Government)				Wanless Proposal			
Waste Stream	**Total Waste**	**Waste Recovered**	**Waste to Landfill**	**Total Waste**	**Waste Recovered**	**Waste to Landfill**	**% Recovered**
MSW	2,700,000	870,000	1,830,000	100,000	6,000	94,000	6
C&I	2,900,000	1,400,000	1,500,000	600,000	294,000	306,000	49
C&D	5,300,000	2,700,000	2,600,000	300,000	150,000	150,000	50

	Revised Waste Statistics				QLD Target (2025)	QLD Target (2030)
Waste Stream	**Total Waste**	**Waste Recovered**	**Waste to Landfill**	**% Recovered**	**% Recovered**	**% Recovered**
MSW	2,700,000	876,000	1,824,000	32.44	50	60
C&I	2,900,000	1,694,000	1,206,000	58.41	55	60
C&D	5,300,000	2,850,000	2,450,000	53.77	75	80

If the Wanless proposal is considered in light of the entire waste disposal in QLD, as they have suggested in point 3, above, the following is the case:

- MSW 32.44% recovered while the QLD target for 2030 is 60 %;
- C&I 58.41% recovered while the QLD target for 2030 is 60 %;
- C&D 53.77% recovered while the QLD target for 2030 is 80 %.
  (Refer to revised waste statistics in the tables above)

If the Wanless proposal is considered as stand alone. The following is the case:

- MSW 6% recovered while the QLD target for 2030 is 60 %;
- C&I 49% recovered while the QLD target for 2030 is 60 %;
- C&D 50% recovered while the QLD target for 2030 is 80%.
  (Refer to Wanless Proposal in the tables above)

4. (p1, executive summary*) It is claimed that the proposal will generate some 50 full time jobs.*

This seems surprising as elsewhere in supporting documentation it is stated that the Wanless Group employs 53 people Australia wide. Further confusion about the veracity of these claims is created when one views Wanless's own web site which states: *the park would employ about 100 workers once completed.*

5. (p2, executive summary, Item 4*) It is claimed the Project is consistent with planning principles and reduces the need for landfill and maximises recycling.*

As discussed in point 3 there is <u>no evidence</u> that the proposal will maximise recycling, as can be seen the recovery rates are well below those adopted as targets by the Qld Government.

6. (p3, executive summary) The proponent makes a number of claims with <u>no supporting evidence</u> for the following issues raised by Council in the information request.

- Promotes ecological sustainability. *Yes, the Project aligns with this principle.*
- Promotes improvements in waste avoidance. *Yes, the Project aligns with this principle.*
- Promotes and supports genuine resource recovery, recycling and residual waste management, therefore reducing the reliance on landfills. *Yes, the Project aligns with this principle.*
- Assists in reducing the reliance on landfills. *Yes, the Project aligns with this principle.*
- Will reduce or limit the unnecessary transport of waste within Australia. *Yes, the Project aligns with this principle.*
- Supports a liveable, sustainable and prosperous Queensland. *Yes, the Project aligns with this principle.*
- Minimises greenhouse emissions. *Yes, the Project aligns with this principle.*
- Supports local jobs and job creation, noting that landfills generally support fewer jobs then where waste is reused or recycled. *Yes, the Project aligns with this principle.*
- Will not result in an outcome whereby landfilling of waste becomes cheaper (economies of scale/supply and demand), which would continue to make the transport of waste in Queensland (including cross border) the most appealing option therefore stifling innovation, waste avoidance, resource recovery and recycling. *Yes, the Project aligns with this principle.*

7. (p9, first paragraph*). It is estimated that approximately 10% of waste received at site would be regulated waste e.g. asbestos. This waste would be sent directly to landfill.*

Why isn't this waste included in Table 3 Project Waste Summary? Also disregarding this quantity of waste to be directly landfilled will potentially change the recycling rates.

8. (p9, first paragraph*) The site would also accept clean fill for rehabilitation of mine voids. Refer to Section 2.3 for further detail.*

   There is confusion and contradictory statements regarding the filling of Lanes & Ironbark pits outside of the TLPI delineation line. In some supporting documents; Urbis correspondence *RESPONSE TO INFORMATION REQUEST MATERIAL CHANGE OF USE AND RECONFIGURING A LOT – SARA REF: 2001-15045 SRA they state that only clean onsite earthen materials will be used for backfilling* while others suggest they will be filled with waste material defined as clean fill in accordance with the definition as presented in the glossary (which would also require ERA 60 to undertake). There is further confusion as per section 2.3.2 of this report which states.

   No additional external waste would be brought onsite for direct disposal to these voids (with exception to clean earthen materials to rehabilitate sections of the voids that fall under the TLPI Waste Activity Buffer Area). With reference to Appendix E the Landfill Engineering report; It is implied by the drawings that the filling concept for the LIP will include initial clean fill (total volume of 6.7 million m^3) to the TLPI line prior to 2024 (a period of say 6 years) to facilitate development of the landfill outside this line. Based on the current market as well as maximising the opportunity for material recycling (as a critical element of the "recycling park"), this is not considered a viable approach.

   Notwithstanding the above, it would be accepted that the clean fill placement could be staged to create a separation between filling activities. However, this has not been recognised in the proposal (as it should). Also, there is no assessment of management requirements to accommodate the potential variation in development approach. In particular, there is no stormwater or groundwater management provisions presented for this clean filling activity included in the documentation.

9. (p9, section 2.2.1*)* The description of the proposed mechanical processing raises a number of questions & doubts. It is proposed that Building 1 will handle MSW, while buildings 2 &3 will handle C&I waste and building 4 will handle C&D waste. While all buildings are the same size (4,200m2) the floor area for undertaking the sorting process doesn't correlate with the stated throughput. MSW has a waste to floor area ratio of 23.8 tonnes/m^2, while buildings 2,3 &4 have a ratio of 71.4 tonnes/m^2. Are the proposed activities and flow charts based on real experience or simply theoretical models?

10. (p10, Figure 2*)* This figure shows that it is proposed to provide 50 carparking spaces adjacent to the office & amenities building. As previously stated, the facility will supposedly employ 50 people as such there is no proposed parking for visitors including educational groups with bus parking – or for that matter how separation of heavy and light vehicle movements (including educational / bus tours) would be managed from a safety perspective.

11. The planning scheme applicable to the site requires: Division 9—Parking Code of the planning scheme, which requires for a Special Industry - recycling premises:1 space per 150m² GFA; plus 0.75 space per staff member (FTE). This equates to some 216 parking spaces, with the proposal having significantly less capacity at 50 spaces.

12. (p14, Section 2.3) *This section states: The site currently contains three mine voids appropriate for use as landfills*.

    However, in the geotechnical report it states that the unsuitable tailings sludge containing (potentially hazardous contaminants) could be stored in a previous mining void. This seems to contradict this statement about the use of these voids for landfilling.

13. (p15, Section 2.3.2) *This section states: Materials to be disposed of in the Tailings Dam void would be the residual output of the non-putrescible and inert recycling sheds at the Resource Recovery Facility. Aside from asbestos, there would be no additional external waste brought onsite for direct disposal to the Tailings Dam void.*

    As such the RRF facility would need to be completed prior to the facility commencing to take any waste. Even though they intend to landfill Asbestos directly there is no discussion regarding management measures.

14. (p17, Section 3.1) *The major landfills (accepting General Waste – putrescible) are:*

- *TiTree at Willowbank (Veolia and JJ Richards partnership), and*
- *Swanbank landfill (Remondis).*

These two landfills accept and dispose in excess of 500ktpa of putrescible waste, nearly 25% of the state's disposal tonnes.

This statement is grossly incorrect. As such, the whole validity of this expert report is bought into question - especially statements that are made regarding landfill capacity in SE Qld.

This is further reinforced where such definite statements are made regarding landfill capacity yet in Table 5 the estimated lifespan for the majority (7 out of 8) of existing landfills is stated as "Unknown".

There is also no evidence that the applicant or their consultants made sufficient contact with the relevant landfill operators with regard to sourcing the information required by Council in their information request in regard to existing landfill facilities in terms of Capacity or Estimated Lifespans such that would warrant the conclusions made in that report.

Appendix D – Economic Needs Analysis

As this document relies heavily on information from the "Waste Industry Management: Expert Report" and as discussed in the previous section there is considerable doubt as to the veracity of this report and also by deduction one could surmise that this report is severely flawed. A review of the report was undertaken by [redacted] Pty Ltd points of interest and inaccuracies are listed below:

15. (p4, Section 1.3) *This report states: Wanless operates throughout New South Wales, Queensland and Victoria with two offices in Sydney (Artarmon and Kemps Creek), one office in Queensland (Oxley) and one office in Victoria (Dandenong South). In total, the business employs 53 persons.*

It is further stated that this proposal will employ 50 full time staff. It seems odd that this proposal will employ as many people as all of Wanless's other operations. Further confusion about the veracity of these claims is created when viewing Wanless's own web site which states*: the park would employ about 100 workers once completed.*

16. (p5, Section 1.9) *This report states: Overall, it is estimated that approximately 85% of incoming material is diverted from landfill at Sydney Recycling Park. This recycling is undertaken in industrial shed of approximately 5,000 sq.m.*

This statement should be supported by audited reports which would be produced for the NSW government.

17. (p6, Section 2.5) *This report states: Precinct 3A – which would be the main waste recycling facility including 20,000 sq.m of industrial sheds forming the main component of the recycling facility zoned site.*

There seems to be some conflict between this report and the Expert Report by MRA as the MRA report presents Figure 2 which shows some 26,880 sq.m of sheds. Which of these reports is correct?

18. (p9, Section 2.18) *This report states: Overall, Wanless Recycling Park Ebenezer is a planned modern facility which will aim to:*

- *Be selective of around the waste products to be accepted at the site.*

This statement makes no sense!

19. (p27, Section 5) This report relies on data from the MRA report with respect to the capacity of SE QLD landfills, as stated in point 14 of the MRA review above, the data and subsequent conclusions are incorrect. As such any use of this data would mean that any analysis and conclusions using that data are also incorrect.

20. (p35, Section 7.8) *This report states: The subject proposal will add to employment in Ipswich municipality, estimated at over 50 jobs on an ongoing operational basis, and 336 jobs during the construction period. Tables 7.1 to 7.3 summarise the employment*

benefits and multiplier effects on the basis of construction costs of the recycling sheds at $82 million, representing 972 jobs in total. The constructions costs of the recycling sheds seems to be a gross over exaggeration, as the author is suggesting a construction cost of $3,050.00 per sq.m of shed, while the average for SE QLD is in the range of $500 to $700 per sq.m. Given that this figure seems so far "off the mark" the veracity of any figures and conclusions deducted in this report should also be treated with extreme caution. There is further confusion due to the fact that Wanless's own web site makes the following statement*: Sydney-based recycling czar Dean Wanless is proposing the $50 million recycling park at a dormant coal mining site at Ebenezer about 12km southwest of Ipswich.*

Appendix E – Landfill Project Engineering Report

A review of the document titled "Landfill Project Engineering Report" by Taft Engineering was undertaken by [redacted] Pty Ltd and ATC Willaims Pty Ltd. The points below summarise a number of inaccuracies, inconsistencies and questions that were found during this review. As can be seen there is considerable doubt as to the engineering, environmental and operational feasibility of the proposal.

21. (p1, Section 1) *This report states: WRP propose to undertake landfilling in these voids to create a rehabilitated landform in alignment with the ICC planning scheme and will include the disposal of Municipal Solid Waste (MSW), Construction and Demolition Waste (C&D), Commercial and Industrial (C&I) waste and Clean Fill to the following voids:*

- *Tailings Dam (C&D and dry C&I)*
- *Ironbark Pit (MSW and Clean Fill)*
- *Lane's Pit (MSW and Clean Fill).*

How does the proponent propose to ensure only dry C&I is landfilled in the former tailings dams, as the industry doesn't collect waste this way. C & I waste is predominantly collected via front lift trucks where they have no guarantee of the mix in the waste load, refer to point 2. above.

23. *(p2, Section 1.1) This report states: Waste acceptance at a rate of 100,000 tonnes to 1,000,000 tonnes per annum under these ERAs are anticipated to comprise the following:*

- *Municipal Solid Waste (MSW)*
- *Contaminated soils only from EMR/CLR sites at contaminate levels in accordance with the landfill acceptance criteria.*

It would appear that there has been no discussion with respect to where contaminated soils are to be landfilled.

24. *(p2, Section 1.1) This report states: Waste acceptance at a rate of 100,000 tonnes to 1,000,000 tonnes per annum under these ERAs are anticipated to comprise the following:*

- *Limited regulated waste including:*
  - *Animal effluent and residues, including abattoir effluent and poultry and fish processing waste.*

These wastes are very odourous however it appears that there has been no consideration of their presence in the Air Quality /odour report, *Appendix J. Also, the report states (p3); Acceptance and management of these waste types into the facility will be addressed in the Site Based Management Plan (SBMP)*, however a review of *Appendix G Wanless Recycling Park Site Based Management Plan* indicates that that they have not being specifically included.

25. *(p3, Section 1.2) This report states: The indicative butter distances provided in the Department Environment and Science (DES) Guideline – Landfill Siting, Design, Operation and Rehabilitation (2013) are:*

- *100 metres from surface waters and the '100 year flood plain'*

An inspection of *Appendix O: Flood and Stormwater Management Plan, Figure: Appendix E1* indicates that this proposal doesn't meet this guideline as the tailings dams are immediately adjacent to the 1 in 100 year flood-line. (refer to point 73).

26. *(p5, Section 3.2) This report states: WRP is proposing landfilling of C&D and dry C&I to occur in the Tailings Dam void which is clearly defined by the topography. As part of the development reprofiling void batters will be undertaken, dewatering and removal of all of the tailings and subgrade improvement works to support the containment system.*

The proponent proposes to dewater the tailings dam and remove the tailings sludge. Yet there has been no discussion regarding the environmental effects of dewatering and the feasibility of removing the tailings sludge. In fact, the applicant hasn't even undertaken any sampling and analysis of this tailings dam water and sludge. Discussions with the former mining superintendent suggests that the tailings water was comprised of some 20% to 25% of super saturated solids. Further, as discussed in point 12 above, there is some confusion regarding where this sludge could be deposited. Experience shows that the safe removal of tailings sludge to be very difficult. As such it would be reasonable for the removal methodology to be discussed, with a management approach clearly defined (and considered in the feasibility assessment of the proposal).

Further, the history of the tailings dam development is unknown and not described in the documentation. The drawings suggest the tailings dam is formed within an excavated pit, extending to levels as low as RL-20m.

The development of the pit used for the tailings dam development has direct relevance to the proposed landfill construction. In particular, excavating a dedicated pit for tailings storage purposes in the times when mining at Ebenezer occurred is uncommon. It would be more likely that the excavation (particularly to the depth indicated) was formed as a pit for coal extraction. In this case, it is also possible that the pit was backfilled to an extent by waste rock. In either case, difficulties with excavation to the pre-tailings dam development profile presents challenges.

A mining study by Taylor Mining Services is referenced however cannot be found in the documentation for verification purposes.

Geotechnical investigation would be required to confirm these conditions.

It is also assumed that the base of the Tailings Dam used for design purposes is based on pre-deposition conditions (i.e. the base of the pit prior to placement of any tailings). This would need to be confirmed as part of planning and design.

27. *(p6, Section 3.2.1.1) This report states: The landfill base is proposed to be built on natural subgrade following removal of the coal fines.*

As discussed in point 26 above this can be extremely difficult. Also, the proponent is incorrect in assuming that all of the tailings sludge would be coal fines, as it is all the solid particles removed in the wash plant, therefore will contain a significant quantities of very finely ground rock particles, which exhibit very soft soil characteristics.

It is implied that all tailings will be removed from the existing tailings dam to expose a natural subgrade for base liner construction. There are no details of the method proposed to remove the tailings and to contain these materials in an alternative location.

Although not acknowledged or addressed in any form, it can be expected that tailings were pumped into the storage area as a low-density slurry. Coal tailings typically comprise a low solids density (possibly less than 2t/m3), are fine grained (likely comprising a high plastic fines and clay fraction), therefore possess poor drained and undrained settling properties and do not consolidate well. Historical Google imagery of the tailings dam area indicates that is has maintained a water pond over time, therefore no opportunity for air-drying of the tailings surface has existed. Even if exposed, industry experience would indicate that an upper desiccated layer would have formed, however the majority of the tailings profile would remain at low density. As such, any proposal to remove the tailings in its current form would likely require repulping and pumped transfer to a new site.

In the event that the tailings transfer is viable and not economically prohibitive, a new tailings dam would need to be establish. Due to the nature of the tailings and characteristics of the site, this storage would likely be a Regulated Structure under the EP Act, requiring stringent engineering and approvals efforts. Also considering the current site conditions, a new dam structure would need to be constructed, requiring considerable earthworks and internal lining (to comply with DES requirements, in a similar vane to a landfill). The method of deposition would also be critical, recognising that a similar geotechnical condition would result, therefore requiring a considerable timeframe for rehabilitation of that area. Only with techniques such as pipehead flocculation would a more competent relocated tailings profile be possible to facilitate a more rapid decommissioning and rehabilitation approach. Beyond these aspects, operating provisions including an emergency spillway and maintenance of design storage allowances and other freeboard capacities would be required.

Considerable planning and engineering works are required to facilitate the transfer and relocation of tailings materials. If not feasible, this proposition could well be economically prohibitive in the context of the overall landfill development.

On balance this is considered to be a fatal flaw in the overall concept.

28. *(p7 & p9, Sections 3.2.3 & 3.3.3) This report states: Landfilling of C&D and dry C&I is proposed for the tailings dam void, which is expected to have a high recovery rate. Based on an assumed residual disposal rate of 15,000 tonnes per annum increasing to 150,000 tonnes per annum with soil cover and compaction density the total life of the void would be approximately 60 years. Also Landfilling of General Waste (MSW and C&I) is proposed for the LIP voids, which is expected to have a lower recovery rate. Based on an assumed residual disposal rate of 40,000 tonnes per annum increasing to 400,000 tonnes per annum with soil cover and compaction density the total life of the void would be approximately 13 years.*

As such the proposed facility only has landfill capacity for General Waste of only 13 years but capacity for C&D waste (inert waste) for some 60 years. How does it intend to operate in the future once this imbalance comes into play? There is no discussion of this scenario within the documents.

29. *(p8, Section 3.3) This report states: As part of the development (LIP) reprofiling void batters will be undertaken, dewatering and subgrade improvement works to support the containment system.*

There are no details on the dewatering of the LIP. There is a considerable volume of water retained within the pit, that will need to be removed prior to any earthworks or landfill development being possible (controlled by the need to access the base of the void for reprofiling purposes). It cannot be considered to be safe to undertake works in one portion of a pit while another portion holds a depth of water, regardless of the extent of containment or separation. Therefore, it will be necessary to dewater the void to the fullest extent practical from the outset, then maintain ongoing inflows (surface water and groundwater) as the development progresses to ensure that the landfill is not inundated. The quality of water contained within the void is critical to pit dewatering. No baseline water quality data has been provided, although it can be expected that the upper water column would be relatively fresh, however due to the anticipated depth of water in the void, a temperature or salinity controlled interface would likely exist at some depth (possibly as shallow as 1.5m from the surface). It can be expected, particularly due to the period since mine closure and the enclosed nature of the pit, that water quality conditions below this interface would be very poor, likely being saline, anoxic, and with a high organic content. Typically, such water is very difficult and costly to treat to a standard required for discharge to the receiving environment. The required process may require aeration, biological (bacterial) treatment in addition nitrification/ denitrification and possibly reverse osmosis. Such a process would be very costly to establish and operate, with the treatment period likely to extend over a lengthy period, therefore compromising the overall development program. Groundwater is addressed in Section 3.4, however in the absence of a hydrogeological assessment, there is no understanding of the potential groundwater inflows to the dewatered pit, and the effort and cost required to keep the pit dry for landfill development purposes. This will be a long-term issue, until the landfill base rises above any potential groundwater level. In support of this concern, the drawings indicate a groundwater level around the LIP of around RL25m, which is some 35m above the proposed base.

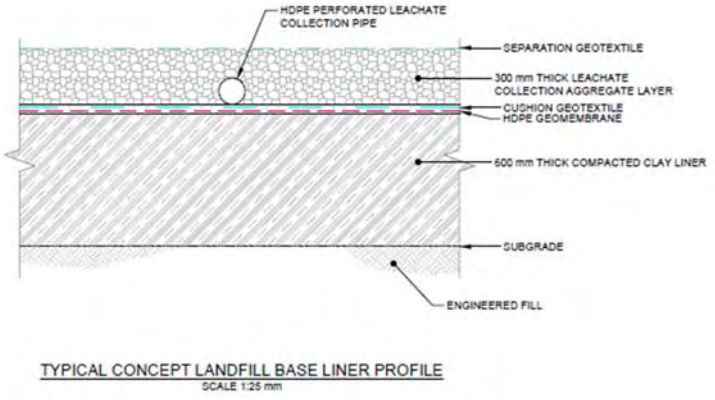
30. *(p10, Section 3.4)* Groundwater monitoring bores have been constructed around the proposed landfill areas (tailings dam and LIP), outside the past mining and backfill areas, penetrating basement sequences and extending to depths of around 50m at the tailings dam and up to 100m at the LIP. All bores are screened, and gravel packed at the base. Around the tailings dam, the screened interval of each bore coincides generally with the base of the proposed future landfill as delineated on the drawings. However, around the LIP, groundwater bores are screened over 50m below the landfill base.

Two issues exist with the groundwater monitoring bore construction: Given the nature of the site geology (interbedded sediments and coal seams), constructed bores do not necessarily intersect the uppermost groundwater aquifer, therefore from a representative groundwater monitoring perspective, do not necessarily provide the ability for assessment of groundwater impacts from the adjacent facility. This is particularly concerning for the LIP where monitoring can only occur 50m below the landfill base, with no credible means for assessing landfill impacts Moreover and more importantly from a landfill design perspective, no hydrogeological assessment of the site has been undertaken, therefore uncertainty exists with respect to the groundwater recovery conditions (i.e. as groundwater levels reach an equilibrium condition in relation to the landfill development) and inflow potential to the landfill area. These conditions impact on the effort and cost required to keep the pit dry for landfill development purposes. This will be a long-term issue, until the landfill base rises above any potential “uppermost” groundwater level. The drawings indicate a groundwater level around the LIP of around RL25m, which is some 35m above the proposed base, which is a particular concern with respect to long

term groundwater inflow. Regardless of these circumstances, the development of a landfill below the long term equilibrium groundwater level under current Qld guidelines and acceptable practices (as well as the precedence that has been set in the past) is that a vertical separation distance between the liner of any landfill and the maximum predicted uppermost groundwater level should be at least 1m. Under the conditions described in the documentation, the development would grossly exceed these conditions and therefore should not be approved. The absence of a hydrogeological assessment for the development is a critical omission, relevant to both design and monitoring of the facility, as well as the ability to feasibly assess the long-term performance of the site.

31. *(p10, Section 3.4) This report states: A groundwater drainage blanket comprising a aggregate layer spread across the whole of the base of the cell with a series of collection pipes within the aggregate.*

There are considerable irregularities and contradictions between the written description and associated drawings: Refer below (Appendix F: Dwg F-050) As you can see this typical concept landfill base liner profile has no groundwater collection layer.



32. *(p10, Section 3.5) This report states: The lining system will be a single composite liner (DES double liner) comprising a minimum 600 mm thick low permeability clay liner for the base of the landfill, and 1,000 mm for the side walls together with a high-density polyethylene (HDPE) geomembrane. Although the minimum requirement for the clay is 600 mm, construction methods include overthickening and cutting back. The cutting back process will cease at 1,000mm to ensure the minimum 600 mm thickness is maintained.*

Batter Reprofiling

Reprofiling of internal batters to slopes of 1(H) to 1(V) within both the tailings dam void (following removal of tailings) and the LIP (following dewatering) are proposed. Batter reprofiling however does not seem to be reflected in the concept drawings (*refer Appendix F, Dwg. F-020, F-043)*. Therefore, there is no understanding as to the extent of excavation and filling required (and whether an earthworks balance exists, or where excess materials will be sourced from or stockpiled to) is available.

Batter reprofiling in the tailings dam void is of particular concern due to the criticality of the tailings transfer process, and the uncertainty of existing geotechnical conditions , and the

possible impact on long term saturation across the exposed substrate following tailings removal (refer Point 27).

Sidewall Liner Construction

It is understood that a 1m thick clay fill layer is proposed for sidewalls in both the tailing dam and LIP area, to be lined with a geomembrane. Whilst this liner thickness exceeds DES's current landfill standard, construction to this thickness is not considered safe or viable.

The design report describes construction of the liner to 2m thickness, then cut back to 1m, expecting that this work will be completed in stages. The first concern is that construction of a 2m wide clay fill section to a height over 1m is unsafe, with no opportunity for fall protection of the plant used, and the impracticality of placing fill in thin layers to achieve acceptable compaction. Secondly, the cutting back process to 1m width will require the subsequent 2m wide liner stage to be formed partially over waste material, which is not acceptable practice, particularly with the potential for local failures of the compacted section at a slope of 45 degrees. Both of these aspects are "Safety in Design" issues that would not comply with current standards to achieve an appropriate level of quality assurance.

Geomembrane lining of steep batters is also a significant concern, with the need to establish anchor trenches at the crest of each lift. No detailing is provided of how this can occur with a proposed final crest width of 1m. Also, under these circumstances, the geomembrane liner design is critical, with the need to limit strains to acceptable levels, which is difficult on steep slopes. Textured and geomembranes greater than 1.5mm thickness would be expected, all of which increase construction costs.

The report suggests that the lining system has been developed based on the outcomes of the hydrogeological risk assessment included in the REMP. On reviewing Appendix H Receiving Environment Management Plan, it isn't evident how these conclusions were drawn. It seems highly inappropriate to recommend a lesser thickness of compacted clay liner than the adjacent [redacted] Facility. Also, the proposal to construct a 1000mm liner on a 1:1 batter is fraught with danger, as it is not possible to have earthmoving equipment work on such a slope. It is proposed that the liner and drainage layer will be constructed just in front of the waste placement, while this sounds feasible in theory it is extremely difficult to achieve and to provide QA in the field especially after extended periods of wet weather. This if based on experience and we would recommend that the permitting authorities have discussions with some landfill operators.

Further the report states in *Table 3 Side Wall Lining System, p11. Leachate Collection Layer - 300mm thick layer of free draining aggregate placed during filling to provide collection leachate against the sidewall.* It is impractical if not impossible to place granular drainage aggregate to a 300mm thickness on a 45-degree slope. Whilst the angle of repose for such material maybe close to 45 degrees, there is no means to practically place this material to a thickness of 300mm. The only practical opportunity to place this material is during the waste placement process, although quality control would be very difficult to maintain, with the likelihood that a much wider zone of aggregate would need to be placed and the loss of considerable aggregate material.

33. *(p16, Section 4.1.1) This report states: The weather data used in the modelling was derived from the Bureau of Meteorology (BoM) Amberley AMO Weather Station 040004, which is approximately 10 km from the site and has been in operation since 1941.*

The HELP model referenced in section 4.1 utilises historic data, there has been no allowance made for possibly more intense rainfall events due to the changes from climate change. It seems that it would be prudent to allow for this as it is likely that rainfall intensities will increase in the future. As such there is some doubt as to the robustness of the leachate generation model presented in section 4.1.2.

34. *(p20, Section 4.3.3) This report states: Leachate is proposed to be stored on site and evaporated in a lined leachate pond and recirculated through the waste mass. On site and off site treatment are emergency measures and are not currently proposed for the standard landfill operations*.

The reference to the contribution of evaporation to leachate disposal is **of note**. Experience indicates that over the life of any landfill within the south east Queensland region that evaporation from an open storage is ineffectual. The use of floating covers is of benefit, although the engineering and costs associated with such systems for the size of ponds required is expected to be substantial.

To consider the potential leachate disposal demand with the use of a pond or open storage, a detailed (daily time step) water balance model is required, which also considers the loss of potential evaporation due to the high TDS of leachate. This should be a minimum requirement to consider the viability of the concept. This proposal intends to have open air leachate dams, there position is shown in Appendix F Landfill Engineering Plans on Drawing F-002. However, they have not being included in Appendix J Air/Odour report.

35. *(p20, Section 4.3.3.2) This report states: Lined storage and evaporation ponds will be used as part the overall leachate management plan. A retractable or floating cover for the storage pond will be considered to manage surface water ingress during periods of high rainfall whilst utilising the evaporation potential when weather conditions are favourable*.

As discussed in point 31 given the high probability for increased rainfall intensities and point 34 experience in SEQLD this would be considered necessary for any robust management regime. Not just proposed if needed!

36. *(p21, Section 4.3.4.3) This report states: Disposal of any treated or untreated leachate would be based on the trade waste agreements which provide quantity and quality criteria to be met. Due to the location of the site, disposal of leachate to an approved disposal facility will be limited to tankering and proposed in the event of an emergency. It is understood that a wastewater treatment facility is a proposed development adjacent the WRP project. WRP propose to hold discussions with the developers for the potential future acceptance of the Leachate for treatment.*

It is unclear if this statement is an attempt to introduce the concept for the acceptance of liquid waste to site for treatment. It should be noted that the only treatment of liquids that should be permitted onsite is leachate generated from approved site facilities.

37. *(p26, Section 6.3.1) This report states: The Australian Rainfall and Run-off data (ARR) for the site shows that an intensity of 143mm/24hr for the 1 in 10-year 24-hour event.*

Refer to point 33 re an allowance for more intense storm events due to climate change.

Appendix F – Landfill Engineering Plans

The plans included in Appendix F which also relate to Appendix E have being reviewed by [redacted] Pty Ltd and ATC Williams Pty Ltd. During this review a number of inconsistencies and errors, were found as highlighted below:

38. *(Plan F-002) Errors/inconsistencies include:*

- final landform contours not consistent with final landform shown in drawings F-034 to F-042;
- Internal Haul Road clashes with resource recovery centre area - specifically WSUD swale and landscaping buffer zone. Refer to Urbis Landscaping Plan for proposed buffer zone;
- Internal Haul Road crosses internal access road. Safety concerns with dump trucks / site machinery constantly interacting with light vehicles.

39. *(Plan F-005) Errors/inconsistencies include:*

- final landform contours not consistent with final landform shown in drawings F-034 to F-042.

40. *(Plan F-008 & F-009) Errors/inconsistencies include:*

- The plans show incorrect low points for groundwater & leachate collection for each stage.

41. *(Plan F-012) Errors/inconsistencies include:*

- Stage1 filling encroaches into Stage 2 cell, Stage 3 cell, Stage 5 cell & Stage 6 cell. Therefore Stage 2, Stage 3, Stage 5 & Stage 6 cells must be constructed prior to filling Stage 1.

42. *(Plan F-013) Errors/inconsistencies include:*

- Stage 2 filling encroaches into Stage 3 cell, Stage 4 cell & Stage 6 cell. Therefore Stage 3, Stage 4 & Stage 6 cells must be constructed prior to filling Stage 2.

43. *(Plans F-014 to F-018) Errors/inconsistencies include:*

- Similar inconsistency as outlined in points 39 & 40 above.

44. *(Plan F-030) Errors/inconsistencies include:*

- Northern section of Lanes Pit. Contours stop at RL22.50 (approximate existing water level of this void) Sections shown on Drawing F-043 provide data at least 22m below water level. Either the existing levels below RL22.5 are assumed, or data has been omitted from this plan.

45. *(Plans F-032 & F-033) Errors/inconsistencies include:*

- Stage 5 groundwater collection point is not at the low point of stage 5;
- Stage 4 & 7 groundwater collection points within the 'in cell sediment pond' shown on F-036;
- Stage 3 groundwater collection point within the 'in cell sediment pond' shown on F-036;
- Stage 2 groundwater collection point is not at the low point of stage 2.

46. *(Plan F-035) Errors/inconsistencies include:*

- Stormwater Runoff will pond in remainder of void until clean fill has reached final profile.

47. *(Plans F-036 & F-040) Errors/inconsistencies include:*

- Staging hasn't considered the need to construct adjacent cells prior to filling as per points 39 &40, above.

48. *(Plan F-035) Errors/inconsistencies include:*

- Details are not consistent with the description in Appendix E, eg. point 29 above;
- No specifications for the HDPE and cushion geotextile;
- No leachate & groundwater sump details;
- It is surprising that the facility would propose only 600mm of compacted clay when the adjacent facility [redacted] has 900mm;
- Constructability of side wall liner and aggregate drainage layer is considered difficult/dubious especially during extended wet weather, refer to point 30 above.

Appendix G – Site Based Management Plan

The SBMP appears that it has been recycled from another location without thorough thought given to this facility. Its title is *Wanless Recycling Park Site Based Management Plan*, yet the entire document seems to be devoted to landfilling with no mention of the proposed Resource Recovery Facility (RRF). This is particularly concerning as the proposal is presented as a recycling facility, yet it appears to be nothing but a landfilling operation. A review of the report was undertaken by [redacted] Pty Ltd with inconsistencies listed below:

49. *(p5, Section 1.4) This report states: The proposed facility will achieve a* Landfill *Compaction Efficiency >1.4t/m³.*

    Once again, inconsistencies between reports is very worrying, given the Expert Report Appendix C cites that*: The proposed landfill would target a high compaction rate (1,000kg/m3)* – which is more than a significant variation.

50. *(p6, Section 2) The report details reviewing, reporting and training procedures*.

    Given there are so many inconsistencies within reports and between reports, it seems unlikely that the proposed operations will do any better.

51. *(p9, Section 3.2) This report states: The site was previously a coal mine operated by Zedemar.*

    This is incorrect as the previous operator was Indemitsu. Zedemar had never operated the site as a coal mine although had sought extensions to the current Mining Lease premised on winnable resourced being held with the current Mining Lease. It needs to be acknowledged that the Mining Lease, when last renewed for a term of 15 years was premised on, inter alia, the following:

    It is not immediately obvious to me why the Minister should not accept the statement of the applicant for renewal. There is little incentive for an applicant for renewal of a mining lease to pursue such a course unless it is satisfied that there is ore worth mining in the area of the lease. Zedemar's information provided to the Minister referred to reserves of more than 12,000,000 tonnes. One of his ministerial briefing notes said that technical assessment by the Department of Employment, Economic Development and Innovation had revealed a high degree of coal resource within the "Bremer View Coal Deposit (MVL172)" and that there were approximately 30,000,000 tonnes of coal remaining on the mining lease area which was described as "a stand alone viable coal mining operation."
    Wright & Bright v The Minister for Employment, Skills & Mining [2012] QSC 112

    The site is under a current Resource authority (ML 4712) with apparent significant resources (based on the above) which were accepted in the Supreme Court, Brisbane to be representative of 'ore worth mining in the area of the lease'.

    It remains unclear as to why no economic assessment of the value and viability of extracting the resource has been undertaken or required by the State, given the approval of the current Wanless DA will clearly result in the quarantining of those resources.

52. *(p14, Table 6) This table references SOPs that will address the pre control impacts*.

The referenced SOPs are not provided in the supporting document, as would be expected in any application which was seeking a development approval and environmental authority of this magnitude.

53. *(p16, Section 4.2) This report states: The control of environmental impacts will be through the following: Site Operating Procedures (SOPs).*

As mentioned in point 52 above these procedures which will ameliorate environmental impacts are not provided. It is also important to note that there is no SOP proposed for the landfilling of asbestos.

Of particular concern is the applicant's practical dismissal of matters relating to Bird Management (relying on an SOP which clearly has not been developed with reference to any detailed environmental assessment). This remains of significant concern, given the proximity to Amberley RAAF and how the facility will impact on the existing management practices at [redacted] which were well established in environmental assessment before approval of [redacted] was gained via the PO&E Court. DoD's response to the application has not considered the potential conflicts that may arise from the new facility in terms of the development creating an ecological 'sink', attracting significant species and increasing the numbers of these birds within the facilities and the buffer zone to the Base. Refer to Griffith University - Environmental Futures Research Institute assessment of these matters.

54. *(p18, Section 5.2) This report states: The site will not be operated, and waste will not be received on Sundays or Public Holidays unless approved by Ipswich City Council*.

Elsewhere in other reports, the applicant states that it won't operate on race days of QLD motorsports. This matter has not been sufficiently considered in recognition of the Strategic importance of the Ipswich Motorsports Precinct – recognised under the SEW Regional Plan as a regionally, state and nationally significant motorsport and outdoor recreational facility that hosts a range of national and international events.

55. *(p19, Section 5.6.1) This report states: All reasonable and practicable measures must be undertaken to stop any unapproved waste from entering the site. Site staff will, where possible, immediately remove the unapproved waste from the waste stream and arrange for the waste to be transported to a facility that can lawfully accept the waste*.

It is very concerning that there is no mention of the sorting of all waste prior to landfilling as has been consistently suggested in Appendix C.

56. *(p21, Section 6.1) This report states: That the Tailings dam landfilling will continue till 2081 while the landfilling of Lanes & Ironbark Pits will continue until 2036.*

As mentioned in point 28 above, there has been no discussion of how the facility will continue to operate past 2036 when there is no landfill capacity for General Waste.

57. *Shaping/Groundwater Relief Layer Granular fill placed over the floor of the cell to provide a dry stable subgrade surface. Then a Compacted Clay Liner 600mm thick low permeability layer compacted to provide a maximum coefficient of permeability of 1x10-9m/s.*

There is no provision for a separating geotextile to ensure that the fine-grained clay layer doesn't migrate into the gravel collection layer.

58. *(p22, Table 10)* As previously discussed it is considered that the construction of the side wall lining system isn't possible and requires more thought and detailed engineering assessments.

59. *(p22 & p23, Sections6.2 & 6.3)* There is no discussion of site preparation for the RRF facility and likewise sheds of some 26,880 sqm of floor area, which will require fire hydrants and other fire protection systems to satisfy the BCA.

Appendix H – Receiving Environment Management Plan

It appears that the entire document seems to be devoted to landfilling with no mention of the proposed Resource Recovery Facility (RRF). This is particularly concerning as the proposal is promoted as a recycling facility, yet it appears to be nothing but a landfilling operation. A review of the report was undertaken by [redacted] Pty Ltd with inconsistencies listed below:

60. *(p11, point 5) This report states: A pump test conducted in November 1986 showed that maximum groundwater inflows into mining areas would be approximately 138 to 413 m³/day.*

    There is some doubt as to whether a test conducted in 1986 is representative of today.

61. *(p21, section 3.2.1)* As discussed previously the proposed liner systems are questioned. (Refer to points 31 & 32 above)

62. *(p22, section 3.3.1) This report states: Leachate levels will be maintained at a maximum level of 300mm above the base of the composite liner system.*

    Most licences require this at the lowest point (the sump) of a cell. This isn't clear in this context.

63. *(p22, section 3.3.2.1) This report states: Potential sources of contamination from previous mining activities include the following: • Weathering of remanent raw and processed coal material • Old haul roads • Tailings dam • Existing surface water bodies*.

    Even though these sources are acknowledged there is no discussion regarding the dewatering of the tailings dam and removal of tailings sludge, or the dewatering of Lanes & Ironbark Pits. Also, it doesn't mention the past open composting of paunch adjacent to Lanes Pit.

64. *(p27, Figure13 & section 3.3.2.4) This report only provides a source pathway receptor diagram for the operational landfill.*

    As previously stated, the report totally ignores the dewatering of the tailings dam and the removal of the tailings sludge plus the dewatering of Lanes & Ironbark Pits. Also, once again it is focussed on the operation of a landfill and totally ignores the resource recovery facility (RRF) which is supposed to be the cornerstone of the proposal. The continued dismissal of the environmental outcomes of the RRF raises serious questions as to what the real intent of the facility is – i.e. a landfill proposal with limited focus on resource recovery.

65. *(p29, section 3.4)* As discussed in the previous point the report is inherently flawed as it ignores activities which may contaminate the environment. The DES website defines the need for a REMP as; *A Receiving Environment Monitoring Program (REMP) may be required for an activity that releases contaminants to waters. The aim of a REMP is to monitor and assess the potential impacts of contaminants releases to the environment. A REMP will help evaluate whether the conditions on the licence are effectively maintaining or protecting environment values over time.*

    Considering this description, it is obvious that the construction of the facility including the operation of the RRF need to be also considered in the REMP. Because this has not been undertaken, the section 3.4 Risk Assessment of the report is considered flawed.

66. *(p36, section 4.2)* As discussed in point 65 above, all conclusions drawn from this REMP are considered to be not accurate and/or robust enough for use in designing the facility.

67. *The information request from SARA included the need to undertake background testing for a period of at least 12 months to provide a baseline dataset.*

The applicant's response relies heavily on the REMP, which has been shown to be questionable - refer to previous points 64 to 66. The response suggests that while this data hasn't been provided to date that it could be provided at the commencement of the ERA activity. This is considered totally unacceptable due to the flawed nature of the REMP.

Appendix J– Air Quality Assessment

A review of this report has been undertaken by Air Noise Environment, however in addition to this [redacted] Pty Ltd consider the following points to be relevant.

68. *(p25, figures 8 & 9)* These figures indicate the location of odour generating activities. However, there is no mention of the proposed open-air leachate dams, even though further in the report (*p86, table B3)* it refers to an analysis undertaken by Heggies which includes leachate dams as generating odour. As such has this study included all sources of odour and is it correct?

69. *(p80, table B1)* This table sets out a summary of the activity data used in the modelling. There doesn't seem to be any consideration of air quality during the construction of the proposed facility. This table also confirms that odour from the proposed open-air leachate dams hasn't been included.

Appendix N– Traffic Response

A review of this report has been undertaken by Bitzios Consulting, however in addition to this [redacted] Pty Ltd consider the following points to be relevant.

70. *(p1) This report states: The current planning scheme, the Temporary Local Planning Instrument (TLPI) No. 2 / 2018 (Waste Activity Regulation) and the draft Ipswich Planning Scheme all require new uses in the surrounding area to be located, designed and operated to not jeopardise the current / future operation of the Ipswich Motorsport Precinct.*

    As discussed in Appendix P, point 80., Champions way will need reconstructing adjacent to raceway as such this will prevent the raceway from being able to operate normally.

71. *(p5) This report states: Champions Way will not have direct access to the highway, but rather the existing intersection will be maintained with an underpass to the upgraded highway. The service road will connect to the proposed interchanges to the north and south of Champions Way.*

    This statement needs to have some context by including a possible timeframe.

72. *(p6)* This section of the report is considering the existing condition of Champions Way, yet it makes no mention of undertaking a pavement condition and structural investigation of the existing road so as to ascertain its present condition and expected life with additional traffic volumes. If this isn't undertaken ICC could be faced with the need to reconstruct the road in the near future.

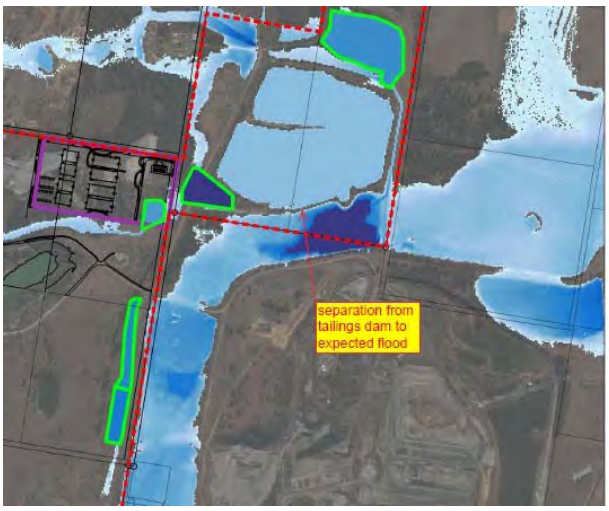
73. *(p6)* The report suggests that there *is a scattering of development along Paynes Road.* However, there is potential for major development in the future which would further affect the vehicle numbers using Champions way.

74. *(p12)* The report suggests that the interplay of trucks and traffic from the raceway will not create a safety concern. This is considered to be somewhat blasé and unrealistic. Likewise, there is a suggestion that another lane between Paynes Road and the carpark access. This isn't possible utilising the existing road reserve as it isn't wide enough. (Refer Appendix P, point 79)

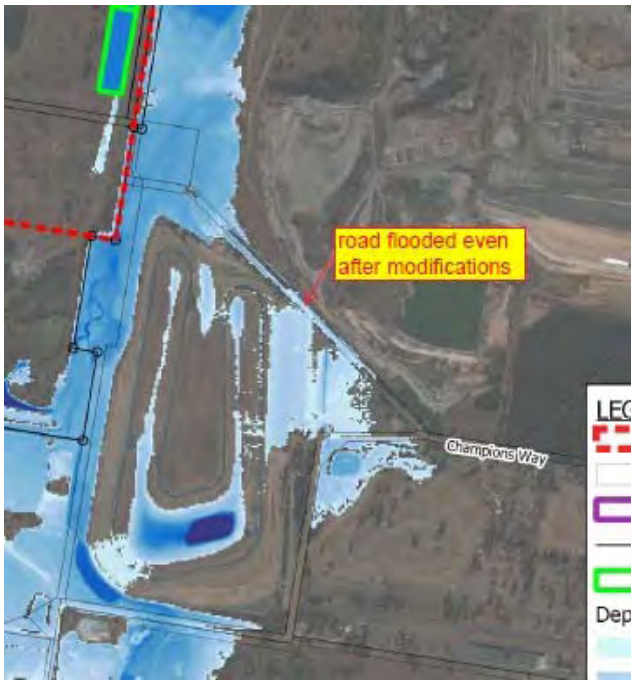
Appendix O – Flood & Stormwater Management Plan

A review of this report has been undertaken by [redacted] Pty Ltd. As can be seen below the proposal has not adequately considered the impact of flooding.

75. *(Figure - Appendix E1)* This plan shows the predicted flooding during the proposed scenario with mitigation for a 1% AEP flooding event. As can be seen the siting of the landfill in the tailings dam area doesn't satisfy the Department Environment and Science (DES) Guideline – *Landfill Siting, Design, Operation and Rehabilitation (2013)* requirements for separation by a distance of 100 meters to the 1 in 100-year flood. Refer below.



76. *(Figure - Appendix E1)* This plan shows the predicted flooding during the proposed scenario with mitigation for a 1% AEP flooding event. As can be seen the prosed access to the facility via Champions way is cut adjacent to the raceway. Refer below.



Appendix P – Amended Civil Engineering Plans

A review of these plans has been undertaken by [redacted] Pty Ltd. The points below indicate potential problems with the proposal as presented:

77. *(Drawing # P102)* The detail "Champions Way Typical Cross-Section" shows only 5 m from the top of shoulder to RPD boundary. Will this not allow enough room to construct a longitudinal table drain for the full length of the road reconstruction – evident especially given the recent damage to the existing table drain during extended wet periods. The corridor from the top of shoulder batter is compromised when one considers that the batter will occupy some 2 m of this corridor. (Refer to point 78 below)

78. *(Drawing # P102)* A close inspection of the longitudinal section indicates that large sections of the road adjacent to the raceway need to be lifted. Also, it is prosed to reconstruct Champions way with a 3300 x 1200 RCBC under it for the full length adjacent to the raceway. How will these reconstruction works be undertaken without the need to shut the raceway for an extended period of time?

79. *(Drawing # P103)* A truck turning movement should be undertaken to ensure that the proposed B-Doubles can turn from the proposed internal road onto the weighbridge adjacent to the office.

80. *(Drawing # P105)* Section A shows a maximum earthworks batter of 1:3, yet in Appendix E it suggests that the dividing bund between waste and clean fill in Lanes & Ironbark Pits will have a batter of 1:1? This needs to be clarified / justified

81. *(Drawing # P106)* Section D shows the proposed internal road encroaching into the road reserve. Internal roads would have to be contained within the site.

Appendix R – Preliminary Geotechnical Investigation

A review of the document titled "Preliminary Geotechnical Investigation" by Douglas Partners was undertaken by [redacted] Pty Ltd and ATC Willaims Pty Ltd. The points below summarise a number of inconsistencies and questions that were found during this review. As can be seen there is some important issues which have not being adequately addressed. This review should also be considered in union with several of the points from the review of Appendix E, Landfill Engineering.

82. *(p5, section 4) This report details a number of boreholes for testing and shows their location on an aerial plan.*

    Why wasn't an investigation undertaken of the settled tailings sludge in area 1 (tailings pit area) so as to clarify its depth, properties and contaminants?

83. *(p11, section 6.1.2) The report states: Where a factor of safety (FOS) of less than 1.2 was found, further analysis was carried out using a flatter slope*.

    Firstly, it is questioned if this FOS is high enough, given most publications suggest not. Also, there is confusion in the above statement in the report, given it is suggested that where the FOS wasn't 1.2, that further analysis would be undertaken. Table 3 Results of Global Stability Analysis however clearly shows multiple instances of FOS being less than 1.2 with no further analysis provided.

84. *(p13, section 6.2) The report states: There are also mine tailings to RL -10, RL -20 and RL -30 in the southern, north-western and north-eastern parts of the Tailings Pit respectively, however this material is to be removed and placed in another mine void on site external to the Waste Activity Area.*

    The report does not nominate how the material is to be removed or which other void is to be used. It appears that all existing voids included in this application area have already being nominated for landfilling. This disposal of mine tailings would also constitute ERA 60, as disposal of the material cannot meet the definition under the EP Regulation for 'clean earth' – i.e. disposal of this material cannot occur in the southern end of Lanes Pit or Ironbark Pit in the 'CLEANFILL VOID' area on the submitted plan of development.

85. *(p14, section 6.2.1) The report states: The historical airphotos suggest this spoil was placed around early to mid-1990's, which is approximately 25 years ago. Based on a creep coefficient of 1.5%, it is estimated that the spoil settlements over the next 20 years might range up to 150 mm, with a further 100 mm over the following 20 years. This settlement assumes no groundwater level rise in the spoil; if groundwater level rise does occur then based on published data, further settlements of the order of 1.4% of the amount of groundwater rise might be expected.*

    There is no indication as to whether this potential future settlement been assessed in the proposed development of the Resource Recovery Facility or the internal roadways.

86. *(p19, section 6.3.2) The report states: Underground services that are settlement sensitive should preferably be routed from Coopers Road in relatively undisturbed land rather than from the south, to avoid the mine spoil and associated settlements noted previously in this report.*

    Given this recommendation it seems curious that no preliminary assessment of service availability along Cooper Road has been undertaken.

Attachment 3

Traffic Review

Issue History

File Name	Prepared	Reviewed	Issued by	Date	Issued to
P4614.001T_Wanless Recycling Park Ebenezer Peer Review	F. Jones	M. Davidson	F. Jones	12/05/2020	Michael McMahon at m.mcmahon@dhenv.com.au
P4614.002T_Wanless Recycling Park Ebenezer Peer Review	F. Jones	M. Davidson	F. Jones	12/05/2020	Michael McMahon at m.mcmahon@dhenv.com.au

Wanless Recycling Park, Ebenezer

Peer Review (Traffic)

1. Introduction

1.1 Background

Bitzios Consulting has been engaged by [redacted] on behalf of the operators and owners of [redacted] (located at 55 Champions Way, Willowbank) to provide traffic engineering advice in relation to a development application (DA) submitted over land situated at Ebenezer and Willowbank (being Lot 2 SP 167885, Lot 231 CH 3132, Lot 230 CH 3132, Lot 240 CH 3132, Lot 241 CH 3132, Lot 242 CH 3132, Lot 1 RP 24569, Lot 1 SP 167885, Lot 243 CH 3132, Lot 254 CH 31200, Lot 257 CH 31247, Lot 312 CH 31969, Lot 2 RP 24570, Lot 1 RL 8701) (subject site) (Council Reference: 10674/2019/CA).

1.2 Site / Development Details

Relevant site / development details are outlined below:

- A waste facility is proposed at the subject site, which is located within the Ipswich City Council (Council) Local Government Area (LGA)
- On the 23rd December 2019, a development application (DA) was submitted over the subject site (Council Reference: 10674/2019/CA), which included:
  - A Material Change of Use (MCU) application for a waste activity use
  - A Reconfiguration of a Lot (ROL) for boundary realignment (13 Lots into 13 Lots)
- As per of the DA, a traffic impact assessment (TIA) report was submitted, which was prepared by TTM Consulting
- On 20th January 2020, Council issued an Information Request (IR), which included several traffic related items. The key item is related to access via Champions Way not being supported by Council (Item 3)
- On the 18th February 2020, the State Assessment and Referral Agency (SARA) issued an IR, which included several traffic related items. The key item is related to network modelling, pavement impacts and potential impacts on the railway network
- On 27th April 2020, the applicant responded to the IR's. The materials, which were prepared by TTM, included the proposal to retain access along Champions Way.

This technical memorandum has been prepared to consider and review relevant proposal materials any traffic or transport related impacts as a result of the DA.

2. Peer Review

2.1 Overview

As part of this peer review, the following materials have been reviewed:

- Traffic Impact Assessment (TIA) Report, prepared by TTM, dated 13/12/2019
- Council's IR, issued on 20/01/2020
- Traffic Response to Council's IR, prepared by TTM, dated 22/04/2020
- State Assessment and Referral Agency (SARA) IR, issued 18/02/2020
- Traffic Response to SARA's IR, prepared by TTM, dated 22/04/2020.

2.2 Champions Way Access

2.2.1 Overview

As noted in Council's IR, several planning documents identify the Ipswich Motorsport Precinct as a major tourism destination, and therefore require no impacts on Champions Way (which is the primary access to the Ipswich Motorsport Precinct). Based on the responses provided, the proposal still retains primary access via Champions Way, which would appear contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct.

2.2.2 Alternative Access Routes

The response prepared by TTM indicates that there are no viable alterative routes between the site and the Cunningham Highway, due to the requirement for private land to complete connections. However, further consideration must be given to access routes south-east of the site via Seppanen Road, as illustrated in Figure 2.1 below.

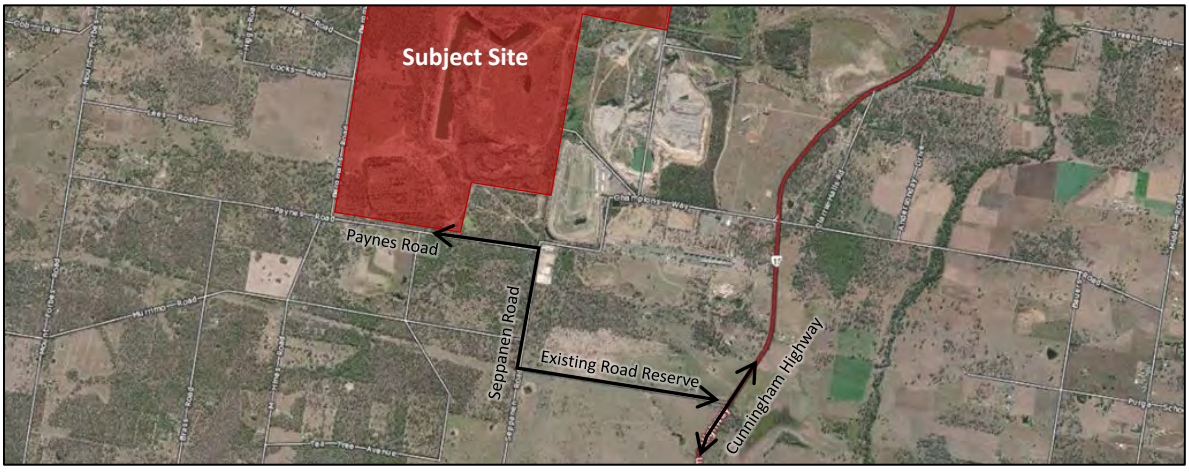


Figure 2.1: Alternative Access Route

Key points are noted below:

- This route directly connects Paynes Road (frontage to site) and the Cunningham Hwy
- This route is consistent with Council's Implementation Guideline No. 32 – Ebenezer Regional Industrial Area (ERIA) and Figure 5a (ERIA Transport and Access Network Plan) which includes this route as being the 'preferred strategic road hierarchy and network within ERIA'.
- This routes contains road reserves along the full length (i.e. no private property required to facilitate route connections)
- Based on QLD Globe, the road reserve appears to be 20m wide, which is suitable to accommodate an Industrial Access Street as per Council's Standard Drawing (SR.03).

No discussion or review has been provided regarding this access route. In our opinion this provides a suitable alterative route between the site and the Cunningham Highway.

2.2.3 Future Upgrades

The response from TTM states:

"Champions Way in its current form is considered an "interim" access arrangement for the proposed development, with alternative routes and upgrades proposed in the future that will provide additional road capacity to dilute the impact of the proposed development"

Whilst it is understood that there is planning to upgrade the Cunningham Highway and associated Champions Way access, Council's does not identify these upgrades within its current or draft planning scheme LGIP Plan for Trunk Infrastructure. As such, these works do not have committed funding and no timeline has been provided for when these upgrades will occur.

It is important to note that the route outlined in Figure 2.1 is identified in Council's LGIP (April 2018) as Future Road Projects 154 and 155 and represents the preferred strategic road hierarchy and network within the ERIA as provided for on Figure 5a (ERIA Transport and Access Network Plan) of Council's Implementation Guideline No 32. This further suggests that this route should be investigated for site access.

2.2.4 Ipswich Motorsport Precinct Access

Figure 2.2 shows access to the Ipswich Motorsport Precinct along Champions Way.

Source: Nearmap

Figure 2.2: Existing Access on Champions Way

The following key points are noted:

- No detailed (i.e. SIDRA / turn warrants) analysis of the impacts on Ipswich Motorsport Precinct access has been undertaken, and it is not clear if there would be increased delays or queueing requiring additional infrastructure (i.e. turn lanes) and/or mitigation measures to offset impacts
- Detailed analysis should consider the critical peaks (i.e. events) and also consider the typical breakdown of heavy vehicles generated by the proposed development.

As such, under the current proposal, the development will have major impacts on access to the Ipswich Motorsport Precinct and no analysis has been undertaken to confirm if any further mitigation measures are required to offset development impacts.

2.2.5 Queensland Raceway Access

Figure 2.3 identifies the location of the proposed extension and heavy vehicle route from Champions Way to connect to the subject site in proximity to the Ipswich Motorsport Precinct.

Source: Nearmap

Figure 2.3: Champions Way Extension

The following key points are noted:

- The extension is proposed on roadway that is currently being utilised as a circulation road to a 650m^2 car park with ~750 parking spaces, as well as direct access to the trackside loading areas and storage / servicing garage
- These areas are expected to generate high demands (particularly on racing days) which will likely be impacted by the proposed developments traffic generation. This is directly opposed to the outcomes of the Planning Scheme in regards to impacts on the Ipswich Motorsport Precinct
- The proposal will also generate significant heavy vehicle volumes, which will significantly impact the amenity of the roadway, especially considering the likely high volumes of pedestrians within the trackside areas
- No analysis of the impacts on Queensland Raceway access has been undertaken, and it is not clear if there would be increased delays or queueing requiring additional infrastructure (i.e. turn lanes) and/or mitigation measures to offset impacts
- Detailed analysis should consider the critical peaks (i.e. events) and also consider the typical breakdown of heavy vehicles generated by the proposed development.

As such, under the current proposal, the development will have major impacts on the Queensland Raceway and no analysis has been undertaken to confirm if any further mitigation measures are required to offset development impacts.

2.2.6 Amenity

As the Ipswich Motorsport Precinct is considered a major tourist attraction, additional heavy vehicle trips along Champions Way will significantly impact the amenity of the area. This is only briefly discussed during Major Events in the area, with further detail required.

2.3 External Analysis

2.3.1 Traffic Generation Volumes

As stated in the response material the site is expected to generate 416 heavy vehicle movements along Champions Way during the ultimate development stage. It is unclear how the peak hour demands have been calculated.

This should be confirmed and updated design volumes are required to confirm that the intersections have been assessed with the inclusion of the revised volumes. Furthermore, details of staff hours and shifts should be provided to confirm when site generation peaks will occur (i.e. shift changeover periods).

2.3.2 Network Modelling

Item 24a of SARA's IR requested the Ipswich-Rosewood Road / Southern Amberley Road and Cunningham Highway / Ipswich Rosewood Road intersections be modelled as a network. TTM's response states:

"To include the Ipswich-Rosewood Road / Southern Amberley Road as part of a networked analysis, additional traffic survey data is required. Given the current restrictions due to COVID-19, it is not possible to undertake surveys at the Ipswich-Rosewood Road / Southern Amberley Road to enable the network analysis"

It is unclear what additional data would be required. Furthermore, whilst surveys cannot be undertaken (due to COVID-19), historic intersection / daily traffic data can be utilised to accurately extrapolate and model typical conditions.

2.3.3 Existing Safety Issues on State Controlled Network

Item 24a of SARA's IR outlines that there are existing **safety** and performance issues that occur due to the proximity of Ipswich-Rosewood Road / Southern Amberley Road and Cunningham Highway / Ipswich Rosewood Road intersections. This is understood to include increase delays for right turning volumes.

TTM's response materials sates:

"As outlined in Section 11.3.1 of DTMR's Guide to Traffic Impact Assessment, the average delay metric is the key performance measure for priority-controlled intersections. It states that "where average peak hour delays for any turn movement exceeds 42 seconds (the Level of Service C/D threshold) then the intersection should be upgraded for safety reasons where it is practical to do so."

The analysis demonstrates that the maximum delay in the 2022 AM peak is in excess of 42 seconds (43 seconds) in the base case, without development traffic. This delay is due to the extremely high right turn demand into Ipswich Rosewood Road from the Cunningham Highway. It is because of this high right turn demand that TMR have identified a major upgrade to this section of the Cunningham Highway, and in particular the intersection with Ipswich Rosewood Road, as identified in the DTMR business case."

TMR's Guide to Traffic Impact Assessments (GTIA) states that where a "High" safety risk score is identified, mitigation works are required regardless if the development worsens the risk or not. This applies in this instance, and mitigation should be provided to reduce turning movement delays below the thresholds in all design scenarios, regardless of base results.

Therefore, it would be expected that mitigation measures would need to be provided at this location to reduce the existing risk score.

2.3.4 Model Calibration (Two Stage Layout)

In response to the IR, the Cunningham Highway / Ipswich Rosewood Road intersection has been reassessed as a two stage turn movement. However, it is unclear if the centre median has sufficient width to accommodate heavy vehicle storage.

This should be updated in SIDRA and modelling updated accordingly.

2.3.5 Delay Assessment

Based on the response material, the following intersections will have a >5% delay impact as a result of the development:

- Cunningham Highway / Coopers Road Intersection
- Cunningham Highway / Ipswich-Rosewood Road Intersection.

TTM's response materials sates:

"the intersection operates well within performance thresholds in terms of DoS and delay thresholds, therefore, no further mitigation works are required"

"it is not reasonable to impose mitigation measures on this development as a result of 50vph, particularly when planning has been undertaken to resolve the significant existing issues at this intersection"

As per the GTIA, mitigation measures are required to offset delay impacts on the state controlled network where the average delay is increased by >5%. The operation of the intersection within acceptable thresholds is not considered by the GTIA, as the development will impact existing users and should be responsible for the offset of these impacts.

As such, mitigation measures are considered warranted to offset development related impacts on the state controlled network. These should also take into consideration the identified safety issues noted above.

2.3.6 Road Safety Audit

Section 9.3.3. of the GTIA states that on roads with >8,000 vehicles per day and 80+km/h speed limit, a Road Safety Audit (RSA) is required to asses development impacts and safety risks. The Cunningham Highway meets this criteria where impacted by the subject site, and as such, an RSA must be provided.

The response material has only provided safety risk assessments for the Cunningham Highway / Ipswich Rosewood Road intersection, which does not meet the requirements of the GTIA.

2.3.7 Pavement Impacts / Contributions

In response to Item 24h of SARA's IR, TTM have provided an updated PIA; however, the contributions still appear to be calculated using a damage exponent of 4 (i.e. SAR4 values). This should be updated accordingly.

2.4 Other

2.4.1 B-Double Routes

Currently, there are no approved B-Double routes which provide access to the subject site. It is noted that the Champions Way is an approved B-Double route between the Cunningham Highway and the Champions Way road fork (approximately 1.3km).

This must be further addressed if B-Doubles are to access the subject site. Furthermore, any roads which are currently not B-Double approved should be suitably assessed to confirm that the provision of B-Doubles is suitable, in accordance with all National Heavy Vehicle Regulator (NHVR) criteria.

2.4.2 Parking Supply

In response to Item 17a of Council's IR the revised architectural plans still provide 50 on-site parking space, equating to one (1) space per staff member. With all visiting vehicles to be stored within the hardstand apron close to the machinery operations. This is not believed to be an ideal solution and designated visitor parking should be provided adjacent to the head office to prevent visitors from storing within any aisles. This is further emphasised due to the nature of the site and the use of heavy vehicles that may traverse over the hardstand areas while manoeuvring through the site.

No visitor parking has been provided at the development as required in the Council Planning Scheme. This would require additional parking spaces on site.

2.4.3 Pavement Design

No details of the pavement design have been supplied in response to Item 17b of Council's IR. These details are warranted to ensure that any approved development will not decrease the expected life span of the surrounding pavement and that all connecting structures, such as bridges and culverts will be designed to a sufficient standard.

3. Summary

In summary, the proposed Wanless Recycling Park proposal does not adequately consider and mitigate traffic related impacts to the surrounding road network. There are a number of items that need to be addressed from a traffic engineering perspective, including:

- Site access proposed via Champions Way would appear contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct. Furthermore, it is inconsistent with Council's Implementation Guideline No. 32 and Figure 5a (ERIA Transport and Access Network Plan) which includes access via Seppanaen Road as being within the preferred strategic road hierarchy and network within the ERIA.
- Ensuring the access route is suitable to accommodate B-Double access to the site
- Demonstrating that there will be no impacts on the safety, operation or amenity of the Ipswich Motorway Precinct
- Updating intersection modelling to reflect network conditions
- Providing mitigation measures at key areas where “High” risk scores have been identified (i.e. where turning movement delays exceed thresholds), regardless of the existing operating conditions, as per the GTIA
- Providing mitigation measures where intersection delay exceeds 5%, regardless of operating conditions, as per the GTIA
- Conducting a Road Safety Audit on relevant state-controlled sections.

Attachment 4

Ecological Review

3D Environmental
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12 May 2020

To: Mike McMahon

RE: COOPERS ROAD, EBENEZER – ECOLOGICAL ASSESSMENT PEER REVIEW

I have undertaken a review of the draft version of the *Ecological Assessment – Ipswich City Council* prepared by Saunders Havill Group for the Wanless Recycling Park development located at Coopers Road, Ebenezer (December 2019). The review process included the following:

1. Critical review of the ecological assessment report and associated figures.
2. Provision of a memorandum which consolidates and summarises issues, which in my opinion, have not been adequately assessed or addressed.

Overview

The *Ecological Assessment – Ipswich City Council* (herein referred to as the document) provides a desktop and on-ground ecological assessment for the proposed Wanless Recycling Park development. Pertinent to the assessment of this report, the following general comments can be made:

1. Ecological databases relevant to the distribution of flora and fauna have been thoroughly searched.
2. Ecological planning tools including those relating to Matters of National Environmental Significance (MNES), Matters of State Environmental Significance (MSES) and Biodiversity Planning Assessments (including Matters of Local Environmental Significance – MLES) have been sufficiently considered.

The deficiencies of this assessment, in my opinion, relate to critical analysis of ecological datasets and inadequate consideration given to assessment of impacts arising from the development footprint and impact mitigation, particularly regarding requirements for ecological offsets. Comments relating to these deficiencies are made in the following sections.

1 Seasonality of Assessment (Section 1.5)

The on-ground ecological assessment was undertaken in November. November is considered a late dry season survey, and the 30 ml of rainfall in the month preceding survey would not have initiated any strong rebound in visible floristic diversity. While I do not believe that this would have affected the findings of the threatened flora assessment, wet season surveys will be necessary to adequately describe habitat condition and inform ecological offset requirements.

2 Field Verified Vegetation Communities and Regional Ecosystems

There is no description or delineation of non-remnant and remnant eucalyptus woodland-open forest areas in the report and there has been no attempt to reclassify or amend the existing regional ecosystem mapping produced by DNRM. Remnant areas of eucalyptus woodland-open forest have not been allocated to a RE code and consideration as to whether some areas constitute High Value Regrowth has not been made clear.

In the Impact Assessment (Section 5) it is stated that 5.4 ha of non-remnant / remnant eucalyptus woodland-open forest will be impacted, but it is not stated what portion of this area is remnant and non-remnant, nor the relative proportions of the various regional ecosystems. This detail will be required to inform requirements for ecological offset.

3 Matters of State Environmental Significance – Regulated Vegetation

For MSES associated with watercourses, it is unclear as to whether VM Act Watercourses have been mapped and whether appropriate buffer distances surrounding a watercourse have been applied to fully inform offset requirements. Buffer distances applied to VM Act Watercourses is specified in Appendix 3 of the Environmental Offset Policy V1.4.

4 Terrestrial Fauna – Likelihood of Occurrence Assessment

It is not clear why species rated with a “moderate” likelihood of occurring (being previously recorded in proximity to the site and with potential habitat typologies or resources present on site) are not given further consideration in the impact assessment. Section 4.1.6 – Threatened Fauna determined two threatened fauna species listed under the EPBC Act and/or NC Act, as having a moderate or higher likelihood of occurring on the WRP site, however at least 6 other species are listed in Appendix B as having a “moderate” likelihood of occurrence. Further reasoning for their exclusion from the impact assessment is required. Analysis within Appendix B provides some reasoning for the exclusion of several species (having no records with some suitable habitat present), however some species which have either nearby records or potentially suitable habitat on site require, as per Appendix B, require further consideration including:

- Red Goshawk;
- Australian Painted Snipe;
- Grey-headed Flying Fox;
- Black faced monarch; and
- Latham’s Snipe.

5 Impact Assessment

The impact assessment section lacks adequate detail to accurately evaluate the short and long-term impacts of the Project. The impact assessment does not include a risk matrix which should include the likelihood of occurrence of key impacts and the consequence of these impacts. This is required for each MSES and MNES known or likely to occur on site, in the context of the total project area and the development footprint area (a comprehensive summary of areas of impact to MNES and MSES has not been provided in the document)

5.1 Impacts to Matters of National Environmental Significance

The impact assessment does not include impacts to MNES as it is stated that these impacts will be covered in an EPBC Act referral. A summary of impacts to MNES would be necessary to adequately assess the Project's impacts within the context of this report. Within the report, consideration of impacts was not given to Cattle Egret (Known) and White-Bellied Sea Eagle (Known) and both are MNES. Other MNES, such as koala, are given more context as they are also considered MSES. In addition, the current Planning Report / Ecological Report state that:

A. *EPBC referral is scheduled to be lodged with DoEE in early 2020, with additional field studies required to quantify the impact on the protected communities. A copy of this reporting will be forwarded to ICC as it becomes available* (Town Planning Report Wanless Recycling Park – Urbis - 19 December 2019 - P0016174 - FINAL); and

B. *It should be noted that the project is being referred to the Department of the Environment and Energy (DoEE) under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) and all matters of national environmental significance (MNES) identified on-site will be assessed through this mechanism* (Ecological Assessment – Flora and Fauna Assessment Coopers Road, Ebenezer Prepared for Wanless Recycling Park Pty Ltd - April 2020 - Job 9921 E)

At the time of this review, there is **no** indication on PD Online of any such referral occurring and a cursory review of the DoEE Referrals List (online) indicates that **no** referral has yet occurred (http://epbcnotices.environment.gov.au/referralslist/)

The lack of referral of the proposal under the EPBC raises concern in terms of how does DES are able to appropriately consider MSES and/or offsets, in absence of any referral to DoEE having occurred or decision from the Commonwealth on whether there is a Controlled Action – for matters of MNES.

Furthermore, the applicant has submitted amended application forms to Council on 7 May 2020. The DES form (*Development application Form 1 - Application details-attachment for an application for an environmental authority*) specifically states 'No' to the question:

- *Would the carrying out of the proposed ERA(s) be likely to have a significant impact on a MNES?**

It is unclear (and presumptuous) that the applicant can make this statement in absence of any referral under the EPBC and/or consideration of the required assessment necessary to undertake such referral. The statement is also contrary to the ecological assessment report which indicates significant residual impact will be incurred to Koala and the Swamp Tea-Tree Ecological Community, both of which are MNES.

6 Management Measures

Management measures listed in Section 5.2 – Potential Project Impacts mention the implementation of "standard mitigation measures", however these are not elaborated on and project specific examples are not provided. This creates doubt as to whether the 'standard mitigation measures' will be effective in ameliorating impacts to sensitive ecological receptors. As an example, the *Melaleuca irbyana* (Swamp Tea-tree) TEC is known to be a groundwater dependent community that is reliant on specific hydrological regimes. Management measures specific to the maintenance of this habitat

have not been considered and are necessary to ensure ongoing degradation of this habitat does not occur.

7 Items Not Included within the Document:

7.1 Personnel

Description of the field personnel and their relevant qualifications was not provided in the document. This information is necessary to validate whether fieldwork was undertaken by suitably qualified personnel. The project area contains large areas that fall within 'High Risk' areas for protected plants, requiring specific levels of experience for surveys to be valid.

7.2 Protected Plant Survey Methodology

As the infrastructure is likely to fall within the 100 m buffer surrounding 'High Risk' areas for protected plants, a protected plant flora survey in accordance with *Flora Survey Guidelines – Protected Plants* (DES 2019) will be required prior to development approval. It is not clear if surveys have been undertaken in accordance with this guideline, and there is no indication of the distribution of *Melaleuca irbyana* across the assessment area other than where it forms a specific regional ecosystem or TEC. Hence impacts to *Melaleuca irbyana* have not been suitably contextualised.

7.3 Aquatic Ecology

An assessment of the aquatic values of the on-site dams was not undertaken and explanation for why this was omitted has not been provided.

7.4 Weed species

The description and mapping of weed distribution or intensity of infestation was not provided in the document. This information is critical to the development of vegetation management and weed management plans.

7.5 Queensland Environmental Offsets Framework

Information regarding the environmental offset framework and potential offsetting requirements associated with this development were not included in the document. In particular, the *Commonwealth Environmental Offset Policy* (2012) and the relationship with the state environmental offset framework should be discussed, particularly as referral of the project to the Commonwealth Department of Environment and Energy (DOEE) for assessment under the EPBC Act has been undertaken.

Further consideration is required regarding significant residual impacts to koala and associated requirements for habitat offset. As per *the Queensland Environmental Offsets Policy - Significant Residual Impact Guideline* (2014), a Significant Residual Impact to koala within areas of mapped koala habitat will occur when a non-juvenile koala habitat tree is removed. Under Schedule 24 of the *Planning Regulation* (2017), a koala habitat tree is defined as:

a) a tree of the *Corymbia, Melaleuca, Lophostemon* or *Eucalyptus genera* that is edible to koalas; or

b) a tree of a type typically used by koalas for shelter, including, for example, a tree of the *Angophora* genus.

A non-juvenile koala habitat tree is defined as a koala habitat tree that:

a) is more than 4m tall; or
b) has a circumference of more than 31.5cm measured at 1.3m above the ground.

There is no quantification of the impacts to the number of non-juvenile koala habitat trees that will be impacted by the development, in terms of species structure and density. Hence the document provides no basis on which to inform offset requirements for koala habitat under state policy.

I trust this review fulfils your requirements for additional ecological context regarding the development application for the Wanless Recycling Plant. I am available for further discussion regarding the points I have raised as required.

Yours Sincerely

David Stanton

Principal – 3d Environmental
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Attachment 5

Noise Review

Air Noise Environment Pty Ltd

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Attention: Mike McMahon

11 May 2020

Ref: 6082-Noisereview-let01.odt

Dear Mike

Re: PEER REVIEW – PROPOSED WANLESS RECYCLING PARK, WILLOWBANK

This report letter presents a peer review of the noise assessment completed for the proposed Wanless Recycling Park Project at Willowbank (Council application number 10674/2019/CA). The review relates to the following reports:

- Acoustics RB Pty Ltd, Proposed Resource Recovery Facility and Landfill, Ebenezer – Environmental Noise assessment, 3 December 2019, Copy 2, Report No. 19-1136.R02;
- Acoustics RB Pty Ltd, Proposed Resource Recovery Facility and Landfill, Ebenezer – Environmental Noise assessment, 24 April 2020, Copy 2, Report No. 19-1136.R02;

The 3 December 2019 report was submitted with the development application. The 24 April 2020 report was submitted in response to an Ipswich City Council[1] and SARA[2] information request. The focus of this peer review is on the 24 April 2020 report. However, the 3 December 2019 and associated information requests have been reviewed for background to the project.

This report letter has been divided into key items followed by a peer review of each item.

1 Ipswich City Council, Re: Assessment Management Information Request (Planning Act 2016 – Section 12 of the Development Assessment Rules), 20 January 2020, Application No. 10674/2019/CA.

2 SARA information request – Bergmans Road, Lanes Road, Ebenezer Road and Coopers road, Ebenezer; Coopers Road, Willowbank, 18 February 2020, SARA reference 2001-15045 SRA.

Background Noise Monitoring

Two noise monitoring locations have been selected:

- Location 1 – south-west area of site, close to dwelling at 290 Bergmans Road, Ebenezer;
- Location 2 – north-east corner of site.

The noise monitoring locations are appropriate in terms of representing ambient noise levels at the nearest sensitive receptors.

Council has raised issues regarding the influence of coal loading operations impacting on background levels, particularly as the loading operations are expected to cease with the cessation of the nearby mining activities. In the opinion of the reviewer, Acoustics RB response is sufficient, which highlights that coal loading operations would not influence RBL (Rating Background Levels) values, which are based on the lowest 10^{th} percentile L_{A90} noise levels.

The measured RBLs summarised in Table 4 are reasonably expected for the given area, which include night time levels of 24 dB(A) and 30 dB(A) at Locations 1 and 2, respectively. It is noted that the evening noise RBL at Location 2 is higher than the day RBL by 2 dB(A) (34 dB(A) vs 32 dB(A)). This carries over to the derivation of background plus criteria, which is 2 dB higher for the evening. Evening background levels are not normally higher than day background levels, unless influenced by extraneous sources such as insect noise. No comment on the higher evening noise levels is provided. If evening levels are normally lower at Location 2, the subsequent noise limit will also be lower. Nonetheless, it is noted that the night-time RBL and associated limit is more stringent than the evening limit, and defines compliance for operations between 6 pm to 6 am, which is associated with the resource recovery facility only.

Assessment Criteria

The Acoustics RB report references the following with respect to noise criteria:

- Acoustic quality objectives (AQOs) of the Environmental Protection (Noise) Policy 2019 (EPP Noise);
- Typical background plus noise limits specified in Environmental Authorities of nearby industrial facilities.
- The L_{Aeq} noise parameter has been adopted;
- A 10 dB facade correction for an open window has been considered for deriving equivalent external AQOs from the internal AQOs defined in the EPP Noise;
- specific noise limits for the 6 am to 7 am period background levels is defined (in addition to the standard day 7 am to 6 pm, evening 6 pm to 10 pm and night 10 pm to 7 am periods);
- a minus 3 dB correction has been applied to the noise limits to allow for potential future activity in other areas of the Wanless Recycling Park site.

The overall approach to deriving noise criteria is considered appropriate. The acoustic report has

reference the relevant guidelines and legislation, and has also drawn appropriate conclusions regarding any adjustments or corrections required for the criteria.

It is recommended that justification be sought regarding the adoption of higher noise limits during the 6 am and 7 am period. This approach appears to have been adopted given the higher background noise levels from 6 am to 7 am, as shown in Table 4 of the Acoustics RB report. It needs to be understood whether the increasing noise levels measured from 6 am to 7 am is due to ambient activity likely to be experienced year round. For example, if it is due to traffic-related activity from the general road network and industry in the area, then it is likely that the increased background noise levels from 6 am to 7 am would be relevant throughout the year. If it is due to bird song or insect noise, then this may be seasonal, and adoption of a higher 6am to 7 am period criteria may not be appropriate.

Noise Modelling

Table 1 presents key inputs for the noise modelling conducted by RB Acoustics and associated review comments.

Overall, the modelling methodology and inputs are appropriate for the assessment of noise impacts on nearest sensitive receptors. **Bolded** text shows aspects of the modelling where further clarification can be sought.

Table 1 – Noise Modelling Review Comments

Review Item	Comments
Calculation Methodology	The CONCAWE noise propagation calculation methodology has been adopted which is an accepted approach for DA noise assessments. CONCAWE is an empirical method which allows for noise predictions under various meteorological conditions.
Sensitive Receptors	Available aerial photography has been reviewed and all nearest sensitive receptors have been accounted for.
Topography	Topographical data for the area has been sourced from a reliable source (DNRM). Footnote B to Table 8 indicates that modelling of the landfill assumes the landfill site will be almost at completion (i.e. highest point). **It is recommended that clarification be sought regarding the source of topographical data for capped landfill areas.** The DNRM data set is unlikely to capture the correct heights of the final capped landfill areas.
Noise Source Data	The sound power levels for equipment is considered appropriate and representative for a waste recycling park of this type. **It is recommended that clarification be sought regarding the activities within the Resource Recovery Buildings and the sound power levels**

Review Item	Comments
	considered for these specific activities.
Noise Source Locations	The modelling noise source locations are presented in Figure 8 to 10. These locations appear to form a reasonable basis for assessing noise impacts. Figures 8 to 10 show modelled line sources for dump trucks. **Further clarification should be sought regarding how the dump trucks have been modelled as a line source.** For example, if an L_{Aeq} has been predicted, the line source may be represented by a moving point source with an assumed number of trucks per hour and vehicle speed. This information is particularly important given that dump trucks are one of the contributors to the predicted exceedances.
Modelling Scenarios	3 noise modelling scenarios have been considered: • Scenario 1 - day time operations – RRF and landfilling at Void 1 and 2 • Scenario 2 - day time operations – RRF and landfilling at Void 1 and 2 • Scenario 3 – night time operations – activity at RRF only. These scenarios appear to form a reasonable basis for assessing noise impacts.
Meteorology	See following section for detailed review.

Acoustics RB have specifically responded to Council's query regarding tonality and impulsiveness on Page 26 of the acoustic report. It is indicated that an evaluation has been undertaken and based on this evaluation, it was determined that there would be no discernible tonality or impulsiveness characteristics. **It is recommended that the evaluation be discussed in further detail.** Tonality is unlikely to be significant based on the type of equipment operating, however, it is expected that impulsive noise sources could contribute to noise impacts.

Modelling Meteorological Conditions

The Acoustics RB report has adopted calm conditions in the noise modelling. The justification for such an approach is provided in some length in Footnote D of Table 8. It is the reviewer's understanding that this approach has been adopted by Acoustics RB because the difference between project noise levels and background noise levels is considered to be the greatest under calm conditions. Whereas, under other conditions (such as down wind or temperature inversions), the Acoustics RB report indicates that the difference is smaller. Therefore, modelling of calm conditions is considered to be a worst-case approach to assessing compliance.

The following text is presented on Page 22 of 61 of the report:

> *'In general, however, under downwind propagation conditions (ie when the receiver is located downwind of the source), the background noise levels will increase at a faster rate than the*

increase in the emitted noise levels. In fact, under downwind conditions (ie wind speed up to 3m/s), the increase in RBL has been typically measured to be 5dBA, while the increase in emitted noise levels is generally in order of 3-4dBA'.

There are a couple of points to highlight regarding the above comment.

Firstly, justification is considered necessary with regards to the RBL increasing by 5 dB(A) under downwind conditions, as well as justification that emitted noise levels increase in the order of 3-4 dB(A). With regards to the increase in emitted noise levels, the dB increase is site specific and influenced by factors such as noise source characteristics, distance to sensitive receptors and topography. No modelling of the subject site under downwind conditions has been undertaken to show that the potential increase in noise levels at the nearest sensitive receptors is in the order of 3-4 dB(A) (and therefore, less than the assumed 5 dB(A) increase to background levels under downwind conditions).

Secondly, for the above Acoustics RB comment to apply, justification should be provided that the RBL values upon which the noise criteria has been based was also determined under calm conditions. The approach that Acoustics RB appears to be seeking to take, is to compare project noise levels under calm conditions with background plus noise criteria (based on RBL values under calm conditions), because this is considered to be the worst-case scenario. However, if the RBL values were affected by wind speeds generally around 2-3 m/s, then the report is comparing calm predictions against higher wind-affected (up to 3 m/s) background levels that are not consistent with the modelling approach being proposed. Page 15 of 61 provides some information about the prevailing wind conditions during the monitoring, which indicates intervals of gentle/moderate breeze at times and generally calm to light winds during the night. If there is any doubt about whether background noise levels were influenced by light winds, then, in the opinion of the reviewer, an alternative approach to the assessment should be taken (i.e. predict noise levels under downwind conditions).

The RB Acoustics report has also applied a similar logic in discussing temperature inversions. On Page 23 of 61 states the following:

Under temperature inversion conditions which may occur at times on some winter nights after reasonably warm days, higher levels of noise are expected to be emitted from distant noise sources. While this effect will apply to the noise emitted by the proposed new facility, it will also apply to all other distant noise sources, especially highway road traffic noise. Taken together, the increase in emitted noise levels and the increase in background noise levels will effectively offset each other.

The above logic is considered scientifically sound, however, the specific value of the offset is open to discussion and a complete offset may not occur. The discussion appears to be written to justify why temperature inversions do not necessarily require consideration, and that assessment under calm conditions represents a worst-case scenario. If this logic is applied to the assessment, then further justification would be necessary to show that RBL values which have been used to derive noise criteria were not influenced by temperature inversions. Otherwise, predicted noise levels under calm conditions are potentially being compared to noise criteria based on higher background levels (influenced by temperature inversions).

Again, if there is any doubt about the specific meteorological conditions influencing the derived RBL values, then the alternative approach to the assessment is recommended (i.e. predict noise levels under downwind conditions). It is noted that in the information request, Council have requested modelling under adverse meteorological conditions if these are found to be a feature of the environment. This request is considered appropriate for assessing noise impacts.

Suitability of Assessment Recommendations

The RB Acoustics report discusses the following potential mitigation options:

- for bulldozers, front end loader and dump trucks (which contribute to predicted exceedance at Residences 55 and 56):
    - specify a maximum noise emission level for the bulldozers, front end loader and dump trucks; and
    - construction of either or both of close-in portable barriers and distant earth mounds/barrier.

The potential mitigation options are provided in general terms only, making reference to the detailed design stage of the project. While, it is acknowledged that the detailed design phase forms the proper basis for finalising detailed mitigation measures, further investigation or details are considered necessary for confirming the practicability of adopting such measures. For example, questions that arise include:

- Are close-in portable barriers a practical option given the expected progression and methodologies to be adopted for landfill operations? Generic reference has been made to other landfills in SE Queensland only.
- If heavy machinery emission noise levels are to be limited, are the potentially required noise limits feasible? For example, low noise emission levels are generally associated with smaller equipment. If this is the case, is the smaller equipment a practical operation for the site.

It is recommended that further justification of proposed measures is provided and an indicative noise mitigation scenario is included to show that the measures are a practical/ feasible approach for the proposed operations.

CONCLUSION

A peer review of the noise assessment for the proposed Wanless Recycling Park at Willow Bank has been completed. Overall, the assessment addresses the relevant noise issues through the use of noise monitoring and noise modelling. The assessment criteria, noise sources and modelling methodology are generally considered appropriate. However, clarification and justification on the following matters is considered important:

- justification on adopting a higher noise criteria during the 6 am to 7 am period;
- clarification on modelling inputs:

- assumptions or source of topographical data for modelled capped landfill area;
- the modelled sources/activities located inside the Resource Recovery Buildings (and sound power levels of these sources);
- assumptions regarding the number of dump truck movements along haul routes.

- Further details on the evaluation undertaken to justify that impulsive characteristics would not be discernible;
- Apparent inconsistencies with the argument for modelling calm conditions (instead of downwind or temperature inversion conditions);
- justification that the proposed measures (which are detailed only in general terms) are feasible for the proposed operations.

Please do not hesitate to contact us should any further information be required.

Yours sincerely

for Air Noise Environment Pty Ltd

Samuel Wong BEng(Chem), MAAS

Senior Environmental Engineer

20 YEARS AIR NOISE ENVIRONMENT of providing solutions, innovation integrity & teamwork

Note: All professional advice provided by Air Noise Environment, including any information contained in this letter, is subject to the terms of the Disclaimer shown on our website at ANE Disclaimers

Attachment 6

Air Quality Review

Air Noise Environment Pty Ltd

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Attention: Mike McMahon

11 May 2020

Ref: 6082-AQreview-let01.odt

Dear Mike

Re: PEER REVIEW – AIR QUALITY ASSESSMENT, PROPOSED WANLESS RECYCLING PARK, WILLOWBANK

This report letter presents a peer review of the air quality assessment completed for the proposed Wanless Recycling Park Project at Willowbank (Council application number 10674/2019/CA). The review relates to the following reports:

- Katestone Environmental Pty Ltd, Wanless Recycling Park: Air Quality Assessment, 13 December 2019, Version 1.1 (Final), Reference D19050-3;
- Letter from Natalie Shaw (Katestone Environmental) to Kylie Rolley-Cervenjak (Urbis), Re: Response to Information Request from Ipswich City Council regarding Wanless Recycling Facility, 22 April 2020; and
- Katestone Environmental Pty Ltd, Wanless Recycling Park: Air Quality Assessment, 22 April 2020, Version 1.3 (Final), Reference D19050-7.

The 13 December 2019 report was submitted with the development application. The 24 April 2020 report was submitted in response to an Ipswich City Council[1] and SARA[2] information request. The focus of this peer review is on the 22 April 2020 information response report. However, the 13 December 2019 and associated information requests have been reviewed for background to the

1 Ipswich City Council, Re: Assessment Management Information Request (Planning Act 2016 – Section 12 of the Development Assessment Rules), 20 January 2020, Application No. 10674/2019/CA.

2 SARA information request – Bergmans Road, Lanes Road, Ebenezer Road and Coopers road, Ebenezer; Coopers Road, Willowbank, 18 February 2020, SARA reference 2001-15045 SRA.

project.

This report letter has been divided into key items followed by a peer review of each item.

Pollutants Considered

The assessment has considered the following pollutants: odour, TSP, PM_{10}, $PM_{2.5}$, deposited dust and crystalline silica. These pollutants are considered suitable for assessing the primary potential air quality impacts from the proposed waste recycling operations.

A flare is proposed and is associated with the release of combustion products (mainly carbon monoxide and nitrogen dioxide), and volatile organic compounds (VOCs). Modelling of the flare has not been undertaken, however, it is noted that Katestone Environmental air quality report specifies and recommends operating emissions and conditions for the proposed flare consistent with the NSW Protection of the Environment Operations (Clean Air) Regulation 2010 (NSW). It is expected that these emission parameters would minimise potential air quality impacts, and the other pollutants that have been modelled are expected to define compliance for the site operations.

Assessment Criteria

Table 2 of the air quality report summarises the air quality criteria adopted for the pollutants considered. Criteria have been referenced from the Environmental Protection (Air) Policy 2019. No ambient air quality goal for crystalline silica is available in Queensland, and Katestone Environmental have referenced an annual average 3 mg/m^3 goal adopted by the EPA Victoria.

Overall, the assessment has referenced the appropriate air quality criteria for the relevant compounds.

Air Dispersion Modelling

Estimated Particulate Emission Rates

Emission rates have been derived from commonly referenced emissions estimation manuals, such as the US EPA AP 42 and National Pollution Inventory. The emissions manuals provide an appropriate basis for deriving emissions from waste transfer and landfill related activities.

One of the key inputs in deriving dust emission rates is the material throughput (e.g. tonnes per annum or day). Katesone Environmental have assumed a maximum annual throughput of 1 million tonnes. This is considered appropriate for assessing worst-case impacts for pollutants associated with an annual average criteria. However, there is a potential for the approach to under-predict 24-hour average predictions for assessment against 24-hour average criteria (applicable to $PM_{2.5}$ and PM_{10}). While, the maximum throughput per year is expected to be 1 million tonnes, daily throughput could vary from day to day (with some days potentially being significantly higher than others).

It is further noted that the Department of Environment and Science guideline ‘Application

requirements for activities with impacts to air' states the following with regards to worst-case emissions:

> *The applicant should also identify 'worst case' emissions (e.g. those that may occur during commissioning, start-up, shutdown, or maintenance and emergencies outside of normal operating conditions). If these emissions are likely to be significantly higher than those for normal operations, it will be necessary to conduct additional modelling specifically to evaluate the worst-case impact of emissions.'*

For the 24-hour predictions of PM_{10} and $PM_{2.5}$, there is some buffer between the predicted results for each scenario and the air quality criteria. This buffer could be sufficient to address any variation in daily waste throughputs. **It is recommended that this aspect of the assessment relating to worst-case daily emissions is reviewed to demonstrate that compliance is achievable on worst-case days.**

Dust Emission Controls

Table 7 of the air quality report specifies the control efficiencies adopted for the watering of haul routes and crushing activities. Standard 50% reductions for watering has been applied for sealed haul routes and crushing activities. However, for unsealed roads, a higher 75% reduction has been applied for watering. This is considered achievable for watering provided that a higher water application rate is adopted, however, the air quality report does not discuss the practical requirements for achieving the higher 75% reduction, including availability of sufficient water on site. The NPI Mining Manual specifies the following control efficiencies for differing haul route watering rates:

- Level 1 - 50% for a water application rate < 2 $L/m^2/hr$; and
- Level 2 - 75% for a water application rate > 2 $L/m^2/hr$.

As haul routes contribute significantly to particulate emissions (as indicated by the emission rates presented in Table 8 of the air quality report), it is important that the conclusions specify the assumption of a 75% reduction associated with a higher watering rate. Otherwise, if a higher watering rate cannot be adopted or is not intended to be adopted at the site, compliance should be demonstrated using the standard 50% control efficiency for watering on unsealed roads.

Estimated Odour Emission Rates

Odour emission rates for the landfill component of the project are discussed in Section 6.2 of the report. The total odour emission rates for the landfill site are considered appropriate for assessing potential odour impacts. Based on previous experience and literature reviews, alternative emission rates for individual sources could be adopted (potentially higher or lower), however, the total emission rate for the site is considered representative of the proposed landfill operations.

Odour emissions from the waste transfer buildings is discussed in Appendix B, Section B2.1 of the report. Odour emissions data has been obtained from a study undertaken by The Odour Unit in 2012 at a waste to energy facility (400,000 tpa municipal solid waste transfer building, forced air

extraction with truck access doors opening/closing). In deriving an odour emission rate (OUV/s), the following data has been adopted from The Odour Unit study:

- highest measured odour concentration at extraction fan of 2,400 OU; and
- flow rate through a 30 m^2 open door of 6 m^3/s.

The adoption of 2,400 OU is the maximum concentration measured, and is significantly higher than all other measured concentrations which range from 320 OU to 1,350 OU. However, upon review of the TOU report, it is not clear whether the 6 m^3/s flow rate adopted is applicable to the proposed waste transfer buildings. The TOU derived 6 m^3/s flow rate is based on the following:

- 1 x 30 m^2 open door way;
- 1 m/s air velocity through the doorway; and
- When the door is opened, air does not rush out, but is affected by pressure equalisation (associated with door opening and extraction fans operating simultaneously), resulting in an estimated 20% of door way opening being associated with emissions-to-atmosphere over a 5-minute open/close sequence.

The flow rate adopted by TOU is specific to a forced extraction building with truck access doors opening and closing. The Katestone Environmental air quality report does not clarify how these specific assumptions relate to the proposed waste transfer buildings, and whether or not, the buildings will operate under forced extraction with doors opening and closing, or under natural ventilation. If the roller doors to the transfer buildings were constantly open, then the 20% factor would not apply, as this relates to a door opening/closing. Furthermore, multiple roller doors would have an affect on the total odour emissions from each transfer building.

The modelling assumes specific odour emission reductions as a result of gas recovery, however it is not clear whether the gas recovery system will be in place and operational prior to commencement of Stage 1. Section 6.3 indicates that ‘a gas extraction system will be installed as the landfill develops’. This suggests there could be a period of time when no extraction is in place, and gas recovery rates would not apply.

Further justification should be sought as to whether the total odour emission rates from the waste transfer buildings are representative. Clarification should also be provided in relation to the timing of the operation of the gas recovery system, to confirm that the modelled odour reductions can be achieved in practice.

Background Air Quality Data and Assessment of Cumulative Impacts

Background air quality data has been sourced from the nearest ambient air monitoring stations in Flinders View and Rocklea. It is also noted that the assumed TSP and deposited dust levels are reasonable (assumptions were made due to the absence of site monitoring data for these pollutants) based on a review of other monitoring stations for TSP and ambient deposited dust sampling completed by ANE for other projects around Brisbane.

It is also noted the modelling has included odour sources from the [redacted] Facility, based

on emissions data provided in DA report for the facility (completed in 2008). No commentary has been provided in relation to the air quality performance of the [redacted] facility in practice, since operations commenced. This information would be of assistance in verifying the appropriateness of the assumptions adopted in the 2008 modelling and assessment.

It is recommended that clarification be sought regarding the operational performance of the [redacted] facility, to confirm the appropriateness of the assumptions included in the cumulative air quality modelling. This could also include commentary on any air quality related complaints that may have arose as a result of the operations of the [redacted] facility.

Meteorological Modelling

Meteorological modelling has been undertaken utilising TAPM and CALMET for the model year 2018. The modelling has also incorporated observational data form the Amberley Bureau of Meteorology station. The adopted methodology is considered suitable and validation outcomes show that the TAPM/CALMET modelling is an accurate representation of the meteorological conditions in the area.

Air Dispersion Modelling

The CALPUFF dispersion model has been utilised to predict the dispersion of air pollutants from the quarry extension. In addition to the main report, further details of the CALPUFF model settings are provided in Appendix A (Section A2) of the report. The following review comments are made:

- sensitive receptor locations – Section 5.2 of the air quality report presents the sensitive receptors considered in the assessment. Available aerial photography has been reviewed and all existing nearby sensitive receptors have been accounted for.
- source locations – the location of sources are considered to be appropriate based on a review of the proposed plans and Figures 5 to 10.
- Appendix A2 notes that dry deposition has been modelled, however, assumptions regarding deposition parameters have not been provided.
- No details on source parameters (e.g. dispersion parameters, heights) are provided.

Adopted deposition parameters can have a significant influence on the predicted TSP, PM_{10} and $PM_{2.5}$ concentrations. **It is recommended that clarification be sought regarding the assumptions made for dry deposition modelling.**

As Council have noted in their information request, the modelling has not included:

- particulate emissions from light vehicles;
- odour emissions from truck movements along public roads; and
- odour from leachate pond and any associated drains and sumps.

Katestone Environmental have indicated that emissions from the above sources would be minor. This is considered to be a reasonable conclusion for these sources. For light vehicles, due to their weight and also limited travel distance (as noted in the Katestone Environmental response), the total

contribution to emissions is minor. With regards to odour from truck movements, these are not normally considered in odour modelling assessments for the reasons provided by Katestone Environmental (e.g. transient nature of passing trucks at 40 km/hr and loads being covered or fully enclosed). For the leachate pond, there is no reason why this source could not have been included as it represents a discrete area at the site, however, the size is noted to be small compared to other major odour emission sources and odour emission rates from well managed leachate ponds are relatively low. **It is recommended that odour management measures for the leachate pond are incorporated in the proposal to minimise the potential odour emissions from this source.**

Suitability of Assessment Recommendations

The results of the modelling indicate predicted compliance with the air quality criteria, and the following measures are recommended:

- *Dust management measures at the facility should include regular watering of haul roads, and regular maintenance of the sealed entrance route to maintain a low silt loading.*
- *The area of day cover should be limited to 1ha, particularly when landfilling is occurring in the northern areas of General Waste landfill void (Iron Bark Pit and Lane's Pit).*
- *The landfill gas flare should have the following features:*
    - *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.*
    - *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 the landfill gas entering the flare, is more than 98%.*

Overall, the recommended measures are reflective of the modelling. However, as noted previously, the modelling specifically considers a Level 2 watering rate (75% control efficiency, > 2 L/m^2/hr watering rate as per NPI Mining Manual). The air quality report indicates a 75% control efficiency for unsealed haul routes, however, no details on the watering rate required to achieve this control efficiency is discussed. Normally, a 50% control efficiency is adopted for standard haul route watering. Given that haul routes contribute significantly to dust emissions, mitigation measures should clearly state the haul route watering rate required for the site, and whether there is sufficient water supply is available for achieving the watering rate.

CONCLUSION

A peer review of the air quality assessment for the proposed Wanless Recycling Park at Willow Bank has been completed. Overall, the assessment addresses the relevant air quality issues through the use of air dispersion modelling modelling. The assessment criteria, air emission sources and modelling methodology are generally considered appropriate. However, there are some areas of uncertainty where clarification should be sought:

- clarification as to whether the modelling approach represents a worst-case emission scenarios (as required by the DES guideline 'Application requirements for activities with impacts to air');
- further justification that the total odour emission rates from the waste transfer building are representative of the proposed operations (see section 'Estimated Odour Emission Rates' of this letter);
- clarification on the timing of the gas recovery system, and therefore, the suitability of the gas recovery rates applied for the odour assessment;
- clarification regarding the appropriateness of the [redacted] facility modelling assessment for the assessment of cumulative impacts (i.e. whether the 2008 modelling inputs are representative of the [redacted] facility in it's current form/stage, including consideration of any odour complaint history).
- clarification on the modelled dry deposition parameters (these have not been provided, and can have a significant influence on the TSP, PM_{10} and $PM_{2.5}$ outcomes).

In addition to the above, it is noted the modelling assumes a higher control efficiency of 75% for watering of unsealed haul routes. According to the NPI, this control efficiency is related to a specific watering rate (> 2 L/m^2/hour). As the compliant modelling outcomes are partly dependent on this assumption, mitigation measures should clearly state the haul route watering rate required for the site to achieve a 75% reduction, and whether there is sufficient water supply is available for achieving the watering rate.

Please do not hesitate to contact us should any further information be required.

Yours sincerely

for Air Noise Environment Pty Ltd

Samuel Wong BEng(Chem), MAAS

Senior Environmental Engineer

20 YEARS AIR NOISE ENVIRONMENT of providing solutions, innovation integrity & teamwork

Note: All professional advice provided by Air Noise Environment, including any information contained in this letter, is subject to the terms of the Disclaimer shown on our website at ANE Disclaimers

[redacted]

10 July 2020

Ipswich City Council
Development Services
Email: plandev@ipswich.qld.gov.au
Att: Assessment Manager - Sandeep Nanjappa

Dear Sir / Madam

Re: Submission (Objection) - Supplementary concerns
Development Application No.: 10674/2019/CA

On behalf of our client, [redacted] Services (Australia) Pty Ltd & [redacted] trading as [redacted] located at 55 Champions Way, Willowbank, please accept this correspondence in regard to the previous submission (objection) made to the assessment manager, dated 3 June 2020.

Having reviewed recent correspondence on PD Online (as referenced below), our client has **significant concerns** in regard to the Applicant's attempt to amend a Mining environmental authority (EPML00594013) - premised on a development proposal and new environmental authority which has **yet to be assessed** by Council and the State (as represented by SARA and DES), and which will remain subject to **Appeal rights** under the *Planning Act 2016*.

Background

By Email dated 6 July 2020, the Applicant advised Council as follows:

"… As discussed, we've confirmed an extension to the SARA assessment timeframes by a further 10 business days out until 28 July 2020. Concurrently to this, we are also working through ***an amendment to the existing Mining EA that sits over the site, as directed by DES****. The EA for the waste approval will only be able to be progressed to a point of draft conditions before until the mining EA is resolved. At this stage, there is some uncertainty as to how long the process to change the EA will take."*

Council further requested on that day that (inter alia):

"Also, can I please request you to provide Council with ***a copy of your submission/application*** *(including any future IR/response/decision as they become available)* ***relating to mining EA****."*

To our knowledge, the information requested above has **not** been submitted.

By Email dated 8 July 2020, Council further advised as follows:

"We appreciate the open communication about this matter. Further to Sandeep's email, can you please ***advise if the change that you are seeking to the Mining EA has been initiated by your client as a direct result of matters that were raised in submissions received during the public notification for DA 10674/2019? Or is this something that has been in requested by DES?***

The Applicant responded on that day as follows:

*"**The amendments to the Mining EA we have been working through were initiated by DES**, and has been a continued workshopping for a number of months. The amending of the EA was foreshadowed in our response to SARA's initial information request to work through the interaction between the two activities from DES's point of view."*

It is unclear from the above whether SARA have been consulted in regard to the proposed Mining EA amendment and/or whether the reference to DES relates to the Waste Operations division of DES or the Coal Business Centre.

Submitter's concerns:

The submitter's concerns in regard to the above extend to the following circumstances, where such amendment to the Mining EA is being sought in relation to dewatering the voids and removing rehabilitation requirements from the Mining EA, where associated with a development application under the *Planning Act 2016* which has yet to be decided:

1. There is an assumption in this instance that the Applicant is reliant on amending conditions of an unrelated approval to allow for dewatering of the mining voids and avoiding rehabilitation obligations that exist under the current Mining EA;
2. Whilst Council and the public have not been informed as to the nature of the amendments proposed to the Mining EA, it nonetheless is of significant concern as to how the Mining EA could possibly require an amendment at this stage - given no decision has been made on the Wanless development application and that any decision would remain subject to the appeal rights conferred under the *Planning Act 2016*;
3. At present, conditions of the current Mining EA require the holder (Zedemar Holdings Pty Ltd) to rehabilitate Tailings Ponds; Dams and ponds; and Active Pit areas for *Water Storage / Fauna Habitat* purposes – as specified in the *Rehabilitation landform criteria* pursuant to Condition F1 and Table F1 (*Final land use and rehabilitation schedule*) of the EA;
4. The Applicant has additionally previously stated that dewatering of the mining voids is a condition that exists under the Mining EA, which is factually incorrect and misleading - the current Mining EA clearly has no condition which requires dewatering of the mining voids;
5. The Applicant further appears to have avoided responding to SARA information request (18 February 2020), which required significant environmental information in regard to dewatering of the voids, based on the factually incorrect and misleading statement above;
6. It remains inappropriate to amend the Mining EA for the purposes of avoiding assessing environmental impacts from dewatering of the Tailings Dam and Pits (including sludges) that are as a direct result of a 'separate application' for a prescribed Waste management ERA which has not yet been approved and which will be subject to Appeal rights under the *Planning Act 2016*;
7. Wanless Recycling Park Pty Ltd, is further not directly entitled to amend the Mining EA, which is held by another entity Zedemar Holdings Pty Ltd;
8. There would be no basis or reasoning for dewatering of the Tailings Dam and Pits (including sludges) in absence of the current Wanless development application, given the Tailings Dam and Pits are required for Water Storage / Fauna Habitat under environmental obligations and conditions of that Mining EA;

9. If the development application is refused (by Council or the P&E Court), and the Mining EA has been amended to suit the development proposal, then the outcomes would be potentially catastrophic for the community – given the loss of rehabilitation requirements that would have otherwise been expected by the State, Council and by the community;

   We additionally note that matters regarding inconsistencies between mining rehabilitation outcomes under a Mining EA were included as Ipswich City Council's *'Reasons for Refusal Filed on behalf of the Respondent'* in regard to *'Future rehabilitation and use of the land'* – as related to Court Appeal No. 912 of 2020.

As was previously stated in the submission dated 3 June 2020, the properly made submission to Council, to the extent it relates to the prescribed ERAs, was also to be taken as a **properly made submission about the application for the environmental authority**[1]. SARA / DSDMIP is again requested to ensure that the Department of Environment and Science take into consideration those relevant matters contained in the submission (and reiterated above) as part of its assessment of the prescribed ERAs.

Council and SARA should otherwise ensure that **all matters** raised in the submission have been properly considered as part of the assessments by the State and Council, including any response by the applicant to submissions and/or Public Hearing.

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours Faithfully

[redacted]

CC DSDMIP / SARA
(Ref: 2001-15045 SRA)
DAAT@dsdmip.qld.gov.au
Att: Andrew Finch, Principal Planner

Department of Environment and Science
palm@des.qld.gov.au

[1] Pursuant to s.115 (4) of the Environmental Protection Act 1994

[redacted]

5 November 2020

Ipswich City Council
Development Services
Email: plandev@ipswich.qld.gov.au
Att: Assessment Manager - Sandeep Nanjappa

Dear Sir / Madam

Re: Submission (Objection) - Supplementary concerns
Development Application No.: 10674/2019/CA

We refer to correspondence in regard to the previous submission (objection) made to the assessment manager, dated 3 June 2020 and supplementary matters raised in our correspondence dated 10 July 2020.

We have also reviewed recent correspondence on PD Online, being the applicant's response to submissions dated 3 September 2020) and provide the following comments and concerns in respect to that response.

Background

Council received some 60 properly made submissions during the public notification stage, including significant concerns raised by [redacted] [redacted] Jon Krause MP, Member for Scenic Rim, community and conservation organisations, as well as numerous affected residents in Willowbank and nearby areas.

Council requested (letter dated 15 June 2020) that the applicant provide a **detailed response** to all matters that were raised by submitters, as follows:

> *Council recommends in this instance that the applicant provides a **detailed response** to all matters that have been raised by submitters. In doing so, the applicant should have regard to the key matters listed below which have been specifically identified in one or more of the submissions.*

Having reviewed the applicant's response to Council dated 3 September 2020, it is apparent that the applicant has chosen to respond only to Council's summary list of 43 dot points – rather than provide a detailed response to the 287 pages of properly made submissions. Of Council's summary list of 43 dot points, the applicant additionally chose **not** to respond to all of those key matters.

The following discrepancies, shortcomings and comments have been prepared by [redacted] Pty Ltd, which indicates that the applicant has made an inadequate attempt to respond to the matters raised in the submissions received during the public notification of the development application.

Review of Applicant's response dated 3 September 2020

Note: Headings below are in reference to dot points (sequentially numbered) of the key matters raised in Council's letter dated 15 June 2020 – to readily identify the applicant's Submission Response Report dated the 3 September 2020.

1. The applicant carried out Public Notification prior to adequately responding to issues raised in information requests by relevant authorities.

The applicant has stated that:

- *The Applicant's view is that is* [sic] *was important to give the community a chance to voice any concerns about the application at an early stage of the assessment process.*

The above demonstrates a lack of understanding of the development application processes under the Act and a lack of appreciation of the intent of the information and referral process. As detailed in the original submission, the applicant was fully aware of significant shortcomings in the application – including SARA's impending Advice Notice - prior to proceeding with the public notification.

It is also clear that not all of the information requested by SARA had been responded to prior to commencement of the public notice and hence the applicant should not have proceeded with the public notice of the application (as detailed in the [redacted] Submission dated 3 June 2020).

The applicant's response is therefore inadequate – noting that there remains a significant number of outstanding issues which have yet to be provided by the applicant in support of the proposal.

Council should provide advice as to whether the failure by the applicant to respond to **all of the information** requested by SARA would result in the application not being able to proceed to public notification pursuant to the DA Rules.

2. There was a lack of meaningful, community consultation and engagement.

This matter was expressed in a number of submissions, noting that one submission acknowledged the significant difference and benefits of undertaking a genuine community consultation process – such as [redacted] (formerly Collex) had prior to its development application made in 1999:

'This evolved into the [redacted] Bio-energy' landfill facility which likewise had initial community objections to the project but in effecting a good model for community consultation, engaged with the community for a period of 2 years prior to their lodgement of the [redacted] facility DA to ensure all environmental & social stigma issues were addressed and resolved plus committed to making a continued annual contribution to the environmental amenity of Ipswich.'

The level of engagement by Wanless with the community is however clearly reflected in the sum of submissions made and identification of substantial shortcomings in the application - including submissions from numerous affected residents in Willowbank

and surrounding areas; community and conservation organisations; and the Member for Scenic Rim.

This matter is otherwise for Council's consideration as assessment manager, taking into consideration all matters raised in submissions – not only those to which Wanless has inadequately responded to.

3. Inconsistencies with the Strategic Outcomes of the Planning Scheme, Planning Scheme Codes and Implementation Guideline No. 32.

It is noted that applicant's response to matters raised in [redacted] submission dated 3 June 2020 (i.e. Item 19 *Inconsistencies with the planning scheme Implementation Guideline No 32*) have neither been acknowledged or responded to by the applicant, with the following points reiterated:

- The development proposal is in clear conflict with the rehabilitation requirements under the existing Mining Lease;
- Given the range of mining and other prescribed ERAs which have historically operated on the site, a detailed audit should have been undertaken to determine the potential type and extent of contamination present – particularly given the intent to use onsite spoil and excavations for uncontrolled fill in the southern portions of Lanes and Ironbark Pits. 2.
- The development remains in clear conflict with operations of RAAF Base Amberley.
- The development remains in clear conflict with and does not support the ongoing operation and function of the Ipswich Motorsport Precinct
- The development remains in clear conflict to the Ebenezer Regional Industrial Area (ERIA) opportunities for further motorsport development in the Ipswich Motorsport Precinct, with no reasonable assessment provided by the applicant on the effects of the development on those future opportunities.
- In addition to the above matters, in regard to the proposal to utilise Champions Way for access to the Wanless Recycling Park, there has been no consideration by the applicant of the alternate access route south-east of the site - via Seppanen Road, which directly connects Paynes Road (frontage to site) and the Cunningham Hwy. This alternate access is consistent with Council's Implementation Guideline No. 32 – Ebenezer Regional Industrial Area (ERIA) and Figure 5a (ERIA Transport and Access Network Plan) which includes this route as being the 'preferred strategic road hierarchy and network within ERIA'. The route contains road reserves along the full length (i.e. no private property required to facilitate route connections) and the road reserve appears to be 20m wide, which is suitable to accommodate an Industrial Access Street as per Council's Standard Drawing (SR.03).
- There remain additional aspects of non-conformity with the Implementation Guideline, including greenscape connections (i.e. waterways, habitat areas, koala habitat and isolated patches of Melaleuca irbyana) which will be severed by the proposal to remove vegetation and habitat to utilise Champions Way extension for access to the development.

Overall, the development remains in clear conflict with the Ebenezer Regional Industrial Area Implementation Guideline and the applicant has failed to meaningfully address any of the above matters.

4. Inconsistencies with and misrepresentation of the proposed land uses and Staging of the Development.

It is noted that applicant's response to matters raised in [redacted] submission dated 3 June 2020 (i.e. Item 1 *Inconsistencies with and misrepresentation of the proposed land uses and staging of the development*) have neither been acknowledged or responded to by the applicant, with the following points reiterated:

- The development application purports to be designed to focus on resource recovery of general wastes which would otherwise largely be disposed of to landfill in Queensland;
- The applicant however provides a higher degree of focus in the overall development application on the landfill component - with substantial parts of the application providing insufficient detailed assessment of the proposed Resource Recovery Facility (RRF) and its timing in the scheme of the overall development, with waste recovery targets for the Wanless Recycling Park also being inconsistent with the Queensland Government's waste recovery targets;
- It is apparent from the supporting information that the applicant likely intends to develop the landfill prior to the full development of the RRF, which would be contrary to the intent of the submitted development application – i.e. given the RRF (in its entirety) is a component that is clearly integral to the operation of the development as a whole and should therefore be fully completed and operational before any waste disposal is permitted to occur on site.
- Waste recovery targets in the application are well below the Queensland's waste recovery targets, which does not support the applicant's contention that the development is primarily for resource recovery with only a residual component going to landfill.
- This is evident in that no staging is indicated on submitted plans (other than for the Stages of the landfill). The RRF should be the primary focus of the development, given the Queensland Government's Strategic priority to force a fundamental shift in the way waste is managed in Queensland and thereby supporting a transition to a zero-waste society.
- The above concerns are emphasised by discrepancies and misrepresentations in the applicant's submission of the Waste Industry Management Expert Report (MRA Consulting Group, 24 April 2020). Waste recovery rates for the Wanless Recycling Park included in the Expert Report are incorrect and below the waste recovery targets set under Queensland's new Waste Management and Resource Recovery Strategy – i.e.
  - Municipal Solid Waste (MSW) recovery proposed in the DA is 6%.

    The QLD target for 2030 is however significantly higher at 60%.
  - Commercial & Industrial (C&I) waste recovery proposed in the DA is 49%.

The QLD target for 2030 is however significantly higher at 60%.

- C&D waste recovery proposed in the DA is 50%.

  The QLD target for 2030 is however significantly higher at 80%.

- There is no evidence the proposal will maximise recycling, with the proposed waste recovery rates for the facility being well below those targets adopted by the Queensland Government.
- The above figures additionally demonstrate a high level of reliance on waste disposal and are indicative of an intent by the applicant to primarily rely on waste disposal to landfill for a significant portion of waste received to the site – rather than resource recovery which the applicant has otherwise suggested and which should be the primary use proposed for the site.
- [redacted] [redacted] therefore consider there is insufficient justification for approval of the development application in its current form.
- Should Council and the State however approve the proposed development, it would be expected that Council require the establishment of the Proposed Resource Recovery Facility (RRF) in its entirety and before allowing for any waste disposal to occur on the site - consistent with the applicant's description of the proposed development in the submitted Town Planning Report (Urbis, 19 December 2019) – being a proposal for 'waste re-use, recycling with residual waste being disposed into the mining voids through landfill'.

It would be clear that the applicant has either not read or not understood the relevance of the above matters in regard to the development proposal.

5. The applicant is likely to develop the landfill prior to the full development of the Resource Recovery, which will be contrary to the intent of the submitted development application.

Refer to comments in item 4 above.

It remains apparent from the supporting information that the applicant likely intends to develop the landfill prior to the **full development of the RRF**, which would be contrary to the intent of the submitted development application.

Waste recovery rates for the Wanless Recycling Park included in the Expert Report are further incorrect and below the waste recovery targets set under Queensland's new Waste Management and Resource Recovery Strategy.

It would be clear that the applicant has either not read or not understood the relevance of the above matters in regard to the development proposal.

6. Incorrect representation/ description of the proposal on DA forms and Public Notification Material.

Matters raised in the [redacted] submission relating to the above were statements of fact only – provided for Council's due and further consideration.

Maters raised in the [redacted] submission (Item 10) additionally related to land uses under the TLPI and prescribed ERAs – the application which was unclear and remains unclear, in particular as they relate to filling the southern void areas under the TLPI no. 2 / 2018 (Waste Activity Regulation) with 'clean fill'.

The applicant has not responded to those stated facts.

This matter has been further reiterated in recent correspondence submitted to SARA – in regard to the applicant's response dated 10 August 2020 to SARA Advice Notice.

7. The waste recovery targets are well below Queensland's waste recovery targets, which does not support the contention that the development is primarily for resource recovery with only a residual component going to landfill.

The applicant's response includes the following statement:

- *The submitter's assertion that the proposed waste recovery targets are well below Queensland's recovery targets is not correct.*

The applicant's response however makes no meaningful attempt to answer the facts and circumstances provided in [redacted] submission dated 3 June 2020 – as there is no attempt to provide a detailed analysis with respect to recycling rates which demonstrates that [redacted] assessment is incorrect.

Given this aspect of the development application is a key feature of the entire proposal, it would be apparent that the applicant is relying on [redacted] assessment as being *incorrect* based only on their consultant's advice and without directly responding to those issues included in [redacted] submission dated 3 June 2020.

We note that the applicant's response references the *Queensland Waste Management and Resource Recovery Strategy* which targets of an Overall **65%** recovery rate by 2025 for Queensland - yet the applicant states that the Wanless facility is expected to operate at an overall rate of **only 45%** at commencement in 2025. Waste recovery targets in the application (by the applicant's admission) are therefore **well below the Queensland's waste recovery targets**, which does not support the applicant's contention that the development is primarily for resource recovery with only a *residual component* going to landfill.

It would be otherwise clear that the applicant has either not read or not understood the relevance of the facts and circumstances provided in [redacted] submission dated 3 June 2020 in regard to waste recovery targets.

The applicant's statement that they '*sought to engage with* [redacted] *late in February 2019 with regards to the ongoing development on the site'* is additionally inaccurate.

8. Rehabilitation of mining voids should not be via landfilling with waste.

The applicant's response does not address the key issues raised with regard to the current rehabilitation obligations under the Mining EA by Zedemar Holdings Pty Ltd – as detailed in Item 2 of [redacted] submission dated 3 June 2020.

There has been no assessment of the loss of environmental opportunities in regard to the rehabilitation requirements that currently existing under Environmental authority (EA) EPML00594013, which would be forgone a consequence of the development proposal.

The applicant's response to submissions also states that filling the voids *will 'create future opportunities for surrounding land to be developed*'. Other areas of the site (i.e. *excluding* areas rehabilitated for water storage / fauna habitat under the EA) that may be suitable for industrial development would however benefit greatly by the retention of a permanent water storage / fauna habitat. Retention of such water storage / fauna habitat features within the Ipswich Regional Economic Cluster would value add significantly and be an asset to the emerging regionally significant major enterprise and industrial area at Ebenezer.

As the above matters are not given any consideration in the applicant's response to submissions, the applicant should be required to provide a detailed assessment of the values arising from the environmental opportunities under the existing EA, to determine and value those lost environmental opportunities that will occur as a result of the development.

Refer also to Point 20 of [redacted] submission dated 3 June 2020, which is of significant concern relating to the applicant's intent to dewater the Tailings Pond and Active Pit areas, which is contrary to the rehabilitation requirements under the existing Mining environmental authority.

9. There is no need for the facility, specifically, no need for additional landfill airspace in the general local government jurisdiction.

Need for the development was raised in [redacted] submission dated 3 June 2020 (Item 2). The applicant's response merely references the Needs Analysis prepared by Location IQ but does not directly address any of those issues raised in the submissions

10. There are many shortcomings in the Waste Industry Management Expert Report and the Needs analysis. Therefore, there can be limited reliance on the statements, assertions and conclusions stated in these reports and these reports should be treated with extreme caution.

The applicant appears to have a philosophy which amounts to no more than "we are the experts, believe us", with the proponent making no effort to answer and/or refute the issues made in the [redacted] submission dated 3 June 2020 with respect to this point.

11. The applicant makes a number of claims in the Waste Industry Management Expert Report with no supporting evidence for issues raised by Council in their information request.

Per point 10 above, the applicant appears to have a philosophy which amounts to no more than "we are the experts, believe us", with the proponent making no effort to answer and/or refute the issues made in the [redacted] submission dated 3 June 2020 with respect to this point.

12. There is no evidence that the applicant or their consultants made sufficient contact with the relevant landfill operators with regard to sourcing the information required by Council in regard to existing landfill facilities in terms of Capacity or Estimated Lifespans such that would warrant the conclusions made in the Waste Industry Management Expert Report and the Needs Analysis.

The proponent has previously stated that experts used each had significant experience within the waste industry and specifically in the Ipswich context. The applicant now appears to indicate that they might be wrong as they weren't able to source the required information from competitors.

Any conclusions made in regard to determining the capacity of landfills within the region are dubious and unconvincing in terms of both the Waste Industry Management Expert Report and the subsequent Needs Analysis, given that:

- statements regarding 'landfill capacity' within the Ipswich LGA have been based on estimated lifespans for the majority (7 out of 8) of existing landfills being stated as '**Unknown'**; and
- Expert Reports state that the estimated landfill capacity in Queensland and more specially in SEQ is '**not known definitively'**; and
- Expert Reports state that there are proposed landfills and landfill extensions within the Ipswich City Council jurisdiction which are '**not captured in the numbers'** presented within that Expert Report.

13. Non-compliance with the Queensland government's Waste Management and Resource Recovery Strategy

The applicant did not respond to this Council matter.

14. Non-compliance with all aspects of the Temporary Local Planning Instrument No. 2 of 2018 (Waste Activity Regulation).

The applicant's response has specifically avoided responding to issues raised in the [redacted] submission dated 3 June 2020, including that:

- Access via Champions Way is not supported by the current Planning Scheme, TLPI No. 2/2018 or draft Ipswich Planning Scheme, which require new uses (and change/expansion to existing uses) in the surrounding area to be located, designed and operated to not jeopardise the current/future operation of the Ipswich

Motorsport Precinct. Council's information request specifically made clear that: ***Council does not support the use of Champions Way as the primary access to the proposed development;***

- The proposed land uses under the TLPI and prescribed ERAs applied for in the application remain unclear - in particular as they relate to filling the southern void areas under the TLPI No. 2 / 2018 (Waste Activity Regulation) with 'clean fill'.
- That the applicant can achieve Rehabilitating a mining void by way of use of Clean Earthen Material from within the site has not been demonstrated by the applicant, which may invalidate the whole of the application in applying for use which is not feasible to be carried out on site under the TLPI definition for Rehabilitating a mining void.

The introduction of an *additional* major waste management facility within the Ipswich Regional Economic Cluster (and directly adjacent to the existing [redacted] facility) has not been justified by the applicant under the current planning scheme provisions, TLPI or environmental legislation and would jeopardise Council's future strategic framework, particularly given the multiple impacts from the proposed Wanless Recycling Park on the existing [redacted] operations.

15. Value and loss of environmental opportunities from the site rehabilitation requirements under the sites' existing ERA's.

The applicant's response has specifically avoided responding to issues raised in the [redacted] submission dated 3 June 2020.

There has been no assessment of the loss of environmental opportunities in regard to the rehabilitation requirements that currently existing under Environmental authority (EA) EPML00594013, which would be forgone a consequence of the development proposal.

16. Non-compliance with site rehabilitation requirements under the sites' existing ERA's.

These matters were clearly outlined in [redacted] submission dated 3 June 2020, with the applicant's response specifically avoided responding to any of the issues raised.

It is extraordinary that the applicant representatives are having discussions with statutory authorities regarding changing the existing ERA's *after* they have submitted the development application. The development application remains technically flawed and should be rejected, including owing to this fact.

How can an objector fully understand the proposal if the applicant can make fundamental changes "on the run" - after the advertising period is completed - and avoid responding to fundamental requests for information by way of reliance on changing a Mining authority which is outside of the public realm?

The application should be refused on this ground alone.

17. The site is subject to an existing environmental authority (EA) EPML00594013 (dated 28 April 2020) which contains specific Rehabilitation landform criteria pursuant to Condition F1 and Table F1 (Final land use and rehabilitation schedule)

Refer to 15 and 16 above.

18. Wanless Recycling Park Pty Ltd is not entitled to amend the Mining environmental authority (EPML00594013) which is held by Zedemar Holdings Pty Ltd.

Refer to 15 and 16 above.

19. The existing environmental authority (EA) EPML00594013 makes it abundantly clear that there is no condition which requires dewatering of the mining voids.

Refer to 15 and 16 above.

20. There was a community expectation, secured by way of the Condition F1 and Table F1 of the EA, that at completion of mining activities under EA EPML00594013, the 'Tailings Ponds' 'Dams and ponds' and 'Active Pit' areas would be rehabilitated for 'Water Storage / Fauna Habitat'. It is therefore impossible to understand how the applicant considers that there could possibly be a condition of the current Mining environmental authority which requires Dewatering of the mining voids.

Refer to 15 and 16 above.

For the applicant to state that its response to this matter 'address this question in detail' is farcical given it has not responded to any of the matters detailed in [redacted] submission dated 3 June 2020 other than continual referencing to *proposed* changes to the Mining environmental authority – which was not contemplated in the original development application and to which the applicant has no entitlement to seek such changes.

21. There are significant errors and inconsistencies in the design and proposed operation, including contradictions in specialist assessments, lack of sufficient detail and inadequate engineering design, including environmental assessment.

The proponent again makes no attempt to address the numerous serious issues raised in relation to the proposed design – as outlined in [redacted] submission dated 3 June 2020, including serious concerns regarding geotechnical, environmental, and operational issues shortcomings – maintaining a reliance on the statement that *"all consultants engaged as part of this work are suitably qualified to carry out their assessments."*

Given the applicant has made no attempt to refute issues raised, it would indicate that the applicant must either be unable to respond or agree with those concerns and is hence unwilling to respond.

It would therefore be extraordinary for an authority to approve the development application given the extent of outstanding issues and concerns raised about the technical and engineering approach proposed for this application.

22. Inconsistencies with existing development approvals and other land uses within the development footprint.

Numerous inconsistencies remain in various plans of development submitted by the applicant, with the latest plan (response to SARA Advice Notice -2001-15045 SRA dated 10-08-2020) of poor quality and unclear. The full extent of the proposal and its interactions with surrounding land uses has not been understood or clearly expressed in the development application or supporting information.

We note that the applicant has not responded to matters relating to the Paunch area, which has historically operated on significant parts of the site – associated with rehabilitation requirements of the Mining lease. As stated in [redacted] submission dated 3 June 2020, land contamination issues associated with the paunch area and previous approvals has not been addressed in detail – i.e. in terms of relying on soil located on site in the current overburden areas, as well as areas within the voids that require excavation to create stable walls, being suggested to be used as 'clean fill' or 'clean earthen material' in southern parts of Lanes Pit and Ironbark Pit within the TLPI Buffer area.

23. Risks of leachate seeping to the groundwater system.

Refer to 21 above. Also, the *Landfill Engineering Report* has many serious errors and inconsistencies, as outlined in [redacted] submission dated 3 June 2020. It is wholly inadequate for the applicant to respond that it has been satisfactorily addressed in their response.

24. Gas and fire risk associated with landfill operation.

This is a matter for Council's consideration of the properly made submissions.

25. Lack of any management measures which deal with wildlife attractants (given the proposed putrescible waste landfill operations).

The proponent states that putrescible waste only comprises 6% of all wastes to be received at the site.

This is blatantly incorrect.

An excerpt from the *Waste Industry Management - Expert Report*, (part of the original submission) is shown below which confirms the site expects to receive 100,000 tpa of household kerbside waste (General Waste: Putrescible). Also 600,000 tpa of C&I waste (experience shows that this waste can have a putrescible content up to 15%). As such this would represent some 90,000 tpa of putrescible waste. As a result, the site could receive some 190,000 tpa of putrescible waste; this translates to some 19% of the expected waste stream, not 6%.

Type of waste	Source	Waste received (tpa)	Recovered (tpa)	Recycling rate target (%)
General waste: Putrescible	- Household kerbside waste	100,000	6,000	6%
General waste: Putrescible & non-putrescible (Primarily Non-putrescible)	- C&I - Targeted C&I businesses which produce general waste with a low food waste content e.g. warehousing or homewares retail - Household bulky waste from kerb-side collections and self-haul - C&D - waste from commercial property e.g. building fit outs, bulk bins	600,000	294,000	49%
General waste: Non-putrescible & inert	- C&D - Mixed general waste bins	300,000	150,000	50%
Total		1,000,000	450,000	45%

It is also important to understand that this is a yearly average and that this rate could be a lot higher on any given day.

It is extremely concerning that the applicant's representatives have failed with this fundamental fact - which would bring into question the design and proposed operation of the facility where basic quantities relied upon are incorrect.

26. Risk of wildlife (bird) strikes at RAAF Amberley Air Base.

The proponent makes no effort to respond and / or refute the issues made in the submissions by [redacted] dated 3 June 2020 with respect to this point. As stated in the [redacted] submission, Griffith University (Environmental Futures Research Institute) state:

- *The applicant, Wanless Recycling Park Pty Ltd, should be required to submit a comprehensive wildlife management program and measures, including the cumulative effect of the proposal on* [redacted] *and any other surrounding existing or proposed waste management facilities i.e. in terms of the development creating an ecological 'sink', attracting significant species and increasing the numbers of these birds within the facilities and the buffer zone to the Base.*

- *Given the absence of sufficient supporting scientific certainty and lack of any preventive actions detailed in the application in the face of that uncertainty, the burden of proof remains with the proponents of the activity to demonstrate that the proposal will not have adverse impacts on operational airspace in the vicinity of RAAF Amberley or adversely impact on the existing activities at* [redacted]

The submission of a comprehensive wildlife management program and measures - which was a requirement of [redacted] original development application - is considered fundamental to ensuring that the proposal can be managed appropriately

It would be irresponsible for an Authority to approve this project based on the fact that the operator will undertake an operational management plan / wildlife management plan at some time in the future. Such an approach is considered extremely risky - as expressed by Griffith University – given the potential bird-strike risks associated with RAAF aircraft.

The assertion that the facility will only receive 6% putrescible waste is also incorrect (refer to 24 above.)

27. Introduction of new and increase in existing pests and vermins in the general area.

The proponent makes no attempt to answer the legitimate issues and concerns, defaulting to this matter being resolved in the future.

28. Clearing of Vegetation on Champions Way with respect to meeting 'Relevant Purpose determination under s 22A of the Vegetation Management Act 1999.

The proponent makes no attempt to answer the legitimate issues and concerns raised in [redacted] submission dated 3 June 2020.

An *alternate access* is possible to the development site from the south-east via Seppanen Road (as discussed in Point 7 of this submission), consistent with the preferred strategic road hierarchy and network within the Ebenezer Regional Industrial Area, hence the development for the road infrastructure can be *reasonably avoided or minimised* rendering any agreement for a Relevant Purpose determination by DNRME not possible.

29. Traffic impacts on Cunningham Highway, particularly intersection of Cunningham Highway and Southern Amberley Road.

The applicant response did not include a response to this Council matter.

30. Traffic impacts as a result of increased traffic on local road network (Coopers Road & Champions Way etc).

The applicant had made no meaningful attempt to answer the legitimate issues / concerns of the submissions. Refer also to Item 37 below with respect to shortcomings with the applicant's and TTM's traffic philosophy/approach.

31. Environmental (air quality, noise, water quality, soil, light etc) impacts on the local community, and local flora and fauna.

This is a matter for Council's consideration of the properly made submissions.

32. Visual, social, health and wellbeing impacts on local residents.

This is a matter for Council's consideration of the properly made submissions. Refer also to item 42 below.

33. Adverse impacts on nearby heritage and tourism routes/sites and events.

This is a matter for Council's consideration of the properly made submissions.

34. Light impacts on RAAF Amberley Air Base and surrounding areas.

This is a matter for Council's consideration of the properly made submissions.

35. Impacts on ground and underground stability.

This is a matter for Council's consideration of the properly made submissions. This should include a proper evaluation of those matters provided *Appendix E – Landfill Project Engineering Report* of the [redacted] submission. The applicant's response is otherwise considered insufficient.

36. Impact on wildlife, specifically via destruction of koala habitat.

Matters raised in the [redacted] submission under Item 8 (*Potential for significant residual impact on MSES, MNES and inadequate ecological assessment provided*) have not been addressed in the applicant's response.

This includes the fact that the application form for the environmental authority specifically stated that the carrying out of the proposed ERA(s) would **not** have a significant impact on a MNES – without having undertaken sufficient studies to make such conclusion.

SARA have previously requested confirmation of lodgement of the required EPBC Act referral to the Department of Agriculture, Water and the Environment which is of relevance to MNES - the outcomes of the referral which need to be provided to DES in support of the EA application.

Council and the State should exercise caution in its decision making and not approve the proposal in the absence of sufficient supporting information on significant residual impacts on MSES and MNES.

The applicant has ignored these concerns in their response.

37. Proposed use is incompatible with the locality.

This is a matter for Council's consideration of the properly made submissions. This should reasonably include all other matters raised that have not been addressed in sufficient detail in the applicant's response.

38. Cost implications to the community.

This is a matter for Council's consideration of the properly made submissions. The applicant's response states that:

Many benefits will be returned to the community in terms of improved rehabilitation outcomes over the site, filling of hazardous historical mining voids, increased recycling and employment benefits.

It remains however of concern that there has been no assessment of the loss of environmental opportunities in regard to the rehabilitation requirements that currently existing under Environmental authority (EA) EPML00594013, which would be forgone a consequence of the development proposal. The applicant's comments fail to acknowledge that the current rehabilitation requirements under the Mining lease already ensure improved rehabilitation outcomes over the site – without the need for landfill.

39. Impact on the Willowbank Ipswich Motor Sport Precinct.

The premise that there is no alternate access to the site other than Champions Way is wholly **incorrect**.

As detailed in [redacted] submission dated 3 June 2020 (Item 7 of the [redacted] submission and supporting peer review by Bitzios Consulting) there is an alternate access via Seppanen Road. This has been further highlighted in a second peer review undertaken by Bitzios – in regard to the applicant's response to SARA Advice Notice – 2001-15045 SRA (refer to **Attachment 1**).

The applicant further states that management plans will be put in place on event days – without any significant detail being provided. There is however no acknowledgement of the disruption to the raceway which will be caused during the proposed construction works on Champions Way adjacent to the raceway.

Further as discussed in the critique of the applicant's response to SARA Advice Notice – 2001-15045 SRA, the proposal to operate the facility in 3 shifts is contrary to the original proposal for the recycling facility to operate from 6am to 6pm.

We additionally note that the Raceway have submitted their own concerns in regard to the proposal, which is indicative of the applicant's lack of ability to meaningfully respond to the issues raised in this and other submissions.

The applicant should be further required to revisit the alternate access to the south-east via Seppanen Road, consistent with Council's Implementation Guideline No. 32 – Ebenezer Regional Industrial Area (ERIA) and Figure 5a (ERIA Transport and Access

Network Plan) which includes this route as being the *'preferred strategic road hierarchy and network within ERIA'*.

Necessary trunk infrastructure should be provided by the applicant to service the development, rather than the applicant avoiding the need to provide for such infrastructure in the development proposal.

40. Lack of trust about waste operators.

This is a matter for Council's consideration of the properly made submissions. The applicant otherwise has not provided a meaningful response to this matter.

41. Decline in property values.

This is a matter for Council's consideration of the properly made submissions. The applicant otherwise has not provided a meaningful response to this matter.

42. Social impact and stigma about adjoining suburbs and Ipswich City as a whole.

The applicant's comments in regard to this matter do not address the specific issue raised by Council and indicate no appreciation or understating of the potential social impacts and stigma associated with the development proposal.

Notwithstanding, Council is reminded that [redacted] currently pay annual Contributions for Local Environmental Improvements pursuant to the originating and amended approvals (Condition 8 of BD3265 of 2005). These contributions are utilised for community and environmental improvements across the City - as determined by Council and having regard to the impacts (whether 'perceived' or 'real') that may arise from the development. Council have additionally indicated that funds from these contributions are targeted to environmental and social programs of work.

Council should be concerned that the approval of the Wanless Recycling Park has the potential for negative outcomes associated with solid waste disposal for the City of Ipswich, including potential environmental and amenity impacts and negative image connotations for the ERIA and for Ipswich as a 'dumping ground' for SEQ and other regions.

Approval of the Wanless Recycling Park may also undermine and/or make redundant such contributions - where a second waste management facility is established adjacent to [redacted] site, there may be limited need for the contribution to continue given the intent of the original condition imposed by Council via the Judgement would no longer reasonably apply to the [redacted] facility.

In the event that the Wanless Recycling Park was to be approved by Council (or subsequently by the Courts), it would seem therefore wholly reasonable and relevant that Council establish the same requirement of the developer of Wanless Recycling Park by way of imposing annual Contributions for Local Environmental Improvements.

This is otherwise a matter for Council's consideration of the properly made submissions.

43. No benefits to the local community.

The applicant's comments in regard to this matter do not address the issue raised by Council in any significant detail. Refer also to comments in item 43 above in regard to monetary contributions that should be required for community and environmental improvements across the City - as determined by Council and having regard to the impacts (whether 'perceived' or 'real') that may arise from the development.

This is a matter for Council's consideration of the properly made submissions.

Additional matters

The concerns raised in our correspondence dated 10 July 2020 have also not been directly responded to by Council or SARA. Those concerns remain paramount considering the circumstances, where an amendment to the Mining EA is being sought in relation to dewatering the voids and removing rehabilitation requirements from the Mining EA, where associated with a development application under the *Planning Act 2016* which has yet to be decided, as reiterated below:

1. The Applicant is reliant on amending conditions of an unrelated approval to allow for dewatering of the mining voids (and tailings dam sludges) and avoiding rehabilitation obligations that exist under the current Mining EA;
2. Council and the public should be informed as to the nature of the amendments proposed to the Mining EA – as requested by Council on 8 July 2020;
3. It remains however of significant concern as to how the Mining EA could possibly require an amendment at this stage - given no decision has been made on the Wanless development application and that any decision would remain subject to the appeal rights conferred under the *Planning Act 2016*;
4. The Applicant has previously been incorrect ion advice to SARA and Council on this matter - stating that dewatering of the mining voids was a 'condition' under the Mining EA – i.e. the current Mining EA clearly has no condition which requires dewatering of the mining voids;
5. The Applicant has avoided responding to SARA information request (18 February 2020), which required significant environmental information in regard to dewatering of the voids, based on incorrect statements made by the applicant;
6. It is inappropriate to amend the Mining EA premised on a 'separate application' by a separate entity for a prescribed Waste management ERA which has not yet been approved and which will be subject to Appeal rights under the *Planning Act 2016*;
7. There would be no basis for dewatering of the Tailings Dam and Pits (including sludges) in absence of the current Wanless development application, given the Tailings Dam and Pits are required for Water Storage / Fauna Habitat under environmental obligations and conditions of that Mining EA;
8. If the development application is refused (by Council or the P&E Court), and the Mining EA has been amended to suit the development proposal, the outcomes would be catastrophic for the community – given the loss of rehabilitation requirements that would have otherwise been expected by the State, Council and by the community.

Matters regarding inconsistencies between mining rehabilitation outcomes under a Mining EA were included as Ipswich City Council's *'Reasons for Refusal Filed on behalf of the Respondent'* in regard to *'Future rehabilitation and use of the land'* – as related to Court Appeal No. 912 of 2020.

Council (and SARA) should provide a response to the above matters so as to inform our client and the public.

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours Faithfully

[redacted]

CC Qld Treasury / SARA
(Ref: 2001-15045 SRA)
DAAT@dsdmip.qld.gov.au
Att: Andrew Finch, Principal Planner

Department of Environment and Science
palm@des.qld.gov.au

[redacted]

5 November 2020

Qld Treasury / SARA
(Ref: 2001-15045 SRA)
DAAT@dsdmip.qld.gov.au
Att: Andrew Finch, Principal Planner

Department of Environment and Science palm@des.qld.gov.au

Dear Andrew

Re: Submission (Objection) - Supplementary concerns
Development Application No.: 10674/2019/CA

We refer to correspondence in regard to the previous submission (objection) made to the assessment manager, dated 3 June 2020 and supplementary matters raised in our correspondence dated 10 July 2020.

Having reviewed correspondence on PD Online, our client has **significant concerns** in regard to the Applicant's response dated 10 August 2020 to SARA Advice Notice – including the applicant's ongoing attempt to rely on a third party amendment to the Mining environmental authority (EPML00594013) premised on a development proposal and new environmental authority which has **yet to be assessed** by Council or the State, and which will remain subject to **Appeal rights** under the *Planning Act 2016*.

SARA's original Information Request (18 February 2020) identified information necessary to assess the application against the relevant provisions of the State Development Assessment Provisions (SDAP) which was **not** provided in the development application. Key Actions that have not been properly addressed in the applicant's SARA information response include:

1. Matters of National Environmental Significance (MNES) and Matters of State Environmental Significance (MSES)

8. Issue:

Page 28 of the Town planning report states that the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) referral for this development is scheduled to be lodged with the Department of Agriculture, Water and the Environment in early 2020. The Ecological report notes that an analysis of whether the proposed development will significantly impact on the koala and/or the grey headed flying fox will be undertaken through formal referral of the project under the EPBC Act.

Action:

(a) Provide confirmation of lodgement of the required EPBC Act referral to the Department of Agriculture, Water and the Environment. The outcomes of this referral should be provided to DES in support of the EA application.

The applicant's response dated 27 April 2020 stated (inter alia) that:

… Lodgement of the EPBC request is expected to be lodged by the end of April. Confirmation of the lodgement of this application will be forwarded to SARA and DES as soon as it becomes available. The outcomes of this referral will be submitted to SARA and DES when that becomes available.

A recent check (20 October 2020) of the EPBC Act - Public notices[1] indicates that **no** referral has occurred.

We note also that the declaration provided to DES on *the Development application Form 1 - Application details-attachment for an application for an environmental authority* states that there would be *no significant impact* on a MNES resulting from carrying out of the proposed ERAs – which is considered to be premature, given the EPBC referral mentioned in the response had not been made. How DES are able to determine environmental impacts and/or offsets associated with the development proposal in the absence of any referral under the EPBC Act occurring is unknown.

It however remains unclear as to why SARA has not requested the applicant provide a proper and full response to the information, as originally requested and promised by the applicant.

Given the above, the applicant therefore has **not** responded to the information requested and the applicant should **not** have been entitled to have proceeded with public notification. This latter issue should remain subject to Council's determination, although SARA should be obligated to respond to this matter.

2. Dewatering of the voids

11. Issue:

No information was provided regarding the dewatering process for the tailings dam or the Lanes and Ironbark pits before the landfill construction begins. Furthermore, the application material does not detail the water quality of the surface water currently stored in those voids.

Action:

(a) Provide detailed information about how the voids will be dewatered, including water quality, water quantity, release points and release rates

(b) Take water samples from the voids and water quality data for further assessment

(c) Undertake a detailed risk assessment to assess the potential impacts of the dewatering on the receiving environment (surface water and groundwater) and propose appropriate mitigation measures to prevent or minimise these impacts.

The applicant's response dated 27 April 2020 stated (inter alia) that:

Dewatering of the mining voids is a condition that exists on the existing Environmental Authority attached to the mining lease… - defaulting to a process to amend the EA which had not occurred.

[1] http://epbcnotices.environment.gov.au/referralslist/

This matter was raised in the original submission, with the following salient points noted:

i. The applicant's response to the information requested was incorrect, given the dewatering process for the tailings dam or the Lanes and Ironbark pits was **not** a condition of EPML00594013 and was in fact contrary to the rehabilitation requirements of the Mining EA;

ii. The applicant therefore did **not** respond to the information requested;

iii. The applicant should **not** have been entitled to have proceeded with public notification;

iv. There has been **no** sampling or analysis of the tailings dam water and sludge;

v. There has been **no** discussion regarding the environmental effects of dewatering and the feasibility of removing the tailings sludge;

vi. The history of the tailings dam development is 'unknown' and **not** described in the application documentation - a detailed Geotechnical investigation would therefore be required to confirm pit and tailings dam conditions – particularly given that drawings suggest the tailings dam is formed within an excavated pit, extending to levels as low as RL-20m;

    Note: Excavating a dedicated pit for tailings storage purposes in the times when mining at Ebenezer occurred is uncommon. It would be more likely that the excavation (particularly to the depth indicated) was formed as a pit for coal extraction. In this case, it is also possible that the pit was backfilled to an extent by waste rock.

    Discussions with the former mining superintendent also suggests that the tailings water was comprised of some 20% to 25% of super saturated solids, with there being some confusion in the development application regarding where this sludge could be deposited – given the range of likely contaminants in that sludge.

vii. Given the above, it would be reasonable for the removal methodology to be included with the supporting information, with a management plan / approach clearly defined and considered in the feasibility assessment of the proposal;

In consideration of the above, it remains unclear as to why SARA has not requested the applicant provide a proper and full response to the information, as originally requested.

Note: Whilst SARA advice note dated 22 May 2020 acknowledged that *dewatering of the existing mining voids is proposed to be carried out under the existing EA attached to the mining lease*, it would be reasonable to assume that such acknowledgement was premised on incorrect advice provided by the applicant – as referred above. It would be considered a breach of the Department's responsibility to allow for dewatering of the existing voids and tailings dam, given the above considerations, without there being an appropriate assessment of the effects on environmental values as a consequence of the proposed dewatering – including how the applicant intends to deal with tailings sludges.

A response to SARA original information request is therefore considered outstanding and SARA should insist on the provision of the information as originally requested.

3. Engineering review

In addition to the abovementioned key shortcomings in the current development application and applicant information responses, a further review of the applicant's response dated 10 August 2020 to the SARA Advice Notice has been undertaken.

The review has identified numerous additional discrepancies, shortcomings and concerns, as provided for at **Attachment 1** to this submission - primarily related to and under the headings of the following:

- Traffic response;
- Flood & Stormwater Management Plan;
- Amended Plan of Development;
- Amended Landfill Project Engineering Report' and
- Amended Landfill Engineering Plans.

Refer to **Attachment 1** for detailed comments.

4. Traffic impact review

Bitzios Consulting has also reviewed the applicant's response dated 10 August 2020 to the SARA Advice Notice and provided the following summary of discrepancies, shortcomings and concerns identified in that review as follows (refer to detailed assessment at **Attachment 2**):

In summary, there are several items that have still not been addressed from a traffic engineering perspective, including:

- *Alternative site accesses have not been assessed / investigated in accordance with SARA and Council's requests*
- *Ensuring the access route is suitable to accommodate B-Double access to the site*
- *Updating intersection modelling to reflect network conditions*
- *Providing mitigation measures at key areas where "High" risk scores have been identified (i.e. where turning movement delays exceed thresholds) as per the GTIA*
- *Providing mitigation measures where intersection delay exceeds 5% as per the GTIA*
- *Conducting a Road Safety Audit on relevant state-controlled sections.*

Based on the above, the proposed Wanless Recycling Park proposal does not adequately consider and mitigate traffic related impacts to the surrounding road network.

5. Air and Noise review

Air Noise Environment has also reviewed the applicant's response dated 10 August 2020 to the SARA Advice Notice and provided the following summary of discrepancies, shortcomings and concerns identified in that review as follows (refer to assessment at **Attachment 3**):

In summary, the following outcomes were identified from the May 2020 ANE peer review, which are still considered relevant items for clarification/justification:

- *Noise:*
    - *justification on adopting a higher noise criteria during the 6 am to 7 am period;*
    - *clarification on modelling inputs:*
        - *assumptions or source of topographical data for modelled capped landfill area;*
        - *the modelled sources/activities located inside the Resource Recovery Buildings (and sound power levels of these sources);*
        - *assumptions regarding the number of dump truck movements along haul routes.*
    - *further details on the evaluation undertaken to justify that impulsive characteristics would not be discernible;*
    - *apparent inconsistencies with the argument for modelling calm conditions (instead of downwind or temperature inversion conditions);*
    - *justification that the proposed measures (which are detailed only in general terms) are feasible for the proposed operations.*
- *Air Quality:*
    - *clarification as to whether the modelling approach represents a worst-case emission scenarios (as required by the DES guideline 'Application requirements for activities with impacts to air');*
    - *further justification that the total odour emission rates from the waste transfer building are representative of the proposed operations (see section 'Estimated Odour Emission Rates' of this letter);*
    - *clarification on the timing of the gas recovery system, and therefore, the suitability of the gas recovery rates applied for the odour assessment;*
    - *clarification regarding the appropriateness of the [redacted] [redacted] facility modelling assessment for the assessment of cumulative impacts (i.e. whether the 2008 modelling inputs are representative of the [redacted] facility in its current form/stage, including consideration of any odour complaint history);*
    - *clarification on the modelled dry deposition parameters (these have not been provided, and can have a significant influence on the TSP, PM10 and PM2.5 outcomes);*
    - *mitigation measures should clearly state the haul route watering rate required for the site to achieve a 75% reduction, and whether there is sufficient water supply is available for achieving the watering rate.*

6. ERA Determination

The applicant had previously amended the ERA form / ERAs and thresholds and previously stated (***Item 20*** of the applicant's IR response to SARA) that:

…The clean fill area to the south of Lanes and Ironbark Pits are is to be filled used soil material on site. In this, soil that is located on site in the current overburden areas as well as areas within the voids that require excavation to create stable walls are proposed to be used as the clean fill in this area…

The current applicant response to SARA Advice Notice (10 August 2020) states:

It is acknowledged that SARA have requested that relevant testing be undertaken of the material that is proposed to be placed in the Voids to confirm the status of this material. Testing of the material has been undertaken on site, and the results are ongoing. It is confirmed that the applicant will come back to SARA on this matter, confirming the results of the testing as soon as is practicable.

The response above remains inconsistent with the application documents - in terms of clarification (or an apparent understanding by the applicant) of the difference between *'clean fill'* (as defined under the EP Act) and *'clean earthen material'* under the planning scheme (TLPI).

The application appears to still rely on only areas of landfill in the Tailings Dam and Lanes and Ironbark Pit within the *Waste Activity Area* under the TLPI to be regulated by DES under ERA 60, with an apparent expectation that waste disposal in the southern areas of Lanes Pit and Ironbark Pit (within the TLPI Buffer Area) will not be regulated by DES, with only *'clean fill'* intended to be disposed of from on-site excavation and earthworks.

Whether soil located on site in the current overburden areas and intended for fill material meets the definition of *'clean fill'* under the EP Act remains unclear – e.g. no information has been submitted which would indicate that overburden areas and excavations do not include redistributed tailings and/or coal fines or other contaminants.

Matters regarding whether ERA 60 will or is intended to extend to the southern (clean fill) areas of Lanes Pit and Ironbark Pit (within the TLPI Buffer Area) remains unclear in the application.

Where DES approve ERA 60 being applied to over areas within the TLPI Buffer Area would remain inconsistent with the planning scheme and current development application.

The applicant should provide more clarity in regard to this matter.

7. Interaction with existing EAs

The applicant has stated (***Item 7*** of the applicant's IR response to SARA) that:

EPML00594013 is the existing Environmental Authority that is attached to the Mining Lease on site. As part of the process to establish a Waste Activity on the site, it is proposed to amend the existing EA to add finality to the Mining EA. It is intended to amend the existing EA site rehabilitation requirements to accommodate the commencement of the recycling facility. Once the level of rehabilitation has been satisfied, the existing mining leave and associated EA will be surrendered which will permit the applicant to commence a Waste EA. From our consultation with DES on this matter, it has been confirmed that only one EA will be able to be held on the site. A prelodgement meeting with DES regarding the amendment of the existing Mining EA was held on the 22 April 2020 to confirm the extent of changes involved in amending the existing EA. It is anticipated that the final rehabilitation requirements for the site will be transitioned to the Waste EA. The applicant is proposing to run this process concurrent to the remainder of the Development Application process.

The current applicant response to SARA Advice Notice (10 August 2020) now states:

…it is required to amend the existing conditions of the Environmental Authority to permit the waste activities to occur without conflicting with the existing conditions for the site.

And

It is acknowledged and understood that the Environmental Authority for the Waste Related activities will be not be able to be issued until the changes to the Mining Environmental Authority have been finalised….

It is reiterated (as outlined in the original submission) that:

- EA EPML00594013 (28 April 2020) contains specific *Rehabilitation landform criteria* which required *'Tailings Ponds' 'Dams and ponds'* and *'Active Pit'* areas to be rehabilitated for *'Water Storage / Fauna Habitat'*;
- These areas represent a significant contribution to the local community and contribute to the environmental values of the area – equating to around 86ha or around 24% of the total surface area of the Mining Lease;
- It remains premature and duplicity that a third party (Zedemar Holdings Pty Ltd) can be permitted to amend a Mining EA premised only on the current development application which has yet to be determined by Council and which will be subject to third party appeal rights;
- Given the above, there is no merit for seeking to amend the Mining EA until a decision has been made with respect to the current development application and that any approval has been taken up – i.e. the decision to remove or amend current rehabilitation requirements under the Mining EA should only be based on a current and valid development approval which has yet to have a thorough assessment of the planning merits;
- Notwithstanding, as previously discussed, where such amendment is accepted by the State, the State should require the applicant to provide the information regarding dewatering of the voids, as was originally requested in the SARA information request – given such information has been requested by the State and Council and yet to date has not been provided by the applicant.

Given the above, it remains unclear how the applicant could therefore be permitted (given no decision has been made with respect to the current development application) to dewater existing voids (including management of tailing dam sludges), given such approval would be in direct contradiction to conditions and violation of the requirements of the existing EA EPML00594013 and considering the applicant has no jurisdiction under which that environmental authority could be amended.

As previously stated in the submission dated 3 June 2020, the properly made submission to Council, to the extent it relates to the prescribed ERAs, was also to be taken as a **properly made submission about the application for the environmental authority**[2]. SARA is again requested to ensure that the Department of Environment and Science take into consideration those relevant matters contained in the submission (and reiterated above) as part of its assessment of the prescribed ERAs.

Council and SARA should otherwise ensure that **all matters** raised in the originating submission have been properly considered as part of the assessments by the State and Council, including any response by the applicant to submissions and/or Public Hearing.

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours Faithfully

[redacted]

Michael McMahon
[redacted] **Pty Ltd on behalf of**

[redacted] **Services (Australia) Pty Ltd &**
[redacted]
ABN 67 450 387 919
3 Grant Street,
Cleveland, Queensland 4163

CC
Ipswich City Council
Development Services
Email: plandev@ipswich.qld.gov.au
Att: Assessment Manager - Sandeep Nanjappa

[2] Pursuant to s.115 (4) of the Environmental Protection Act 1994

Review of the applicant's response dated 10 August 2020 to the SARA Advice Notice

October 2020

A review of the applicant's response dated 10 August 2020 to the SARA Advice Notice has been undertaken, with the following discrepancies, shortcomings and comments raised below.

Note: Headings below are in reference to the *Appendices* as submitted by the applicant in their response to the SARA Action Notice, acknowledging that the applicant has not attempted to resolve previous issues and concerns, as provided in [redacted] [redacted] original submission (objection) dated 3 June 2020.

- ***Appendix A –Traffic Statement***

  A review of the document titled *'Traffic Impact Statement to SARA Advice Notice'* by TTM dated 06 July 2020 was undertaken by [redacted] Pty Ltd.

  The points below summarise a number of inaccuracies, inconsistencies and questions that were found during this review.

  As indicated below, there is a major flaw with the proposal and as such this report from TTM cannot be relied upon.

  1. With reference to Excerpt (A) from the original Town Planning Report (see below) there is considerable confusion as to the intentions of the proponent. The report states that the hours of operation for the Resource Recovery & Landfill Operations are proposed to be 6am to 6pm, 7 days a week. Therefore, the strategy to spread staff hours over 3 shifts in a 24-hour period is not feasible, Excerpt (C). Given this, the strategy proposed by TTM is clearly flawed.
  2. Review of traffic generation (Excerpt D)

     We have reviewed the expected heavy traffic generation (Excerpt D). There is quite a discrepancy with respect to the average weight of truck compared to an existing landfill in close proximity.

     As such, a full breakdown (including truck type, percentage of traffic and average weight) should be required to better explain Excerpt D.

     P19 Town Planning Report by Urbis dated 19/12/2019. (Excerpt A)

Key Development Parameter	Proposed Development
Built Form and Use	4 Primary Buildings (2 for General Waste and 2 for Dry Waste) and 4 Secondary Buildings (2 for General Waste and 2 for Dry Waste) and 250sqm office and general administration building.
Throughput	700,000t p.a. for General Waste; and 300,000t p.a. of Dry Waste
Car Parking	50 spaces
Hours of Operation	Resource Recovery and Landfill operations are intended to occur between the hours of 6am to 6pm 7 days a week; Delivery of waste operating hours to and from site is proposed to be unrestricted

Review of the applicant's response dated 10 August 2020 to the SARA Advice Notice

October 2020

P30 Town Planning Report by Urbis dated 19/12/2019. (Excerpt B)

Traffic

The traffic impact assessment takes into consideration the proposed development with the peak number of traffic movements (up to 390 daily trucks). The truck movements are spread across 24 hours with 80% of movements within 6am-6pm. The key intersections within the area were assessed for the impact of the proposed development. The report outlines that the proposed development will not have an adverse impact on Cunningham Highway intersections with Champions Way (main access intersection) and Coopers Road

Traffic Impact Statement to SARA Advice Notice by TTM dated 06/07/2020 (Excerpt C)

Current Peak Traffic Periods

Surveys conducted by TTM as part of the Traffic Engineering Report (TTM Ref: 19BRT0485 RP01_01_191213) indicate that the road peaks for the critical intersections occur between **06:30-07:30** for the AM Peak and **15:30-16:30** for the PM Peak.

Development Traffic Demands

The development traffic generation consists of two types of traffic – staff and trucks importing / exporting material.

In terms of avoiding the road traffic peak, scheduling staff traffic demands such that they do not coincide with the road peak traffic period is achievable based on planning shift start and finish times such that staff arrive and depart the site clear of 6.30 – 7.30am and 3.30 – 4.30pm.

Planning truck arrivals and departures is more difficult to manage and control for the operators of the facility. As such, the following assessment includes a review of the impacts if only truck demands are generated by the proposed development during the road peak traffic periods.

Staff Traffic Demands

In the original analysis, TTM estimated the staff portion of the traffic generation at 30vph and assumed that this traffic would arrive and depart in the peak traffic periods described above.

Based on the strategy to "avoid" traffic travelling to / from the site during peak periods, TTM have discussed the operation of the site with the applicant. The applicant has advised that the facility will operate with three staff shifts per day. These shifts can be scheduled as follows:

- 6am – 2pm
- 2pm –10pm
- 10pm – 6am

These staff shift times will eliminate the need for staff to travel to / from the site during peak traffic periods, significantly reducing the peak hour demands.

It is recommended that these staff shift times form part of the conditions of approval.

Traffic Impact

Statement to SARA Advice Notice by TTM dated 06/07/2020 (Excerpt D)

Table 1: Development Heavy Vehicle Traffic Generation – Summary

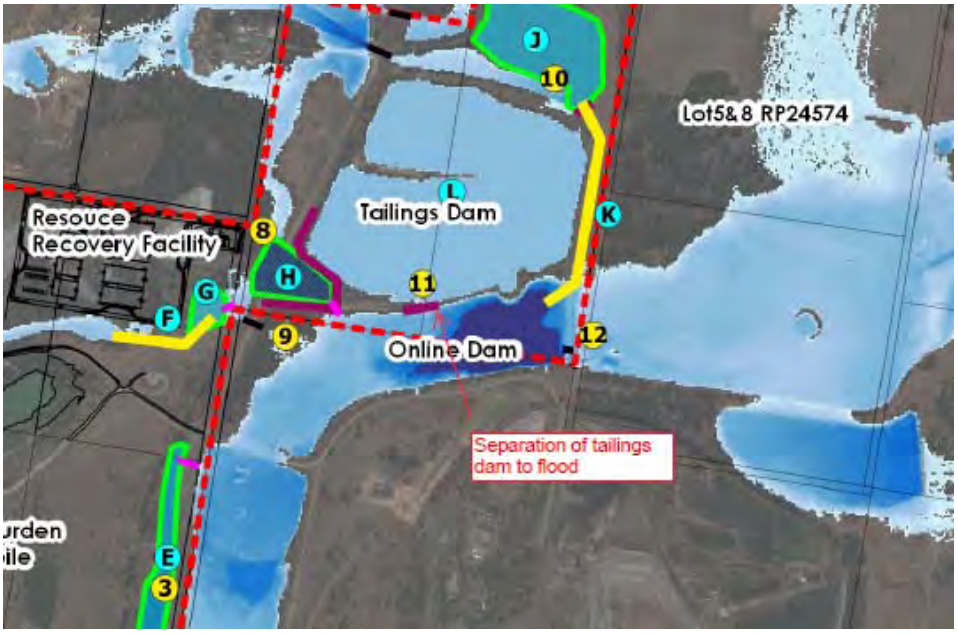
Operational Years	AM & PM Peak Hour Truck / hr
2025	4 IB / 4 OB
2027	8 IB / 8 OB
2029	10 IB / 10 OB
2032	14 OB / 14 OB

IB – Inbound
OB - Outbound

- ***Appendix B – Flood & Stormwater Management Plan – 24 June 2020***

A review of this revised report has been undertaken by [redacted] Pty Ltd. As can be seen below the proposal still has serious shortcomings regarding the expected flood inundation.

3. *(Figure 2.5)* this revised development plan shows the proposed flow regime. As can be seen, the siting of the landfill in the tailings dam area doesn't satisfy the Department Environment and Science (DES) Guideline – *Landfill Siting, Design, Operation and Rehabilitation (2013)* requirements for separation by a distance of 100 meters to the 1 in 100-year flood. Refer below.

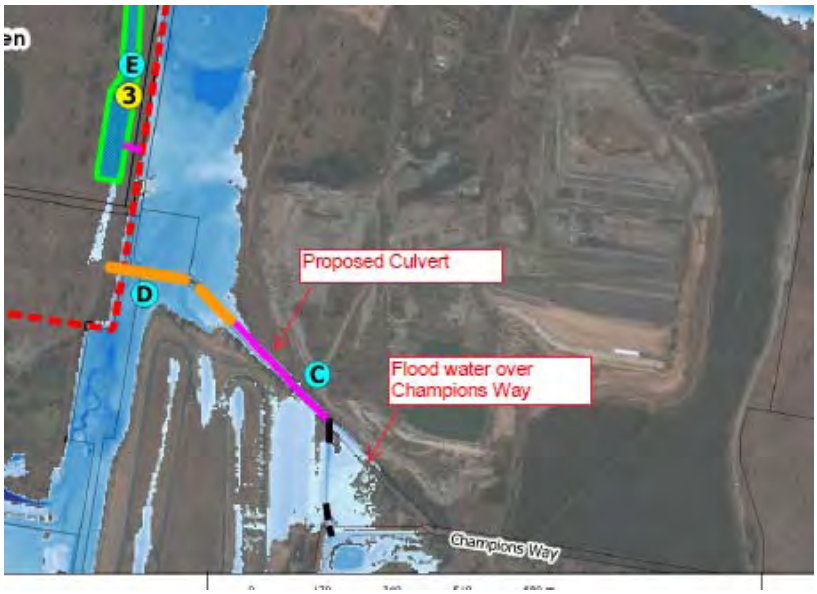


4. *(Figure 2.5)* The revised plan shows the proposed flow regime. The previous version of this plan showed the access adjacent to the raceway covered in flood water. As can be seen in the revised plan below, this flooding has now been covered

by a magenta line showing the proposed culvert. Has the presence of this culvert been modelled or simply placed to hide the flooding? Refer below. Also, the position of this culvert isn't consistent with the former plan P102 Rev 2 undertaken by Peak Urban, Appendix P: Amended Civil Engineering Plans. Further this plan has an incorrect title block as it refers to Plainland Industrial Estate!

As discussed, in [redacted] objection (3 June 2020), in Attachment 2 / Appendix P, the construction of this culvert will result in severe disruption to the Raceway.

Also, the part plan below shows that Champions Way east of the culvert is still expected to be covered by floodwater.



- ***Appendix D – Amended Plan of Development***

  A review of the plan RAL1 (Rev9) by Urbis indicates that there is still some confusion regarding the proposed development. The plan is not clear and confusing.

5. The plan has a legend for a proposed bridge however it is not clear on the drawing.

- ***Appendix H – Amended Landfill Project Engineering Report***

  A review of the document titled "Landfill Project Engineering Report" (Revision 2 July 2020) by Taft Engineering was undertaken by [redacted] Pty Ltd. The points below summarise a number of inaccuracies, inconsistencies and questions that were found during this review. As can be seen there is still considerable doubt as to the engineering, environmental and operational feasibility of the proposal.

6. (p1, Section 1) *This report states: WRP propose to undertake landfilling in these voids to create a rehabilitated landform in alignment with the ICC planning scheme and will include the disposal of Municipal Solid Waste (MSW), Construction and Demolition Waste (C&D), Commercial and Industrial (C&I) waste and Clean Fill to the following voids:*

- *Tailings Dam (C&D and dry C&I)*
- *Ironbark Pit (MSW and Clean Fill)*
- *Lane's Pit (MSW and Clean Fill).*

How the proponent proposes to ensure only dry C&I is landfilled in the former tailings dams is unclear, given the industry does not collect waste this way. C & I waste is predominantly collected via front lift trucks where they have no guarantee of the mix in the waste load.

7. *(p2, Section 1.1) This report states: Waste acceptance at a rate of 100,000 tonnes to 1,000,000 tonnes per annum under these ERAs are anticipated to comprise the following:*

    - *Solid Waste (MSW)*
    - *Contaminated soils only from EMR/CLR sites at contaminate levels in accordance with the landfill acceptance criteria*
    - *Commercial and Industrial waste (C&I)*
    - *Putrescible commercial and industrial waste (office waste, papers, food, shopping center waste and the like)*
    - *Construction and demolition (C&D) waste (concrete, timber, metals, etc. – residuals from reprocessing will be landfilled)*
    - *Any combination waste types in Schedule 9, Part 3, Division of the EP regulation*
    - *Limited regulated waste including:*
        - *Animal effluent and residues, including abattoir effluent and poultry and fish processing waste*
        - *Asbestos*
        - *Biosecurity waste that has been rendered non-infectious*
        - *Food processing waste*
        - *Sewage sludge or residue produced in carrying out an activity to which section 63 applies*
        - *Tyres.*

    This statement is different to the previous statement from the original report, also of note it is not consistent with the description provided in (5) above. In (5) they only refer to C&D, Dry C&I. MSW and Clean Fill there is no mention of the other waste products.

8. *(p2, Section 1.1) This report states: Waste acceptance at a rate of 100,000 tonnes to 1,000,000 tonnes per annum under these ERAs are anticipated to comprise the following:*

    - *Limited regulated waste including:*

- *Animal effluent and residues, including abattoir effluent and poultry and fish processing waste.*

These wastes are very odorous however it appears that there has been no consideration of their presence in the Air Quality /odour report, *Appendix J. Also, the report states (p3); Acceptance and management of these waste types into the facility will be addressed in the Site Based Management Plan (SBMP)*, however a review of *Appendix G Wanless Recycling Park Site Based Management Plan* indicates that that they have not being specifically included.

9. *(p3, Section 1.2) This report states: The indicative butter distances provided in the Department Environment and Science (DES) Guideline – Landfill Siting, Design, Operation and Rehabilitation (2013) are:*

   - *100 meters from surface waters and the '100-year flood plain'*

   An inspection of *Appendix B: Flood and Stormwater Management Plan, (24 June 2020)* indicates that this revised proposal still doesn't meet this guideline as the tailings dams are immediately adjacent to the 1 in 100 year flood-line. (refer to point 3).

10. *(p3, Section 1.2) This report states: The proposed facilities distance from the sensitive locations are provided in Figure 004.*

    This is incorrect, as an inspection of Figure 004 indicates that it is titled "Site Hydrogeological Conditions".

11. *(p5, Section 3) This report states: The landfill concept design has been developed based on the outcomes of the risk assessment included in the Receiving Environmental Monitoring Program (REMP).*

    There is no revised REMP included in the set of documents as such we assume that the original REMP remains. In the previous review the following comment was made with respect to the REMP. "It appears that the entire document seems to be devoted to landfilling with no mention of the proposed Resource Recovery Facility (RRF). This is particularly concerning as the proposal is promoted as a recycling facility, yet it appears to be nothing but a landfilling operation".

    The DES website defines the need for a REMP as*; A Receiving Environment Monitoring Program (REMP) may be required for an activity that releases contaminants to waters. The aim of a REMP is to monitor and assess the potential impacts of contaminants releases to the environment. A REMP will help evaluate whether the conditions on the licence are effectively maintaining or protecting environment values over time.*

    With reference to Attachment 2/Appendix H of [redacted] [redacted] objection (3 June 2020).

    The revised landfill engineering report is fundamentally flawed due to its reliance on the previous REMP.

12. *(p5, Section 3.2.1) This revised report states: As part of the development reprofiling void batters will be undertaken, dewatering and removal of all of the tailings and subgrade improvement works to support the containment system.*

    Included, in Attachment 2/Appendix E of [redacted] objection (3 June 2020).

    The proponent proposes to dewater the tailings dam and remove the tailings sludge. There however has been no discussion regarding the environmental effects of dewatering and the feasibility of removing the tailings sludge. In fact, the applicant hasn't undertaken any sampling and analysis of this tailings dam water and sludge. Discussions with the former mining superintendent suggests that the tailings water was comprised of some 20% to 25% of super saturated solids. Further, there is some confusion regarding where this sludge could be deposited. Experience shows that the safe removal of tailings sludge to be very difficult. As such it would be reasonable for the removal methodology to be discussed, with a management approach clearly defined (and considered in the feasibility assessment of the proposal).

    Further, the history of the tailings dam development is unknown and not described in the documentation. The drawings suggest the tailings dam is formed within an excavated pit, extending to levels as low as RL-20m.

    The development of the pit used for the tailings dam development has direct relevance to the proposed landfill construction. In particular, excavating a dedicated pit for tailings storage purposes in the times when mining at Ebenezer occurred is uncommon. It would be more likely that the excavation (particularly to the depth indicated) was formed as a pit for coal extraction. In this case, it is also possible that the pit was backfilled to an extent by waste rock. In either case, difficulties with excavation to the pre-tailings dam development profile presents challenges.

    A mining study by Taylor Mining Services is referenced however cannot be found in the documentation for verification purposes.

    Geotechnical investigation would be required to confirm these conditions.

    It is also assumed that the base of the Tailings Dam used for design purposes is based on pre-deposition conditions (i.e. the base of the pit prior to placement of any tailings). This would need to be confirmed as part of planning and design.

13. *(p6, Section 3.2.1.1) This revised report states: The landfill base is proposed to be built on natural subgrade following removal of the coal fines.*

    Included, in Attachment 2/Appendix E of [redacted] objection (3 June 2020).

    As discussed in point 11 above this can be extremely difficult. Also, the proponent is incorrect in assuming that all of the tailings sludge would be coal fines, as it is all the solid particles removed in the wash plant, therefore will contain a significant

quantities of very finely ground rock particles, which exhibit very soft soil characteristics.

It is implied that all tailings will be removed from the existing tailings dam to expose a natural subgrade for base liner construction. There are no details of the method proposed to remove the tailings and to contain these materials in an alternative location.

Although not acknowledged or addressed in any form, it can be expected that tailings were pumped into the storage area as a low-density slurry. Coal tailings typically comprise a low solids density (possibly less than $2t/m^3$), are fine grained (likely comprising a high plastic fines and clay fraction), therefore possess poor drained and undrained settling properties and do not consolidate well. Historical Google imagery of the tailings dam area indicates that is has maintained a water pond over time, therefore no opportunity for air-drying of the tailings surface has existed. Even if exposed, industry experience would indicate that an upper desiccated layer would have formed, however the majority of the tailings profile would remain at low density. As such, any proposal to remove the tailings in its current form would likely require repulping and pumped transfer to a new site.

In the event that the tailings transfer is viable and not economically prohibitive, a new tailings dam would need to be established. Due to the nature of the tailings and characteristics of the site, this storage would likely be a Regulated Structure under the EP Act, requiring stringent engineering and approvals efforts. Also considering the current site conditions, a new dam structure would need to be constructed, requiring considerable earthworks and internal lining (to comply with DES requirements, in a similar vein to a landfill). The method of deposition would also be critical, recognising that a similar geotechnical condition would result, therefore requiring a considerable timeframe for rehabilitation of that area. Only with techniques such as pipe head flocculation would a more competent relocated tailings profile be possible to facilitate a more rapid decommissioning and rehabilitation approach. Beyond these aspects, operating provisions including an emergency spillway and maintenance of design storage allowances and other freeboard capacities would be required.

Considerable planning and engineering works are required to facilitate the transfer and relocation of tailings materials. If not feasible, this proposition could well be economically prohibitive in the context of the overall landfill development.

On balance this is considered to be a fatal flaw in the overall concept.

14. *(p6, Section 3.2.2) This revised report states: The final landform for the site has been developed to provide a landform conducive to post closure use for industrial development.*

    This seems very curious as experience shows that any structures will need extensive engineering if placed on former landfills. Normal convention is to return the landform it to its previous state - in this instance open grass lands.

15. *(p7, Section 3.2.2) This revised report states: Waste settlement analysis over the life of the facility is expected to be approximately 5% of over depth of facility based on primary and long-term secondary settlement analysis of the proposed waste types.*

    The report however has previously stated that the '*Top of cap maximum height of 50mAHD pre settlement; Top of cap maximum height of 45mAHD post-settlement.* These figures do not support the 5% waste settlement, as stated. This is supported by a review of drawing F007 Tailings Proposed Base which shows the lowest point at approx. -20m AHD.

16. *(p7 & p9, Sections 3.2.3 & 3.3.3) This revised report states: Landfilling of C&D and dry C&I is proposed for the tailings dam void, which is expected to have a high recovery rate. Based on an assumed residual disposal rate of 15,000 tonnes per annum increasing to 150,000 tonnes per annum with soil cover and compaction density the total life of the void would be approximately 60 years. Also Landfilling of General Waste (MSW and C&I) is proposed for the LIP voids, which is expected to have a lower recovery rate. Based on an assumed residual disposal rate of 40,000 tonnes per annum increasing to 400,000 tonnes per annum with soil cover and compaction density the total life of the void would be approximately 13 years.*

    The proposed facility has landfill capacity for General Waste of 13 years only but capacity for C&D waste (inert waste) for some 60 years. How the development is intended to operate in the future - once this imbalance comes into play – has not been discussed within the submitted documents.

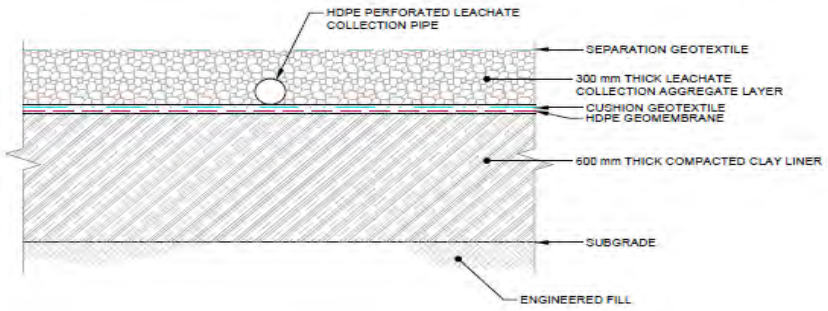
17. *(p8, Section 3.3.1) This revised report states: As part of the development (LIP) reprofiling void batters will be undertaken, dewatering and subgrade improvement works to support the containment system.*

    There are no details on the dewatering of the LIP. There is a considerable volume of water retained within the pit, that will need to be removed prior to any earthworks or landfill development being possible (controlled by the need to access the base of the void for reprofiling purposes). It cannot be considered to be safe to undertake works in one portion of a pit while another portion holds a depth of water, regardless of the extent of containment or separation. Therefore, it will be necessary to dewater the void to the fullest extent practical from the outset, then maintain ongoing inflows (surface water and groundwater) as the development progresses to ensure that the landfill is not inundated. The quality of water contained within the void is critical to pit dewatering. No baseline water quality data has been provided, although it can be expected that the upper water column would be relatively fresh, however due to the anticipated depth of water in the void, a temperature or salinity-controlled interface would likely exist at some depth (possibly as shallow as 1.5m from the surface). It can be expected, particularly due to the period since mine closure and the enclosed nature of the pit, that water quality conditions below this interface would be very poor, likely being saline, anoxic, and with a high organic content. Typically, such water is very difficult and costly to treat to a standard required for discharge to the receiving environment. The required process may require aeration, biological (bacterial) treatment in addition to nitrification/ denitrification and possibly reverse osmosis. Such a process would be

very costly to establish and operate, with the treatment period likely to extend over a lengthy period, therefore compromising the overall development program. Groundwater is addressed in Section 3.4, however in the absence of a hydrogeological assessment, there is no understanding of the potential groundwater inflows to the dewatered pit, and the effort and cost required to keep the pit dry for landfill development purposes. This will be a long-term issue, until the landfill base rises above any potential groundwater level. In support of this concern, the drawings indicate a groundwater level around the LIP of around RL25m, which is some 35m above the proposed base.

18. *(p10, Section 3.4) This revised report states: A groundwater drainage blanket comprising an aggregate layer spread across the whole of the base of the cell with a series of collection pipes within the aggregate.*

    There are considerable irregularities and contradictions between the written description and associated drawings: This fact was pointed out in Attachment 2/Appendix E of [redacted] [redacted] objection (3 June 2020). Refer below (Appendix I: Dwg F-050) As can be seen, this typical concept landfill base liner profile has no groundwater collection layer.



TYPICAL CONCEPT LANDFILL BASE LINER PROFILE
SCALE 1:25 mm

19. *(p10, Section 3.5) This revised report states: The lining system will be a single composite liner (DES double liner) comprising a minimum 600 mm thick low permeability clay liner for the base of the landfill, and 1,000 mm for the side walls together with a high-density polyethylene (HDPE) geomembrane. Although the minimum requirement for the clay is 600 mm, construction methods include overthickening and cutting back. The cutting back process will cease at 1,000mm to ensure the minimum 600 mm thickness is maintained.*

    Included, in Attachment 2/Appendix E of [redacted] [redacted] objection (3 June 2020).

Batter Reprofiling

Reprofiling of internal batters to slopes of 1(H) to 1(V) within both the tailings dam void (following removal of tailings) and the LIP (following dewatering) are proposed. Batter reprofiling however does not seem to be reflected in the concept drawings (*refer Appendix F, Dwg. F-020, F-043).* Therefore, there is no understanding as to the extent of excavation and filling required (and whether an

earthworks balance exists, or where excess materials will be sourced from or stockpiled to) is available.

Batter reprofiling in the tailings dam void is of particular concern due to the criticality of the tailings transfer process, and the uncertainty of existing geotechnical conditions and the possible impact on long term saturation across the exposed substrate following tailings removal (refer Point 17).

Sidewall Liner Construction

It is understood that a 1m thick clay fill layer is proposed for sidewalls in both the tailing dam and LIP area, to be lined with a geomembrane. Whilst this liner thickness exceeds DES's current landfill standard, construction to this thickness is not considered safe or viable.

The design report describes construction of the liner to 2m thickness, then cut back to 1m, expecting that this work will be completed in stages. The first concern is that construction of a 2m wide clay fill section to a height over 1m is unsafe, with no opportunity for fall protection of the plant used, and the impracticality of placing fill in thin layers to achieve acceptable compaction. Secondly, the cutting back process to 1m width will require the subsequent 2m wide liner stage to be formed partially over waste material, which is not acceptable practice, particularly with the potential for local failures of the compacted section at a slope of 45 degrees. Both of these aspects are "Safety in Design" issues that would not comply with current standards to achieve an appropriate level of quality assurance.

Geomembrane lining of steep batters is also a significant concern, with the need to establish anchor trenches at the crest of each lift. No detailing is provided of how this can occur with a proposed final crest width of 1m. Also, under these circumstances, the geomembrane liner design is critical, with the need to limit strains to acceptable levels, which is difficult on steep slopes. Textured and geomembranes greater than 1.5mm thickness would be expected, all of which increase construction costs.

The report suggests that the lining system has been developed based on the outcomes of the hydrogeological risk assessment included in the REMP. On reviewing Appendix H Receiving Environment Management Plan, it isn't evident how these conclusions were drawn. It seems highly inappropriate to recommend a lesser thickness of compacted clay liner than the adjacent [redacted] Facility. Also, the proposal to construct a 1000mm liner on a 1:1 batter is fraught with danger, as it is not possible to have earthmoving equipment work on such a slope. It is proposed that the liner and drainage layer will be constructed just in front of the waste placement, while this sounds feasible in theory it is extremely difficult to achieve and to provide QA in the field especially after extended periods of wet weather. This if based on experience and we would recommend that the permitting authorities have discussions with some landfill operators.

Further the report states in *Table 3 Side Wall Lining System, p11. Leachate Collection Layer -300mm thick layer of free draining aggregate placed during*

filling to provide collection leachate against the sidewall. It is impractical if not impossible to place granular drainage aggregate to a 300mm thickness on a 45-degree slope. Whilst the angle of repose for such material maybe close to 45 degrees, there is no means to practically place this material to a thickness of 300mm. The only practical opportunity to place this material is during the waste placement process, although quality control would be very difficult to maintain, with the likelihood that a much wider zone of aggregate would need to be placed and the loss of considerable aggregate material.

20. *(p16, Section 4.1.1) This report states: The weather data used in the modelling was derived from the Bureau of Meteorology (BoM) Amberley AMO Weather Station 040004, which is approximately 10 km from the site and has been in operation since 1941.*

    The HELP model referenced in section 4.1 utilises historic data, there has been no allowance made for possibly more intense rainfall events due to the changes from climate change. It seems that it would be prudent to allow for this as it is likely that rainfall intensities will increase in the future. As such there is some doubt as to the robustness of the leachate generation model presented in section 4.1.2.

21. *(p20, Section 4.3.3) This report states: Leachate is proposed to be stored on site and evaporated in a lined leachate pond and recirculated through the waste mass. On site and off-site treatment are emergency measures and are not currently proposed for the standard landfill operations.*

    The reference to the contribution of evaporation to leachate disposal is **of note**. Experience indicates that over the life of any landfill within the south east Queensland region that evaporation from an open storage is ineffectual. The use of floating covers is of benefit, although the engineering and costs associated with such systems for the size of ponds required is expected to be substantial.

    To consider the potential leachate disposal demand with the use of a pond or open storage, a detailed (daily time step) water balance model is required, which also considers the loss of potential evaporation due to the high TDS of leachate. This should be a minimum requirement to consider the viability of the concept. This proposal intends to have open air leachate dams, there position is shown in Appendix F Landfill Engineering Plans on Drawing F-002. However, they have not being included in Appendix J Air/Odour report.

22. *(p20, Section 4.3.3.2) This report states: Lined storage and evaporation ponds will be used as part the overall leachate management plan. A retractable or floating cover for the storage pond will be considered to manage surface water ingress during periods of high rainfall whilst utilising the evaporation potential when weather conditions are favourable.*

As discussed in point 20 given the high probability for increased rainfall intensities and point 34 experience in SEQLD this would be considered necessary for any robust management regime. Not just proposed if needed!

23. *(p21, Section 4.3.4.3) This report states: Disposal of any treated or untreated leachate would be based on the trade waste agreements which provide quantity and quality criteria to be met. Due to the location of the site, disposal of leachate to an approved disposal facility will be limited to tankering and proposed in the event of an emergency. It is understood that a wastewater treatment facility is a proposed development adjacent the WRP project. WRP propose to hold discussions with the developers for the potential future acceptance of the Leachate for treatment.*

    It is unclear if this statement is an attempt to introduce the concept for the acceptance of liquid waste to site for treatment. It should be noted that the only treatment of liquids that should be permitted onsite is leachate generated from approved site facilities.

24. *(p26, Section 6.3.1) This report states: The Australian Rainfall and Run-off data (ARR) for the site shows that an intensity of 143mm/24hr for the 1 in 10-year 24-hour event.*

    Refer to point 33 re an allowance for more intense storm events due to climate change.

- ***Appendix I –Amended Landfill Engineering Plans***

    A review of the amended plans doesn't show any different date or revision number as to that which was part of the original application. There is no clear evidence that the plans have been revised. Please find below comments made with respect to the original objection. Included, in Attachment 2/Appendix F of [redacted] [redacted] objection (3 June 2020). During this review a number of inconsistencies and errors, were found as highlighted below:

25. *(Plan F-002) Errors/inconsistencies include:*

    - final landform contours not consistent with final landform shown in drawings F-034 to F-042;
    - Internal Haul Road clashes with resource recovery centre area - specifically WSUD swale and landscaping buffer zone. Refer to Urbis Landscaping Plan for proposed buffer zone;
    - Internal Haul Road crosses internal access road. Safety concerns with dump trucks / site machinery constantly interacting with light vehicles.

26. *(Plan F-005) Errors/inconsistencies include:*

    - final landform contours not consistent with final landform shown in drawings F-034 to F-042.

27. *(Plan F-008 & F-009) Errors/inconsistencies include:*

- The plans show incorrect low points for groundwater & leachate collection for each stage.

28. *(Plan F-012) Errors/inconsistencies include:*

- Stage1 filling encroaches into Stage 2 cell, Stage 3 cell, Stage 5 cell & Stage 6 cell. Therefore Stage 2, Stage 3, Stage 5 & Stage 6 cells must be constructed prior to filling Stage 1.

29. *(Plan F-013) Errors/inconsistencies include:*

- Stage 2 filling encroaches into Stage 3 cell, Stage 4 cell & Stage 6 cell. Therefore Stage 3, Stage 4 & Stage 6 cells must be constructed prior to filling Stage 2.

30. *(Plans F-014 to F-018) Errors/inconsistencies include:*

- Similar inconsistency as outlined in points 25 & 26 above.

31. *(Plan F-030) Errors/inconsistencies include:*

- Northern section of Lanes Pit. Contours stop at RL22.50 (approximate existing water level of this void) Sections shown on Drawing F-043 provide data at least 22m below water level. Either the existing levels below RL22.5 are assumed, or data has been omitted from this plan.

32. *(Plans F-032 & F-033) Errors/inconsistencies include:*

- Stage 5 groundwater collection point is not at the low point of stage 5;
- Stage 4 & 7 groundwater collection points within the 'in cell sediment pond' shown on F-036;
- Stage 3 groundwater collection point within the 'in cell sediment pond' shown on F-036;
- Stage 2 groundwater collection point is not at the low point of stage 2.

33. *(Plan F-035) Errors/inconsistencies include:*

- Stormwater Runoff will pond in remainder of void until clean fill has reached final profile.

34. *(Plans F-036 & F-040) Errors/inconsistencies include:*

- Staging hasn't considered the need to construct adjacent cells prior to filling as per points 25 &26, above.

35. *(Plan F-050) Errors/inconsistencies include:*

- Details are not consistent with the description in Appendix H, e.g. point 18 above;
- No specifications for the HDPE and cushion geotextile;
- No leachate & groundwater sump details;
- It is surprising that the facility would propose only 600mm of compacted clay when the adjacent facility [redacted] has 900mm;
- Constructability of side wall liner and aggregate drainage layer is considered difficult/dubious especially during extended wet weather, refer to point 19 above.
- No details re the construction of the subgrade at 1:1 slope.

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8 September 2020

[redacted] Pty Ltd
1 Lewis Street
Clayfield QLD 4011

Attention: **Michael McMahon**

Sent via email: m.mcmahon@dhenv.com.au

Dear Mike,

RE: FURTHER PEER REVIEW | WANLESS RECYCLING PARK, EBENEZER

1.0 INTRODUCTION

1.1. Overview

Bitzios Consulting has been engaged by [redacted] on behalf of the operators and owners of [redacted] (located at 55 Champions Way, Willowbank) to provide traffic engineering advice in relation to a development application (DA) submitted over land situated at Ebenezer and Willowbank (being Lot 2 SP 167885, Lot 231 CH 3132, Lot 230 CH 3132, Lot 240 CH 3132, Lot 241 CH 3132, Lot 242 CH 3132, Lot 1 RP 24569, Lot 1 SP 167885, Lot 243 CH 3132, Lot 254 CH 31200, Lot 257 CH 31247, Lot 312 CH 31969, Lot 2 RP 24570, Lot 1 RL 8701) (subject site) (Council Reference: 10674/2019/CA).

1.2. Background

Bitzios Consulting has previously provided a peer review of the proposed DA and relevant responses to Council and the State Assessment and Referral Agency (SARA) information Requests (IRs).

It is noted that since the above peer review, SARA has issued a consolidated advice notice issued on the 22nd May 2020 and TTM traffic have prepared relevant responses (dated 6th July 2020).

This letter has been prepared to consider and review the revised application materials (i.e. TTM Response Letter) and should be read in conjunction with the previous peer review undertaken by Bitzios Consulting (dated 12th May 2020).

A copy of the peer review prepared by Bitzios Consulting is included at **Attachment A.**

2.0 PEER REVIEW

2.1. Overview

As part of this peer review, the following materials have been reviewed:

- Traffic Impact Assessment (TIA) Report, prepared by TTM, dated 13/12/2019
- State Assessment and Referral Agency (SARA) IR, issued 18/02/2020
- Traffic Response to SARA's IR, prepared by TTM, dated 22/04/2020
- SARA Advice Notice issued 22/05/2020
- **Traffic Impact Statement to SARA Advice Note, prepared by TTM, dated 06/07/2020**
- **Submissions Response Report, prepared by URBIS, dated 03/09/2020**.

This letter should be read in conjunction with the previous peer review undertaken by Bitzios Consulting (dated 12th May 2020).

2.2. Response Material Review

Table 2.1 provides a summary of our review of the issues raised with the DA and TTM's responses.

Table 2.1: Development Application Issues and Responses

Issue Title	Bitzios Issue Raised (12/05/2020)	SARA Advice Notice (22/05/2020)	TTM Response (31/08/2020)	Bitzios Further Issues
Champions Way Access	<u>Alternative Access Routes</u> Alternative accesses to the site have not been properly assessed. For further details refer to Section 2.2.2 of **Attachment A.**	SARA have requested further consideration and assessment of alternative site access location / re-routing traffic as required to reduce impacts on the state-controlled network.	TTM have not prepared any relevant arguments or investigations into alternative access locations.	No relevant responses prepared.
	<u>Future Upgrades</u> TTM notes that the proposed access via Champions Way is an interim solution only and that alternative routes will be proposed in the future. There is no reasoning as to why alternative routes cannot be assessed now. For further details refer to Section 2.2.3 of **Attachment A.**	-	-	No relevant responses prepared.
	<u>Amenity</u> Additional heavy vehicle trips along Champions Way will significantly impact the amenity of the area. This is only briefly discussed during Major Events in the area, with further details required.	SARA has requested the applicant to confirm the exact mitigation measures which will be implemented to reduce the actual visual, acoustic and odour impacts experienced	-	This has not been addressed from a traffic volumes perspective.

External Analysis	<u>Traffic Generation Volumes</u> The site is expected to generate 416 heavy vehicle movements along Champions Way during the ultimate development stage. It is unclear how the peak hour demands have been calculated. Details of staff hours and shifts should also be provided to confirm when site generation peaks will occur. For further details refer to Section 2.3.1 of **Attachment A.**	SARA have requested an options analysis to determine appropriate measures that will reduce the impact on safety and efficiency of the state-controlled road network.	TTM have proposed that the site operates within shifts to prevent staff vehicles entering / exiting the site during the peak hours. This does not occur for proposed heavy vehicle movements.	It should be noted that the heavy vehicle peak hour traffic movements do not align with the original volumes in TTM's traffic impact assessment (dated: 13/12/2019). As such, all external assessments will need to be undertaken again with the amended traffic volumes. Heavy vehicles alone are expected to exceed the 5% impacts. It is unclear how peak hour traffic volumes have been adopted. It should also be noted that the site has proposed a shift change at 6:00am with the peak am network being from 6:30 to 7:30. This would likely result in staff on the road during the network peak (i.e. 6.30) as they may not leave immediately at the end of the shift. Further assessment and mitigation works are required to demonstrate that the site will result in delay or safety impacts on the state-controlled network and/or does not warrant further mitigation to offset development impacts
	<u>Network Modelling</u> The Ipswich-Rosewood Road / Southern Amberley Road and Cunningham Highway / Ipswich Rosewood Road should be modelled as a network as requested by SARA. For further details refer to Section 2.3.2 of **Attachment A.**	-	No revised Network modelling has been undertaken	No relevant responses prepared.

	<u>Existing Safety issues on State Controlled Network</u> TMR's Guide to Traffic Impact Assessments (GTIA) states that where a "High" safety risk score is identified, mitigation works are required regardless if the development worsens the risk or not. This applies in this instance, and mitigation should be provided to reduce turning movement delays below the thresholds in all design scenarios, regardless of base results. For further details refer to Section 2.3.3 of **Attachment A.**	-	TTM has not prepared a further detailed safety assessment or a road safety audit. TTM states that DTMR GTIA requires safety assessment to be undertaken where upgrades are proposed as part of mitigation measures.	No relevant responses prepared. TTM states that DTMR GTIA requires safety assessment to be undertaken where upgrades are proposed as part of mitigation measures. This is not true and all existing and future safety concerns should be addressed as per Part C of the GTIA.
External Analysis	<u>Model Calibration</u> In response to the IR, the Cunningham Highway / Ipswich Rosewood Road intersection has been reassessed as a two stage turn movement. However, it is unclear if the centre median has sufficient width to accommodate heavy vehicle storage. This should be updated in SIDRA and modelling updated accordingly. For further details refer to Section 2.3.4 of **Attachment A.**	-	-	No relevant responses prepared. Refer to Bitzios issues raised (12/05/2020).

External Analysis	<u>Delay Assessment</u> The Cunningham Hwy / Coopers Rd Intersection and the Cunningham Hwy / Ipswich Rosewood Road intersection will have >5% delay impacts. As per the GTIA, mitigation measures are required to offset delay impacts on the state-controlled network where the average delay is increased by >5%. The operation of the intersection within acceptable thresholds is not considered by the GTIA, as the development will impact existing users and should be responsible for the offset of these impacts. For further details refer to Section 2.3.5 of **Attachment A.**	The Cunningham Highway / Champions Way, Cunningham Highway / Coopers Road and Cunningham Highway / Ipswich Rosewood Road intersection will have >5% impacts. The proposal does not address development impacts by proposing any mitigation measures. SARA have also requested an analysis of the Southern Amberley Road / Ipswich Rosewood Road intersection due to the close proximity to the Cunningham Highway / Ipswich Rosewood Road intersection.	Only SIDRA assessment has been undertaken at the Cunningham Highway / Champions Way intersection. No SIDRA outputs have been provided. TTM states that the Cunningham Highway Ipswich Rosewood Road does not need to be assessed as it has existing efficiency and safety issues.	No SIDRA outputs have been provided. As such, it is not possible to check that the intersection does not exceed 5% delays. SIDRA outputs should be provided for all SIDRA assessments undertaken. Detailed delay and safety assessments should be undertaken for the Cunningham Highway / Ipswich Rosewood Road in accordance with DTMR's GTIA and any development impacts should be suitably mitigated. No intersection assessment has been undertaken at the Southern Amberley Road / Ipswich Rosewood Road intersection as requested by SARA.
	<u>Road Safety Audit</u> Section 9.3.3. of the GTIA states that on roads with >8,000 vehicles per day and 80+km/h speed limit, a Road Safety Audit (RSA) is required to assess development impacts and safety risks. The Cunningham Highway meets these criteria where impacted by the subject site, and as such, an RSA must be provided. For further details refer to Section 2.3.6 of **Attachment A.**	SARA have requested a road safety audit in accordance with DTMR's GTIA, due to the prevailing speed environment on the Cunningham Highway.	TTM has not prepared a further detailed safety assessment or a road safety audit. TTM has states that DTMR GTIA requires safety assessment to be undertaken where upgrades are proposed as part of mitigation measures.	No relevant responses prepared. TTM has states that DTMR GTIA requires safety assessment to be undertaken where upgrades are proposed as part of mitigation measures. This is not true and all existing and future safety concerns should be addressed as per TMR's GTIA and SARA's Advice Notice.
	<u>Pavement Impacts / Contributions</u> The contributions still appear to be calculated using a damage exponent of 4 (i.e. SAR4 values). This should be updated accordingly. For further details refer to Section 2.3.7 of **Attachment A.**	-	-	No relevant responses prepared.

Other Issues	<u>B-Double Routes</u> Currently, there are no approved B-Double routes which provide access to the subject site. For further details refer to Section 2.4.1 of **Attachment A.**	-	-	No relevant responses prepared.
	<u>Pavement Design</u> No details of the pavement design have been supplied. These details are warranted to ensure that any approved development will not decrease the expected life span of the surrounding pavement and that all connecting structures, such as bridges and culverts will be designed to a sufficient standard. For further details refer to Section 2.4.3 of **Attachment A.**	-	-	No relevant responses prepared.
	<u>Operating Times</u> In the original DA package, it was stated that the site would operate between 6am and 6pm seven (7) days of the week.	-	TTM's responses states that that the site would operate 24 hours per day.	TTM's responses is inconsistent with the TIA and further details / clarification should be provided regarding operating periods. If revised operating periods are proposed, a revised traffic assessment may be required to consider the impacts of the additional operational hours and/or changes to previous operating hours.

3.0 SUMMARY

In summary, there are several items that have still not been addressed from a traffic engineering perspective, including:

- Alternative site accesses have not been assessed / investigated in accordance with SARA and Council's requests
- Ensuring the access route is suitable to accommodate B-Double access to the site
- Updating intersection modelling to reflect network conditions
- Providing mitigation measures at key areas where "High" risk scores have been identified (i.e. where turning movement delays exceed thresholds) as per the GTIA
- Providing mitigation measures where intersection delay exceeds 5% as per the GTIA
- Conducting a Road Safety Audit on relevant state-controlled sections.

Based on the above, the proposed Wanless Recycling Park proposal does not adequately consider and mitigate traffic related impacts to the surrounding road network.

Yours faithfully

Mark Davidson
Senior Traffic Engineer & Transport Planner
BITZIOS CONSULTING

Attachments:

A: Bitzios Consulting Peer Review (12th May 2020)

Attachment A: Bitzios Consulting Peer Review (12th May 2020)

Issue History

File Name	Prepared	Reviewed	Issued by	Date	Issued to
P4614.001T_Wanless Recycling Park Ebenezer Peer Review	F. Jones	M. Davidson	F. Jones	12/05/2020	Michael McMahon at m.mcmahon@dhenv.com.au
P4614.002T_Wanless Recycling Park Ebenezer Peer Review	F. Jones	M. Davidson	F. Jones	12/05/2020	Michael McMahon at m.mcmahon@dhenv.com.au

Wanless Recycling Park, Ebenezer

Peer Review (Traffic)

1. Introduction

1.1 Background

Bitzios Consulting has been engaged by [redacted] on behalf of the operators and owners of [redacted] (located at 55 Champions Way, Willowbank) to provide traffic engineering advice in relation to a development application (DA) submitted over land situated at Ebenezer and Willowbank (being Lot 2 SP 167885, Lot 231 CH 3132, Lot 230 CH 3132, Lot 240 CH 3132, Lot 241 CH 3132, Lot 242 CH 3132, Lot 1 RP 24569, Lot 1 SP 167885, Lot 243 CH 3132, Lot 254 CH 31200, Lot 257 CH 31247, Lot 312 CH 31969, Lot 2 RP 24570, Lot 1 RL 8701) (subject site) (Council Reference: 10674/2019/CA).

1.2 Site / Development Details

Relevant site / development details are outlined below:

- A waste facility is proposed at the subject site, which is located within the Ipswich City Council (Council) Local Government Area (LGA)
- On the 23rd December 2019, a development application (DA) was submitted over the subject site (Council Reference: 10674/2019/CA), which included:
  - A Material Change of Use (MCU) application for a waste activity use
  - A Reconfiguration of a Lot (ROL) for boundary realignment (13 Lots into 13 Lots)
- As per of the DA, a traffic impact assessment (TIA) report was submitted, which was prepared by TTM Consulting
- On 20th January 2020, Council issued an Information Request (IR), which included several traffic related items. The key item is related to access via Champions Way not being supported by Council (Item 3)
- On the 18th February 2020, the State Assessment and Referral Agency (SARA) issued an IR, which included several traffic related items. The key item is related to network modelling, pavement impacts and potential impacts on the railway network
- On 27th April 2020, the applicant responded to the IR's. The materials, which were prepared by TTM, included the proposal to retain access along Champions Way.

This technical memorandum has been prepared to consider and review relevant proposal materials any traffic or transport related impacts as a result of the DA.

2. Peer Review

2.1 Overview

As part of this peer review, the following materials have been reviewed:

- Traffic Impact Assessment (TIA) Report, prepared by TTM, dated 13/12/2019
- Council's IR, issued on 20/01/2020
- Traffic Response to Council's IR, prepared by TTM, dated 22/04/2020
- State Assessment and Referral Agency (SARA) IR, issued 18/02/2020
- Traffic Response to SARA's IR, prepared by TTM, dated 22/04/2020.

2.2 Champions Way Access

2.2.1 Overview

As noted in Council's IR, several planning documents identify the Ipswich Motorsport Precinct as a major tourism destination, and therefore require no impacts on Champions Way (which is the primary access to the Ipswich Motorsport Precinct). Based on the responses provided, the proposal still retains primary access via Champions Way, which would appear contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct.

2.2.2 Alternative Access Routes

The response prepared by TTM indicates that there are no viable alterative routes between the site and the Cunningham Highway, due to the requirement for private land to complete connections. However, further consideration must be given to access routes south-east of the site via Seppanen Road, as illustrated in Figure 2.1 below.

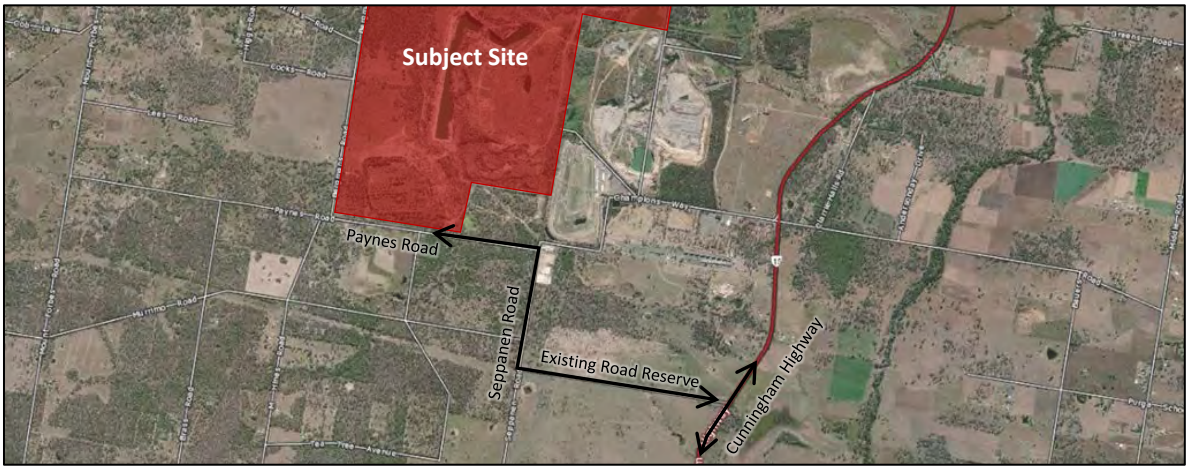

Figure 2.1: Alternative Access Route

Key points are noted below:

- This route directly connects Paynes Road (frontage to site) and the Cunningham Hwy
- This route is consistent with Council's Implementation Guideline No. 32 – Ebenezer Regional Industrial Area (ERIA) and Figure 5a (ERIA Transport and Access Network Plan) which includes this route as being the 'preferred strategic road hierarchy and network within ERIA'.
- This routes contains road reserves along the full length (i.e. no private property required to facilitate route connections)
- Based on QLD Globe, the road reserve appears to be 20m wide, which is suitable to accommodate an Industrial Access Street as per Council's Standard Drawing (SR.03).

No discussion or review has been provided regarding this access route. In our opinion this provides a suitable alterative route between the site and the Cunningham Highway.

2.2.3 Future Upgrades

The response from TTM states:

"Champions Way in its current form is considered an "interim" access arrangement for the proposed development, with alternative routes and upgrades proposed in the future that will provide additional road capacity to dilute the impact of the proposed development"

Whilst it is understood that there is planning to upgrade the Cunningham Highway and associated Champions Way access, Council's does not identify these upgrades within its current or draft planning scheme LGIP Plan for Trunk Infrastructure. As such, these works do not have committed funding and no timeline has been provided for when these upgrades will occur.

It is important to note that the route outlined in Figure 2.1 is identified in Council's LGIP (April 2018) as Future Road Projects 154 and 155 and represents the preferred strategic road hierarchy and network within the ERIA as provided for on Figure 5a (ERIA Transport and Access Network Plan) of Council's Implementation Guideline No 32. This further suggests that this route should be investigated for site access.

2.2.4 Ipswich Motorsport Precinct Access

Figure 2.2 shows access to the Ipswich Motorsport Precinct along Champions Way.

Source: Nearmap

Figure 2.2: Existing Access on Champions Way

The following key points are noted:

- No detailed (i.e. SIDRA / turn warrants) analysis of the impacts on Ipswich Motorsport Precinct access has been undertaken, and it is not clear if there would be increased delays or queueing requiring additional infrastructure (i.e. turn lanes) and/or mitigation measures to offset impacts
- Detailed analysis should consider the critical peaks (i.e. events) and also consider the typical breakdown of heavy vehicles generated by the proposed development.

As such, under the current proposal, the development will have major impacts on access to the Ipswich Motorsport Precinct and no analysis has been undertaken to confirm if any further mitigation measures are required to offset development impacts.

2.2.5 Queensland Raceway Access

Figure 2.3 identifies the location of the proposed extension and heavy vehicle route from Champions Way to connect to the subject site in proximity to the Ipswich Motorsport Precinct.

Source: Nearmap

Figure 2.3: Champions Way Extension

The following key points are noted:

- The extension is proposed on roadway that is currently being utilised as a circulation road to a 650m^2 car park with ~750 parking spaces, as well as direct access to the trackside loading areas and storage / servicing garage
- These areas are expected to generate high demands (particularly on racing days) which will likely be impacted by the proposed developments traffic generation. This is directly opposed to the outcomes of the Planning Scheme in regards to impacts on the Ipswich Motorsport Precinct
- The proposal will also generate significant heavy vehicle volumes, which will significantly impact the amenity of the roadway, especially considering the likely high volumes of pedestrians within the trackside areas
- No analysis of the impacts on Queensland Raceway access has been undertaken, and it is not clear if there would be increased delays or queueing requiring additional infrastructure (i.e. turn lanes) and/or mitigation measures to offset impacts
- Detailed analysis should consider the critical peaks (i.e. events) and also consider the typical breakdown of heavy vehicles generated by the proposed development.

As such, under the current proposal, the development will have major impacts on the Queensland Raceway and no analysis has been undertaken to confirm if any further mitigation measures are required to offset development impacts.

2.2.6 Amenity

As the Ipswich Motorsport Precinct is considered a major tourist attraction, additional heavy vehicle trips along Champions Way will significantly impact the amenity of the area. This is only briefly discussed during Major Events in the area, with further detail required.

2.3 External Analysis

2.3.1 Traffic Generation Volumes

As stated in the response material the site is expected to generate 416 heavy vehicle movements along Champions Way during the ultimate development stage. It is unclear how the peak hour demands have been calculated.

This should be confirmed and updated design volumes are required to confirm that the intersections have been assessed with the inclusion of the revised volumes. Furthermore, details of staff hours and shifts should be provided to confirm when site generation peaks will occur (i.e. shift changeover periods).

2.3.2 Network Modelling

Item 24a of SARA's IR requested the Ipswich-Rosewood Road / Southern Amberley Road and Cunningham Highway / Ipswich Rosewood Road intersections be modelled as a network. TTM's response states:

"To include the Ipswich-Rosewood Road / Southern Amberley Road as part of a networked analysis, additional traffic survey data is required. Given the current restrictions due to COVID-19, it is not possible to undertake surveys at the Ipswich-Rosewood Road / Southern Amberley Road to enable the network analysis"

It is unclear what additional data would be required. Furthermore, whilst surveys cannot be undertaken (due to COVID-19), historic intersection / daily traffic data can be utilised to accurately extrapolate and model typical conditions.

2.3.3 Existing Safety Issues on State Controlled Network

Item 24a of SARA's IR outlines that there are existing **safety** and performance issues that occur due to the proximity of Ipswich-Rosewood Road / Southern Amberley Road and Cunningham Highway / Ipswich Rosewood Road intersections. This is understood to include increase delays for right turning volumes.

TTM's response materials sates:

"As outlined in Section 11.3.1 of DTMR's Guide to Traffic Impact Assessment, the average delay metric is the key performance measure for priority-controlled intersections. It states that "where average peak hour delays for any turn movement exceeds 42 seconds (the Level of Service C/D threshold) then the intersection should be upgraded for safety reasons where it is practical to do so."

The analysis demonstrates that the maximum delay in the 2022 AM peak is in excess of 42 seconds (43 seconds) in the base case, without development traffic. This delay is due to the extremely high right turn demand into Ipswich Rosewood Road from the Cunningham Highway. It is because of this high right turn demand that TMR have identified a major upgrade to this section of the Cunningham Highway, and in particular the intersection with Ipswich Rosewood Road, as identified in the DTMR business case."

TMR's Guide to Traffic Impact Assessments (GTIA) states that where a "High" safety risk score is identified, mitigation works are required regardless if the development worsens the risk or not. This applies in this instance, and mitigation should be provided to reduce turning movement delays below the thresholds in all design scenarios, regardless of base results.

Therefore, it would be expected that mitigation measures would need to be provided at this location to reduce the existing risk score.

2.3.4 Model Calibration (Two Stage Layout)

In response to the IR, the Cunningham Highway / Ipswich Rosewood Road intersection has been reassessed as a two stage turn movement. However, it is unclear if the centre median has sufficient width to accommodate heavy vehicle storage.

This should be updated in SIDRA and modelling updated accordingly.

2.3.5 Delay Assessment

Based on the response material, the following intersections will have a >5% delay impact as a result of the development:

- Cunningham Highway / Coopers Road Intersection
- Cunningham Highway / Ipswich-Rosewood Road Intersection.

TTM's response materials sates:

"the intersection operates well within performance thresholds in terms of DoS and delay thresholds, therefore, no further mitigation works are required"

"it is not reasonable to impose mitigation measures on this development as a result of 50vph, particularly when planning has been undertaken to resolve the significant existing issues at this intersection"

As per the GTIA, mitigation measures are required to offset delay impacts on the state controlled network where the average delay is increased by >5%. The operation of the intersection within acceptable thresholds is not considered by the GTIA, as the development will impact existing users and should be responsible for the offset of these impacts.

As such, mitigation measures are considered warranted to offset development related impacts on the state controlled network. These should also take into consideration the identified safety issues noted above.

2.3.6 Road Safety Audit

Section 9.3.3. of the GTIA states that on roads with >8,000 vehicles per day and 80+km/h speed limit, a Road Safety Audit (RSA) is required to asses development impacts and safety risks. The Cunningham Highway meets this criteria where impacted by the subject site, and as such, an RSA must be provided.

The response material has only provided safety risk assessments for the Cunningham Highway / Ipswich Rosewood Road intersection, which does not meet the requirements of the GTIA.

2.3.7 Pavement Impacts / Contributions

In response to Item 24h of SARA's IR, TTM have provided an updated PIA; however, the contributions still appear to be calculated using a damage exponent of 4 (i.e. SAR4 values). This should be updated accordingly.

2.4 Other

2.4.1 B-Double Routes

Currently, there are no approved B-Double routes which provide access to the subject site. It is noted that the Champions Way is an approved B-Double route between the Cunningham Highway and the Champions Way road fork (approximately 1.3km).

This must be further addressed if B-Doubles are to access the subject site. Furthermore, any roads which are currently not B-Double approved should be suitably assessed to confirm that the provision of B-Doubles is suitable, in accordance with all National Heavy Vehicle Regulator (NHVR) criteria.

2.4.2 Parking Supply

In response to Item 17a of Council's IR the revised architectural plans still provide 50 on-site parking space, equating to one (1) space per staff member. With all visiting vehicles to be stored within the hardstand apron close to the machinery operations. This is not believed to be an ideal solution and designated visitor parking should be provided adjacent to the head office to prevent visitors from storing within any aisles. This is further emphasised due to the nature of the site and the use of heavy vehicles that may traverse over the hardstand areas while manoeuvring through the site.

No visitor parking has been provided at the development as required in the Council Planning Scheme. This would require additional parking spaces on site.

2.4.3 Pavement Design

No details of the pavement design have been supplied in response to Item 17b of Council's IR. These details are warranted to ensure that any approved development will not decrease the expected life span of the surrounding pavement and that all connecting structures, such as bridges and culverts will be designed to a sufficient standard.

3. Summary

In summary, the proposed Wanless Recycling Park proposal does not adequately consider and mitigate traffic related impacts to the surrounding road network. There are a number of items that need to be addressed from a traffic engineering perspective, including:

- Site access proposed via Champions Way would appear contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct. Furthermore, it is inconsistent with Council's Implementation Guideline No. 32 and Figure 5a (ERIA Transport and Access Network Plan) which includes access via Seppanaen Road as being within the preferred strategic road hierarchy and network within the ERIA.
- Ensuring the access route is suitable to accommodate B-Double access to the site
- Demonstrating that there will be no impacts on the safety, operation or amenity of the Ipswich Motorway Precinct
- Updating intersection modelling to reflect network conditions
- Providing mitigation measures at key areas where “High” risk scores have been identified (i.e. where turning movement delays exceed thresholds), regardless of the existing operating conditions, as per the GTIA
- Providing mitigation measures where intersection delay exceeds 5%, regardless of operating conditions, as per the GTIA
- Conducting a Road Safety Audit on relevant state-controlled sections.

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Attention: Mike McMahon

8 September 2020

Ref: 6082let-8Sept2020-01.odt

Dear Mike

Re: AIR AND NOISE PEER REVIEW – PROPOSED WANLESS RECYCLING PARK, WILLOWBANK

As per our discussions, the latest air and noise report letters/responses[1,2,3] have been reviewed with regards to the proposed Wanless Recycling Park Project at Willowbank (Council application number 10674/2019/CA). These report letters were provided by the proponent in response to a SARA Advice Notice issued on 22 May 2020 and in response to public submissions. Based on our review of these report letters, no additional comments are made over and above those already detailed in the peer review letters issued on 11 May 2020 (attached as an Appendix to this letter). In summary, the following outcomes were identified from the May 2020 ANE peer review, which are still considered relevant items for clarification/justification:

- Noise:
  - justification on adopting a higher noise criteria during the 6 am to 7 am period;
  - clarification on modelling inputs:
    - assumptions or source of topographical data for modelled capped landfill area;
    - the modelled sources/activities located inside the Resource Recovery Buildings (and

1 Letter from Natalie Shaw (Katestone Environmental) to Kylie Rolley-Cervenjak (Urbis), Re: Response to Advice Notice from SARA regarding Wanless Recycling Facility, 3 July 2020

2 Memorandum in response to SARA Advice Notice 22 May 2020, from Russell Brown (Acoustics RB) to Tom Auckland (Urbis), 3 July 2020, Ref: RB/19-1136.M02

3 Submissions Response Report from Kylie Rolley-Cervenjak (Urbis) to Sandeep Nanjappa (Ipswich City Council), 3 September 2020.

sound power levels of these sources);

- assumptions regarding the number of dump truck movements along haul routes.

- further details on the evaluation undertaken to justify that impulsive characteristics would not be discernible;
- apparent inconsistencies with the argument for modelling calm conditions (instead of downwind or temperature inversion conditions);
- justification that the proposed measures (which are detailed only in general terms) are feasible for the proposed operations.

- Air Quality:
  - clarification as to whether the modelling approach represents a worst-case emission scenarios (as required by the DES guideline 'Application requirements for activities with impacts to air');
  - further justification that the total odour emission rates from the waste transfer building are representative of the proposed operations (see section 'Estimated Odour Emission Rates' of this letter);
  - clarification on the timing of the gas recovery system, and therefore, the suitability of the gas recovery rates applied for the odour assessment;
  - clarification regarding the appropriateness of the [redacted] [redacted] facility modelling assessment for the assessment of cumulative impacts (i.e. whether the 2008 modelling inputs are representative of the [redacted] facility in it's current form/stage, including consideration of any odour complaint history);
  - clarification on the modelled dry deposition parameters (these have not been provided, and can have a significant influence on the TSP, PM_{10} and $PM_{2.5}$ outcomes);
  - mitigation measures should clearly state the haul route watering rate required for the site to achieve a 75% reduction, and whether there is sufficient water supply is available for achieving the watering rate.

Please do not hesitate to contact us should any further information be required.

Yours sincerely

for Air Noise Environment Pty Ltd

Samuel Wong BEng(Chem), MAAS

Senior Environmental Engineer

Note: All professional advice provided by Air Noise Environment, including any information contained in this letter, is subject to the terms of the Disclaimer shown on our website at ANE Disclaimers

APPENDIX – 11 MAY 2020 PEER REVIEWS

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Attention: Mike McMahon

11 May 2020

Ref: 6082-AQreview-let01.odt

Dear Mike

Re: PEER REVIEW – AIR QUALITY ASSESSMENT, PROPOSED WANLESS RECYCLING PARK, WILLOWBANK

This report letter presents a peer review of the air quality assessment completed for the proposed Wanless Recycling Park Project at Willowbank (Council application number 10674/2019/CA). The review relates to the following reports:

- Katestone Environmental Pty Ltd, Wanless Recycling Park: Air Quality Assessment, 13 December 2019, Version 1.1 (Final), Reference D19050-3;
- Letter from Natalie Shaw (Katestone Environmental) to Kylie Rolley-Cervenjak (Urbis), Re: Response to Information Request from Ipswich City Council regarding Wanless Recycling Facility, 22 April 2020; and
- Katestone Environmental Pty Ltd, Wanless Recycling Park: Air Quality Assessment, 22 April 2020, Version 1.3 (Final), Reference D19050-7.

The 13 December 2019 report was submitted with the development application. The 24 April 2020 report was submitted in response to an Ipswich City Council[1] and SARA[2] information request. The focus of this peer review is on the 22 April 2020 information response report. However, the 13 December 2019 and associated information requests have been reviewed for background to the

1 Ipswich City Council, Re: Assessment Management Information Request (Planning Act 2016 – Section 12 of the Development Assessment Rules), 20 January 2020, Application No. 10674/2019/CA.

2 SARA information request – Bergmans Road, Lanes Road, Ebenezer Road and Coopers road, Ebenezer; Coopers Road, Willowbank, 18 February 2020, SARA reference 2001-15045 SRA.

project.

This report letter has been divided into key items followed by a peer review of each item.

Pollutants Considered

The assessment has considered the following pollutants: odour, TSP, PM_{10}, $PM_{2.5}$, deposited dust and crystalline silica. These pollutants are considered suitable for assessing the primary potential air quality impacts from the proposed waste recycling operations.

A flare is proposed and is associated with the release of combustion products (mainly carbon monoxide and nitrogen dioxide), and volatile organic compounds (VOCs). Modelling of the flare has not been undertaken, however, it is noted that Katestone Environmental air quality report specifies and recommends operating emissions and conditions for the proposed flare consistent with the NSW Protection of the Environment Operations (Clean Air) Regulation 2010 (NSW). It is expected that these emission parameters would minimise potential air quality impacts, and the other pollutants that have been modelled are expected to define compliance for the site operations.

Assessment Criteria

Table 2 of the air quality report summarises the air quality criteria adopted for the pollutants considered. Criteria have been referenced from the Environmental Protection (Air) Policy 2019. No ambient air quality goal for crystalline silica is available in Queensland, and Katestone Environmental have referenced an annual average 3 mg/m^3 goal adopted by the EPA Victoria.

Overall, the assessment has referenced the appropriate air quality criteria for the relevant compounds.

Air Dispersion Modelling

Estimated Particulate Emission Rates

Emission rates have been derived from commonly referenced emissions estimation manuals, such as the US EPA AP 42 and National Pollution Inventory. The emissions manuals provide an appropriate basis for deriving emissions from waste transfer and landfill related activities.

One of the key inputs in deriving dust emission rates is the material throughput (e.g. tonnes per annum or day). Katesone Environmental have assumed a maximum annual throughput of 1 million tonnes. This is considered appropriate for assessing worst-case impacts for pollutants associated with an annual average criteria. However, there is a potential for the approach to under-predict 24-hour average predictions for assessment against 24-hour average criteria (applicable to $PM_{2.5}$ and PM_{10}). While, the maximum throughput per year is expected to be 1 million tonnes, daily throughput could vary from day to day (with some days potentially being significantly higher than others).

It is further noted that the Department of Environment and Science guideline ‘Application

requirements for activities with impacts to air' states the following with regards to worst-case emissions:

> *The applicant should also identify 'worst case' emissions (e.g. those that may occur during commissioning, start-up, shutdown, or maintenance and emergencies outside of normal operating conditions). If these emissions are likely to be significantly higher than those for normal operations, it will be necessary to conduct additional modelling specifically to evaluate the worst-case impact of emissions.'*

For the 24-hour predictions of PM_{10} and $PM_{2.5}$, there is some buffer between the predicted results for each scenario and the air quality criteria. This buffer could be sufficient to address any variation in daily waste throughputs. **It is recommended that this aspect of the assessment relating to worst-case daily emissions is reviewed to demonstrate that compliance is achievable on worst-case days.**

Dust Emission Controls

Table 7 of the air quality report specifies the control efficiencies adopted for the watering of haul routes and crushing activities. Standard 50% reductions for watering has been applied for sealed haul routes and crushing activities. However, for unsealed roads, a higher 75% reduction has been applied for watering. This is considered achievable for watering provided that a higher water application rate is adopted, however, the air quality report does not discuss the practical requirements for achieving the higher 75% reduction, including availability of sufficient water on site. The NPI Mining Manual specifies the following control efficiencies for differing haul route watering rates:

- Level 1 - 50% for a water application rate < 2 $L/m^2/hr$; and
- Level 2 - 75% for a water application rate > 2 $L/m^2/hr$.

As haul routes contribute significantly to particulate emissions (as indicated by the emission rates presented in Table 8 of the air quality report), it is important that the conclusions specify the assumption of a 75% reduction associated with a higher watering rate. Otherwise, if a higher watering rate cannot be adopted or is not intended to be adopted at the site, compliance should be demonstrated using the standard 50% control efficiency for watering on unsealed roads.

Estimated Odour Emission Rates

Odour emission rates for the landfill component of the project are discussed in Section 6.2 of the report. The total odour emission rates for the landfill site are considered appropriate for assessing potential odour impacts. Based on previous experience and literature reviews, alternative emission rates for individual sources could be adopted (potentially higher or lower), however, the total emission rate for the site is considered representative of the proposed landfill operations.

Odour emissions from the waste transfer buildings is discussed in Appendix B, Section B2.1 of the report. Odour emissions data has been obtained from a study undertaken by The Odour Unit in 2012 at a waste to energy facility (400,000 tpa municipal solid waste transfer building, forced air

extraction with truck access doors opening/closing). In deriving an odour emission rate (OUV/s), the following data has been adopted from The Odour Unit study:

- highest measured odour concentration at extraction fan of 2,400 OU; and
- flow rate through a 30 m^2 open door of 6 m^3/s.

The adoption of 2,400 OU is the maximum concentration measured, and is significantly higher than all other measured concentrations which range from 320 OU to 1,350 OU. However, upon review of the TOU report, it is not clear whether the 6 m^3/s flow rate adopted is applicable to the proposed waste transfer buildings. The TOU derived 6 m^3/s flow rate is based on the following:

- 1 x 30 m^2 open door way;
- 1 m/s air velocity through the doorway; and
- When the door is opened, air does not rush out, but is affected by pressure equalisation (associated with door opening and extraction fans operating simultaneously), resulting in an estimated 20% of door way opening being associated with emissions-to-atmosphere over a 5-minute open/close sequence.

The flow rate adopted by TOU is specific to a forced extraction building with truck access doors opening and closing. The Katestone Environmental air quality report does not clarify how these specific assumptions relate to the proposed waste transfer buildings, and whether or not, the buildings will operate under forced extraction with doors opening and closing, or under natural ventilation. If the roller doors to the transfer buildings were constantly open, then the 20% factor would not apply, as this relates to a door opening/closing. Furthermore, multiple roller doors would have an affect on the total odour emissions from each transfer building.

The modelling assumes specific odour emission reductions as a result of gas recovery, however it is not clear whether the gas recovery system will be in place and operational prior to commencement of Stage 1. Section 6.3 indicates that ‘a gas extraction system will be installed as the landfill develops’. This suggests there could be a period of time when no extraction is in place, and gas recovery rates would not apply.

Further justification should be sought as to whether the total odour emission rates from the waste transfer buildings are representative. Clarification should also be provided in relation to the timing of the operation of the gas recovery system, to confirm that the modelled odour reductions can be achieved in practice.

Background Air Quality Data and Assessment of Cumulative Impacts

Background air quality data has been sourced from the nearest ambient air monitoring stations in Flinders View and Rocklea. It is also noted that the assumed TSP and deposited dust levels are reasonable (assumptions were made due to the absence of site monitoring data for these pollutants) based on a review of other monitoring stations for TSP and ambient deposited dust sampling completed by ANE for other projects around Brisbane.

It is also noted the modelling has included odour sources from the [redacted] Facility, based

on emissions data provided in DA report for the facility (completed in 2008). No commentary has been provided in relation to the air quality performance of the [redacted] facility in practice, since operations commenced. This information would be of assistance in verifying the appropriateness of the assumptions adopted in the 2008 modelling and assessment.

It is recommended that clarification be sought regarding the operational performance of the [redacted] facility, to confirm the appropriateness of the assumptions included in the cumulative air quality modelling. This could also include commentary on any air quality related complaints that may have arose as a result of the operations of the [redacted] facility.

Meteorological Modelling

Meteorological modelling has been undertaken utilising TAPM and CALMET for the model year 2018. The modelling has also incorporated observational data form the Amberley Bureau of Meteorology station. The adopted methodology is considered suitable and validation outcomes show that the TAPM/CALMET modelling is an accurate representation of the meteorological conditions in the area.

Air Dispersion Modelling

The CALPUFF dispersion model has been utilised to predict the dispersion of air pollutants from the quarry extension. In addition to the main report, further details of the CALPUFF model settings are provided in Appendix A (Section A2) of the report. The following review comments are made:

- sensitive receptor locations – Section 5.2 of the air quality report presents the sensitive receptors considered in the assessment. Available aerial photography has been reviewed and all existing nearby sensitive receptors have been accounted for.
- source locations – the location of sources are considered to be appropriate based on a review of the proposed plans and Figures 5 to 10.
- Appendix A2 notes that dry deposition has been modelled, however, assumptions regarding deposition parameters have not been provided.
- No details on source parameters (e.g. dispersion parameters, heights) are provided.

Adopted deposition parameters can have a significant influence on the predicted TSP, PM_{10} and $PM_{2.5}$ concentrations. **It is recommended that clarification be sought regarding the assumptions made for dry deposition modelling.**

As Council have noted in their information request, the modelling has not included:

- particulate emissions from light vehicles;
- odour emissions from truck movements along public roads; and
- odour from leachate pond and any associated drains and sumps.

Katestone Environmental have indicated that emissions from the above sources would be minor. This is considered to be a reasonable conclusion for these sources. For light vehicles, due to their weight and also limited travel distance (as noted in the Katestone Environmental response), the total

contribution to emissions is minor. With regards to odour from truck movements, these are not normally considered in odour modelling assessments for the reasons provided by Katestone Environmental (e.g. transient nature of passing trucks at 40 km/hr and loads being covered or fully enclosed). For the leachate pond, there is no reason why this source could not have been included as it represents a discrete area at the site, however, the size is noted to be small compared to other major odour emission sources and odour emission rates from well managed leachate ponds are relatively low. **It is recommended that odour management measures for the leachate pond are incorporated in the proposal to minimise the potential odour emissions from this source.**

Suitability of Assessment Recommendations

The results of the modelling indicate predicted compliance with the air quality criteria, and the following measures are recommended:

- *Dust management measures at the facility should include regular watering of haul roads, and regular maintenance of the sealed entrance route to maintain a low silt loading.*
- *The area of day cover should be limited to 1ha, particularly when landfilling is occurring in the northern areas of General Waste landfill void (Iron Bark Pit and Lane's Pit).*
- *The landfill gas flare should have the following features:*
    - *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.*
    - *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 the landfill gas entering the flare, is more than 98%.*

Overall, the recommended measures are reflective of the modelling. However, as noted previously, the modelling specifically considers a Level 2 watering rate (75% control efficiency, > 2 L/m^2/hr watering rate as per NPI Mining Manual). The air quality report indicates a 75% control efficiency for unsealed haul routes, however, no details on the watering rate required to achieve this control efficiency is discussed. Normally, a 50% control efficiency is adopted for standard haul route watering. Given that haul routes contribute significantly to dust emissions, mitigation measures should clearly state the haul route watering rate required for the site, and whether there is sufficient water supply is available for achieving the watering rate.

CONCLUSION

A peer review of the air quality assessment for the proposed Wanless Recycling Park at Willow Bank has been completed. Overall, the assessment addresses the relevant air quality issues through the use of air dispersion modelling modelling. The assessment criteria, air emission sources and modelling methodology are generally considered appropriate. However, there are some areas of uncertainty where clarification should be sought:

- clarification as to whether the modelling approach represents a worst-case emission scenarios (as required by the DES guideline 'Application requirements for activities with impacts to air');
- further justification that the total odour emission rates from the waste transfer building are representative of the proposed operations (see section 'Estimated Odour Emission Rates' of this letter);
- clarification on the timing of the gas recovery system, and therefore, the suitability of the gas recovery rates applied for the odour assessment;
- clarification regarding the appropriateness of the [redacted] facility modelling assessment for the assessment of cumulative impacts (i.e. whether the 2008 modelling inputs are representative of the [redacted] facility in it's current form/stage, including consideration of any odour complaint history).
- clarification on the modelled dry deposition parameters (these have not been provided, and can have a significant influence on the TSP, PM_{10} and $PM_{2.5}$ outcomes).

In addition to the above, it is noted the modelling assumes a higher control efficiency of 75% for watering of unsealed haul routes. According to the NPI, this control efficiency is related to a specific watering rate (> 2 L/m^2/hour). As the compliant modelling outcomes are partly dependent on this assumption, mitigation measures should clearly state the haul route watering rate required for the site to achieve a 75% reduction, and whether there is sufficient water supply is available for achieving the watering rate.

Please do not hesitate to contact us should any further information be required.

Yours sincerely

for Air Noise Environment Pty Ltd

Samuel Wong BEng(Chem), MAAS

Senior Environmental Engineer

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Attention: Mike McMahon

11 May 2020

Ref: 6082-Noisereview-let01.odt

Dear Mike

Re: PEER REVIEW – PROPOSED WANLESS RECYCLING PARK, WILLOWBANK

This report letter presents a peer review of the noise assessment completed for the proposed Wanless Recycling Park Project at Willowbank (Council application number 10674/2019/CA). The review relates to the following reports:

- Acoustics RB Pty Ltd, Proposed Resource Recovery Facility and Landfill, Ebenezer – Environmental Noise assessment, 3 December 2019, Copy 2, Report No. 19-1136.R02;
- Acoustics RB Pty Ltd, Proposed Resource Recovery Facility and Landfill, Ebenezer – Environmental Noise assessment, 24 April 2020, Copy 2, Report No. 19-1136.R02;

The 3 December 2019 report was submitted with the development application. The 24 April 2020 report was submitted in response to an Ipswich City Council[1] and SARA[2] information request. The focus of this peer review is on the 24 April 2020 report. However, the 3 December 2019 and associated information requests have been reviewed for background to the project.

This report letter has been divided into key items followed by a peer review of each item.

1 Ipswich City Council, Re: Assessment Management Information Request (Planning Act 2016 – Section 12 of the Development Assessment Rules), 20 January 2020, Application No. 10674/2019/CA.

2 SARA information request – Bergmans Road, Lanes Road, Ebenezer Road and Coopers road, Ebenezer; Coopers Road, Willowbank, 18 February 2020, SARA reference 2001-15045 SRA.

Background Noise Monitoring

Two noise monitoring locations have been selected:

- Location 1 – south-west area of site, close to dwelling at 290 Bergmans Road, Ebenezer;
- Location 2 – north-east corner of site.

The noise monitoring locations are appropriate in terms of representing ambient noise levels at the nearest sensitive receptors.

Council has raised issues regarding the influence of coal loading operations impacting on background levels, particularly as the loading operations are expected to cease with the cessation of the nearby mining activities. In the opinion of the reviewer, Acoustics RB response is sufficient, which highlights that coal loading operations would not influence RBL (Rating Background Levels) values, which are based on the lowest 10^{th} percentile L_{A90} noise levels.

The measured RBLs summarised in Table 4 are reasonably expected for the given area, which include night time levels of 24 dB(A) and 30 dB(A) at Locations 1 and 2, respectively. It is noted that the evening noise RBL at Location 2 is higher than the day RBL by 2 dB(A) (34 dB(A) vs 32 dB(A)). This carries over to the derivation of background plus criteria, which is 2 dB higher for the evening. Evening background levels are not normally higher than day background levels, unless influenced by extraneous sources such as insect noise. No comment on the higher evening noise levels is provided. If evening levels are normally lower at Location 2, the subsequent noise limit will also be lower. Nonetheless, it is noted that the night-time RBL and associated limit is more stringent than the evening limit, and defines compliance for operations between 6 pm to 6 am, which is associated with the resource recovery facility only.

Assessment Criteria

The Acoustics RB report references the following with respect to noise criteria:

- Acoustic quality objectives (AQOs) of the Environmental Protection (Noise) Policy 2019 (EPP Noise);
- Typical background plus noise limits specified in Environmental Authorities of nearby industrial facilities.
- The L_{Aeq} noise parameter has been adopted;
- A 10 dB facade correction for an open window has been considered for deriving equivalent external AQOs from the internal AQOs defined in the EPP Noise;
- specific noise limits for the 6 am to 7 am period background levels is defined (in addition to the standard day 7 am to 6 pm, evening 6 pm to 10 pm and night 10 pm to 7 am periods);
- a minus 3 dB correction has been applied to the noise limits to allow for potential future activity in other areas of the Wanless Recycling Park site.

The overall approach to deriving noise criteria is considered appropriate. The acoustic report has

reference the relevant guidelines and legislation, and has also drawn appropriate conclusions regarding any adjustments or corrections required for the criteria.

It is recommended that justification be sought regarding the adoption of higher noise limits during the 6 am and 7 am period. This approach appears to have been adopted given the higher background noise levels from 6 am to 7 am, as shown in Table 4 of the Acoustics RB report. It needs to be understood whether the increasing noise levels measured from 6 am to 7 am is due to ambient activity likely to be experienced year round. For example, if it is due to traffic-related activity from the general road network and industry in the area, then it is likely that the increased background noise levels from 6 am to 7 am would be relevant throughout the year. If it is due to bird song or insect noise, then this may be seasonal, and adoption of a higher 6am to 7 am period criteria may not be appropriate.

Noise Modelling

Table 1 presents key inputs for the noise modelling conducted by RB Acoustics and associated review comments.

Overall, the modelling methodology and inputs are appropriate for the assessment of noise impacts on nearest sensitive receptors. **Bolded** text shows aspects of the modelling where further clarification can be sought.

Table 1 – Noise Modelling Review Comments

Review Item	Comments
Calculation Methodology	The CONCAWE noise propagation calculation methodology has been adopted which is an accepted approach for DA noise assessments. CONCAWE is an empirical method which allows for noise predictions under various meteorological conditions.
Sensitive Receptors	Available aerial photography has been reviewed and all nearest sensitive receptors have been accounted for.
Topography	Topographical data for the area has been sourced from a reliable source (DNRM). Footnote B to Table 8 indicates that modelling of the landfill assumes the landfill site will be almost at completion (i.e. highest point). **It is recommended that clarification be sought regarding the source of topographical data for capped landfill areas.** The DNRM data set is unlikely to capture the correct heights of the final capped landfill areas.
Noise Source Data	The sound power levels for equipment is considered appropriate and representative for a waste recycling park of this type. **It is recommended that clarification be sought regarding the activities within the Resource Recovery Buildings and the sound power levels**

Review Item	Comments
	considered for these specific activities.
Noise Source Locations	The modelling noise source locations are presented in Figure 8 to 10. These locations appear to form a reasonable basis for assessing noise impacts. Figures 8 to 10 show modelled line sources for dump trucks. **Further clarification should be sought regarding how the dump trucks have been modelled as a line source.** For example, if an L_{Aeq} has been predicted, the line source may be represented by a moving point source with an assumed number of trucks per hour and vehicle speed. This information is particularly important given that dump trucks are one of the contributors to the predicted exceedances.
Modelling Scenarios	3 noise modelling scenarios have been considered: • Scenario 1 - day time operations – RRF and landfilling at Void 1 and 2 • Scenario 2 - day time operations – RRF and landfilling at Void 1 and 2 • Scenario 3 – night time operations – activity at RRF only. These scenarios appear to form a reasonable basis for assessing noise impacts.
Meteorology	See following section for detailed review.

Acoustics RB have specifically responded to Council's query regarding tonality and impulsiveness on Page 26 of the acoustic report. It is indicated that an evaluation has been undertaken and based on this evaluation, it was determined that there would be no discernible tonality or impulsiveness characteristics. **It is recommended that the evaluation be discussed in further detail.** Tonality is unlikely to be significant based on the type of equipment operating, however, it is expected that impulsive noise sources could contribute to noise impacts.

Modelling Meteorological Conditions

The Acoustics RB report has adopted calm conditions in the noise modelling. The justification for such an approach is provided in some length in Footnote D of Table 8. It is the reviewer's understanding that this approach has been adopted by Acoustics RB because the difference between project noise levels and background noise levels is considered to be the greatest under calm conditions. Whereas, under other conditions (such as down wind or temperature inversions), the Acoustics RB report indicates that the difference is smaller. Therefore, modelling of calm conditions is considered to be a worst-case approach to assessing compliance.

The following text is presented on Page 22 of 61 of the report:

> *'In general, however, under downwind propagation conditions (ie when the receiver is located downwind of the source), the background noise levels will increase at a faster rate than the*

increase in the emitted noise levels. In fact, under downwind conditions (ie wind speed up to 3m/s), the increase in RBL has been typically measured to be 5dBA, while the increase in emitted noise levels is generally in order of 3-4dBA'.

There are a couple of points to highlight regarding the above comment.

Firstly, justification is considered necessary with regards to the RBL increasing by 5 dB(A) under downwind conditions, as well as justification that emitted noise levels increase in the order of 3-4 dB(A). With regards to the increase in emitted noise levels, the dB increase is site specific and influenced by factors such as noise source characteristics, distance to sensitive receptors and topography. No modelling of the subject site under downwind conditions has been undertaken to show that the potential increase in noise levels at the nearest sensitive receptors is in the order of 3-4 dB(A) (and therefore, less than the assumed 5 dB(A) increase to background levels under downwind conditions).

Secondly, for the above Acoustics RB comment to apply, justification should be provided that the RBL values upon which the noise criteria has been based was also determined under calm conditions. The approach that Acoustics RB appears to be seeking to take, is to compare project noise levels under calm conditions with background plus noise criteria (based on RBL values under calm conditions), because this is considered to be the worst-case scenario. However, if the RBL values were affected by wind speeds generally around 2-3 m/s, then the report is comparing calm predictions against higher wind-affected (up to 3 m/s) background levels that are not consistent with the modelling approach being proposed. Page 15 of 61 provides some information about the prevailing wind conditions during the monitoring, which indicates intervals of gentle/moderate breeze at times and generally calm to light winds during the night. If there is any doubt about whether background noise levels were influenced by light winds, then, in the opinion of the reviewer, an alternative approach to the assessment should be taken (i.e. predict noise levels under downwind conditions).

The RB Acoustics report has also applied a similar logic in discussing temperature inversions. On Page 23 of 61 states the following:

Under temperature inversion conditions which may occur at times on some winter nights after reasonably warm days, higher levels of noise are expected to be emitted from distant noise sources. While this effect will apply to the noise emitted by the proposed new facility, it will also apply to all other distant noise sources, especially highway road traffic noise. Taken together, the increase in emitted noise levels and the increase in background noise levels will effectively offset each other.

The above logic is considered scientifically sound, however, the specific value of the offset is open to discussion and a complete offset may not occur. The discussion appears to be written to justify why temperature inversions do not necessarily require consideration, and that assessment under calm conditions represents a worst-case scenario. If this logic is applied to the assessment, then further justification would be necessary to show that RBL values which have been used to derive noise criteria were not influenced by temperature inversions. Otherwise, predicted noise levels under calm conditions are potentially being compared to noise criteria based on higher background levels (influenced by temperature inversions).

Again, if there is any doubt about the specific meteorological conditions influencing the derived RBL values, then the alternative approach to the assessment is recommended (i.e. predict noise levels under downwind conditions). It is noted that in the information request, Council have requested modelling under adverse meteorological conditions if these are found to be a feature of the environment. This request is considered appropriate for assessing noise impacts.

Suitability of Assessment Recommendations

The RB Acoustics report discusses the following potential mitigation options:

- for bulldozers, front end loader and dump trucks (which contribute to predicted exceedance at Residences 55 and 56):
    - specify a maximum noise emission level for the bulldozers, front end loader and dump trucks; and
    - construction of either or both of close-in portable barriers and distant earth mounds/barrier.

The potential mitigation options are provided in general terms only, making reference to the detailed design stage of the project. While, it is acknowledged that the detailed design phase forms the proper basis for finalising detailed mitigation measures, further investigation or details are considered necessary for confirming the practicability of adopting such measures. For example, questions that arise include:

- Are close-in portable barriers a practical option given the expected progression and methodologies to be adopted for landfill operations? Generic reference has been made to other landfills in SE Queensland only.
- If heavy machinery emission noise levels are to be limited, are the potentially required noise limits feasible? For example, low noise emission levels are generally associated with smaller equipment. If this is the case, is the smaller equipment a practical operation for the site.

It is recommended that further justification of proposed measures is provided and an indicative noise mitigation scenario is included to show that the measures are a practical/ feasible approach for the proposed operations.

CONCLUSION

A peer review of the noise assessment for the proposed Wanless Recycling Park at Willow Bank has been completed. Overall, the assessment addresses the relevant noise issues through the use of noise monitoring and noise modelling. The assessment criteria, noise sources and modelling methodology are generally considered appropriate. However, clarification and justification on the following matters is considered important:

- justification on adopting a higher noise criteria during the 6 am to 7 am period;
- clarification on modelling inputs:

- assumptions or source of topographical data for modelled capped landfill area;
- the modelled sources/activities located inside the Resource Recovery Buildings (and sound power levels of these sources);
- assumptions regarding the number of dump truck movements along haul routes.

- Further details on the evaluation undertaken to justify that impulsive characteristics would not be discernible;
- Apparent inconsistencies with the argument for modelling calm conditions (instead of downwind or temperature inversion conditions);
- justification that the proposed measures (which are detailed only in general terms) are feasible for the proposed operations.

Please do not hesitate to contact us should any further information be required.

Yours sincerely

for Air Noise Environment Pty Ltd

Samuel Wong BEng(Chem), MAAS

Senior Environmental Engineer

20 YEARS AIR NOISE ENVIRONMENT of providing solutions, innovation integrity & teamwork

Note: All professional advice provided by Air Noise Environment, including any information contained in this letter, is subject to the terms of the Disclaimer shown on our website at ANE Disclaimers

[redacted]

24 December 2020

Qld Treasury / SARA
(Ref: 2001-15045 SRA)
DAAT@dsdmip.qld.gov.au
Att: Andrew Finch, Principal Planner

Dear Andrew

Re: Submission (Objection) - Supplementary concerns
Development Application No.: 10674/2019/CA

We refer to [redacted] previous submission (objection) made to the assessment manager, dated 3 June 2020 and supplementary matters in our letters dated 10 July 2020 and 5 November 2020.

We have reviewed recent correspondence on Council's e-pathway, being the applicant's response dated 19 October 2020 to SARA Second Advice Notice; and the further response dated 13 November 2020 to SARAs original information request (which resulted in a recent minor change to the development application dated 10 December 2020) and provide the following comments and concerns in respect to those responses.

Note: The submitted supporting documentation in the development application (including subsequent information response) does not support approval of the application in its current form and there remains insufficient engineering, environmental, or town planning reason which would otherwise justify approval of the application.

Background

There has been plethora of discrepancies in the application - as identified in [redacted] original submission and subsequent correspondence to Council and SARA - in regard to key engineering, environmental and planning issues, which have raised serious concerns and to date have **not** been adequately addressed in responses by the applicant or their consultants.

The multiple information requests and numerous extensions have given the public an expectation of viewing additional supporting material, however instead have led to confusion by the applicant (and SARA), including overlooking key matters (such as the EPBC referral - which was proposed to occur in April 2020) or have been misleading (in regard to dewatering the voids).

In regard to the EPBC referral, it is apparent that no referral has occurred to date – i.e., the applicant had not completed its response to the original information request, with the applicant commencing public notification prematurely. Assessment of MNES also has a direct bearing on the outcome of assessments by DES, including its assessment of the most recent submission of the amended Koala Management Plan – refer to Point 1 below and discussed in **Attachment 1**.

In regard to the information originally sought by SARA for dewatering the voids (previously proposed by the applicant to be the subject to a separate EA amendment), information recently submitted has added further to the confusion and/or has resulted in the applicant's own consultants questioning the feasibility of the actual physical removal of tailings solids in the tailings dam and/or sludge/solids from the base of Lanes Pit - refer to **Attachment 1** for additional comments.

There further remains insufficient detail in application to determine the legitimacy of **the applicant's intent to recover waste**, given there remains no detail of how the multiple components of the development are intended to be staged, with waste recovery targets in the application being well below the Queensland's waste recovery targets. These matters support the opinion that the proposal appears more a landfill project (than a resource recovery one). This matter has been further confused by the applicant's current expert reports which now suggest that disposal of C&D and dry C&I would not commence until 2035 – i.e., 11 years after commencement of General Waste (MSW and C&I) disposal for the LIP voids – emphasising that the Project appears intended as primarily a landfilling operation, with the resource recovery facility possibly not operational until around 2035.

In addition to the above, Ipswich City Council has requested (on two occasions, the most recent being 23 November 2020) that the applicant provide '*a detailed response to* ***all matters*** *that have been raised by submitters including the supplementary submission material'*. To date, the applicant has yet to provide an adequate response to Council on those matters.

[redacted] therefore reiterate that **all matters** outlined in its original submission (3 June 2020) and supplementary submission material should be considered. Until such time as all of those matters have been appropriately addressed (including possible undertaking of the public notification for a second time), determination of the current development application by either the State or Council would be considered premature.

Submitter's additional concerns:

Having reviewed recent applicant correspondence on Council's e-pathway – i.e., 19 October 2020 (SARA Second Advice Notice) and 13 November 2020 (additional response to SARAs information request), the following salient points are noted:

1. Matters of National Environmental Significance (MNES) and Matters of State Environmental Significance (MSES)

A review of the amended Koala Management Plan (KMP) is currently being undertaken and further comments may be provided to Council at a later date. Notwithstanding, the following points are noted in regard to Matters of National Environmental Significance (MNES), which the applicant has not yet addressed.

SARA originally requested (IR dated 18 February 2020 – Item 8) the following information:

(a) Provide confirmation of lodgement of the required EPBC Act referral to the Department of Agriculture, Water and the Environment. The outcomes of this referral should be provided to DES in support of the EA application.

The applicant provided the following information response to SARA (27 April 2020), stating that this was a full response to the information:

…Lodgement of the EPBC request is expected to be lodged by the end of April. Confirmation of the lodgement of this application will be forwarded to SARA and DES as soon as it becomes available…

To date there appears to be **no** referral of the proposal under the EPBC Act and no response by the applicant to the information originally requested. SARAs original information request therefore remains unfulfilled.

The lack of referral under the EPBC Act (and provision of information to SARA) raises concerns of how SARA / DES can appropriately consider impacts on MSES (including any environmental offsets applicable) in absence of a referral to DoEE having occurred or a decision on whether there is a Controlled Action for matters of MNES under the EPBC Act. The lack of referral of the proposal under the EPBC Act also questions the validity and completeness of the submitted KMP.

In addition, as the applicant did **not** provide a full response to SARAs information request – contrary to the statement in their response dated 27 April 2020 - and did not advise the assessing authority that it must proceed with its assessment of the application (in accordance with sections 13.2(b) or (c) of the DA Rules), the applicant was not entitled to commence public notification (until after the end of Part 3 of the DA Rules – i.e. public notification commenced before the end of Part 3 of the DA Rules). This matter has been further compounded by the applicant's recent 'addendum' to the information request regarding dewatering of the voids.

2. Dewatering of the voids

SARA previously requested (IR dated 18 February 2020 – Item 8) the following information:

(a) Provide detailed information about how the voids will be dewatered, including water quality, water quantity, release points and release rates

(b) Take water samples from the voids and water quality data for further assessment

(c) Undertake a detailed risk assessment to assess the potential impacts of the dewatering on the receiving environment (surface water and groundwater) and propose appropriate mitigation measures to prevent or minimise these impacts.

The applicant's response dated 27 April 2020 stated (inter alia) that: *Dewatering of the mining voids is a condition that exists on the existing Environmental Authority attached to the mining lease…;* defaulting to a process to amend the Mining EA, with that process now abandoned by the applicant.

This matter was also raised in the original submission, with the following salient points noted:

i. The applicant's original response to the information requested was incorrect - dewatering process for the tailings dam / Lanes and Ironbark pits was **not** a condition of EPML00594013;

ii. Dewatering the tailings dam / Lanes and Ironbark pits is contrary to the rehabilitation requirements of the Mining EA;

iii. The applicant did **not** respond to the information requested and should **not** have been entitled to proceed with public notification (i.e., public notification commenced before the end of Part 3 of the DA Rules);

iv. There has been insufficient sampling or analysis of the tailings dam sludge – as identified in the most recent assessment by Douglas Partners recommending that: *Additional sampling and analysis would be required to confirm that the material is not contaminated. A suitable sampling density and assessment criteria will need to be established*;

v. There has been **no** sampling of any other site material (overburden) that might be intended for deposition in the southern voids as 'clean fill';

vi. There has been **no** discussion regarding the feasibility of actual physical removal of tailings solids in the tailings dam or any sludge/solids at the base of Lanes Pit.

As previously identified, the history of the tailings dam development is 'unknown' and **not** sufficiently described in the application documentation - a detailed Geotechnical investigation being required to confirm pit and tailings dam conditions – particularly given drawings suggest the tailings dam is formed within an excavated pit, extending to levels as low as RL-20m.

Given the above, it would be reasonable for the removal methodology to be included with the supporting information, with a management plan / approach clearly defined and considered in the feasibility assessment of the proposal.

This matter has been reviewed in further detail in **Attachment 1**.

3. Engineering review

A review of the applicant's response (dated 18 October 2020) to SARA second advice notice; and additional response (dated 13 November 2020) to SARA original information request dated 18 February 2020 has identified additional concerns, as provided for at **Attachment 1** to this submission - primarily related to and under the headings of the following:

- Amended Koala Management Plan (as discussed in Point 1 above);
- Amended Plan of Development;
- Amended Landfill Engineering Plans;
- Amended Landfill Project Engineering Report;
- Amended Receiving Environment Management Plan (REMP);
- Amended Site Based Management Plan (SBMP);
- Groundwater Rebound Report;
- Sediment Testing Report;
- Baseline and Impact Assessment – Wanless Recycling Park & Discharge Management Strategy

Refer to **Attachment 1** for detailed comments. Importantly, the issues raised in Attachment 1 are *in addition to* comments previously made in written submissions on the development application.

4. ERA Determination

The applicant previously amended the ERA form / ERAs and thresholds and previously stated (***Item 20*** of the applicant's IR response to SARA) that:

…The clean fill area to the south of Lanes and Ironbark Pits are is to be filled used soil material on site. In this, soil that is located on site in the current overburden areas as well as areas within the voids that require excavation to create stable walls are proposed to be used as the clean fill in this area…

The applicant response to SARA Advice Notice (10 August 2020) stated:

It is acknowledged that SARA have requested that relevant testing be undertaken of the material that is proposed to be placed in the Voids to confirm the status of this material. Testing of the material has been undertaken on site, and the results are ongoing. It is confirmed that the applicant will come back to SARA on this matter, confirming the results of the testing as soon as is practicable.

The Douglas Partners report recently submitted however provides a limited assessment of the Tailings Dam only (not the overburden areas) and concludes that additional sampling and analysis will be required to confirm that the material (in the tailings dam) is not contaminated. The preliminary findings of the Douglas Partners report have not adequately responded to SARAs concerns.

The application additionally relies on waste disposal in the southern areas of Lanes and Ironbark Pits (within the TLPI Buffer Area) not being regulated by DES – i.e., with only *'clean fill'* intended to be disposed of from on-site excavation and earthworks. Whether soil located on site in the current overburden areas and intended for fill material meets the definition of *'clean fill'* under the EP Act also remains unclear – e.g., no information has been submitted which would indicate that overburden areas and excavations do not include redistributed tailings and/or coal fines or other contaminants.

Given the above, matters regarding whether ERA 60 is or is not intended to extend to the southern (clean fill) areas of Lanes and Ironbark Pits within the TLPI Buffer Area remains unclear in the application to date. It further remains questionable as to:

A. Whether voids intended for 'clean earth' will be able to be restricted to 'clean earth', noting that minimal testing has been provided;

B. Whether additional sampling and analysis, to confirm that the material is not contaminated, is able to be regulated by DES via an environmental authority – i.e., given that 'clean earth' is not an ERA and that no verification of suitable sampling density or assessment criteria has been established; and

C. Whether the applicant can rely on the definition of 'clean earth' under the *Waste Reduction and Recycling Act 2011* for acid sulfate soils – given this relates to *exempt waste* under the levy and not the definition of 'clean earth' that applies for the purpose of ERA 60.

The applicant has not provided any more clarity in regard to this matter such that would enable DES to determine the waste ERA thresholds proposed by the applicant.

In addition, as previously stated in the properly made submission dated 3 June 2020, to the extent it relates to the prescribed ERAs, a submission is taken to be a **properly made submission about the application for the environmental authority**[1]. SARA is requested to ensure that the Department of Environment and Science take into consideration all relevant matters contained in [redacted] original submission (with additional matters raised in correspondence dated 10 July 2020 and 5 November 2020 and this correspondence) as part of its assessment of the prescribed ERAs.

Council and SARA should otherwise ensure that **all matters** raised in the originating submission and supplementary concerns have been properly considered as part of the assessments by the State and Council, including any response by the applicant to submissions and/or Public Hearing.

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours Faithfully

[redacted]

CC
Ipswich City Council
Development Services
Email: plandev@ipswich.qld.gov.au
Att: Assessment Manager - Sandeep Nanjappa

Department of Environment and Science
palm@des.qld.gov.au

[1] Pursuant to s.115 (4) of the Environmental Protection Act 1994

ATTACHMENT 1

Part 1.

Note: *Headings below are in reference to the Appendices as submitted by the applicant in their response (18-10-2020) to* ***RESPONSE TO SARA ADVICE NOTICE - WANLESS RECYCLING PARK - 2001-15045-SRA****. The following discrepancies, shortcomings and comments have been prepared by* [redacted] *Pty Ltd. Note the proponent has not attempted to resolve previous issues/concerns for the development as provided in* [redacted] *objection of the 3rd June 2020 and* [redacted] *comments (dated 10-08-2020) to the response to Advice Notice -2001-15045 SRA (dated 18-02-2020).*

The following comments are only with respect to the information provided in the response to RESPONSE TO SARA ADVICE NOTICE - WANLESS RECYCLING PARK - 2001-15045-SRA.

Appendix A - Amended Koala Management Plan

A review of the amended Koala Management Plan (KMP) is currently being undertaken and further comments may be provided to Council at a later date. Notwithstanding, the following relevant points are noted in regard to Matters of National Environmental Significance (MNES), which the applicant has not yet addressed:

1. As was stated in the original submission (3 June 2020) SARA have previously requested (IR dated 18 February 2020 – Item 8) the following information:

   Action*:*

   (a) Provide confirmation of lodgement of the required EPBC Act referral to the Department of Agriculture, Water and the Environment. The outcomes of this referral should be provided to DES in support of the EA application.

2. The applicant provided the following information response to SARA (27 April 2020), stating that this was a full response to the information:

   It is noted that the EPBC referral is forthcoming, however has not be lodged at this time. Field work has taken longer than expected to complete in addressing the information responses to both Ipswich City Council and SARA. Lodgement of the EPBC request is expected to be lodged by the end of April. Confirmation of the lodgement of this application will be forwarded to SARA and DES as soon as it becomes available. The outcomes of this referral will be submitted to SARA and DES when that becomes available.

3. We note that, at the date of this correspondence, there appears to be **no** referral of the proposal under the EPBC Act and hence no response by the applicant to the information originally requested. SARAs original information request remains unfulfilled.

4. The lack of referral under the EPBC (and provision of information to SARA) raises concerns in terms of how SARA / DES can appropriately consider impacts on MSES and/or any offsets applicable - in absence of a referral to DoEE having occurred or decision on whether there is a Controlled Action for matters of MNES under the EPBC. The lack of referral of the proposal under the EPBC questions the validity and completeness of the KMP.

5. The applicant therefore did **not** provide a full response to SARAs information request – contrary to the statement by the applicant in their response dated 27 April 2020 - and did not, in accordance with sections 13.2(b) or (c) of the DA Rules, advise the assessing authority that it must proceed with its assessment of the application.

6. The applicant therefore was not entitled to commence public notification until after the end of Part 3 of the DA Rules – i.e., public notification commenced before the end of Part 3 of the DA Rules.

Appendix B – Amended Plan of Development

A review of the submitted amended plan **RAL1 (Rev 10**) indicates that there is still confusion regarding the proposed development.

As stated previously, the plan lacks any significant detail, has little to ne details as to how the development staging will occur and remains unclear. The same points were made in relation to **Revision 9**[1] and there has been no attempt to better clarify the plan in the current submission.

Appendix C –Amended Landfill Engineering Plans

A review of the supposed amended plans doesn't show any different date or revision number as to that which was part of the original application. As previously stated, there is no clear evidence that the plans have been revised. Please find below comments made with respect to the original objection which were included, in **Attachment 2/Appendix F** of [redacted] original objection (3 June 2020). During this review, a number of inconsistencies and errors, were found as tabulated below:

1. *(Plan F-002) Errors/inconsistencies include:*
    - final landform contours not consistent with final landform shown in drawings F-034 to F-042;
    - Internal Haul Road clashes with resource recovery centre area - specifically WSUD swale and landscaping buffer zone. Refer to Urbis Landscaping Plan for proposed buffer zone;
    - Internal Haul Road crosses internal access road. Safety concerns with dump trucks / site machinery constantly interacting with light vehicles.

2. *(Plan F-005) Errors/inconsistencies include:*
    - final landform contours not consistent with final landform shown in drawings F-034 to F-042.

3. *(Plan F-008 & F-009) Errors/inconsistencies include:*
    - The plans show incorrect low points for groundwater & leachate collection for each stage.

4. *(Plan F-012) Errors/inconsistencies include:*
    - Stage1 filling encroaches into Stage 2 cell, Stage 3 cell, Stage 5 cell & Stage 6 cell. Therefore Stage 2, Stage 3, Stage 5 & Stage 6 cells must be constructed prior to filling Stage 1.

5. *(Plan F-013) Errors/inconsistencies include:*
    - Stage 2 filling encroaches into Stage 3 cell, Stage 4 cell & Stage 6 cell. Therefore Stage 3, Stage 4 & Stage 6 cells must be constructed prior to filling Stage 2.

6. *(Plans F-014 to F-018) Errors/inconsistencies include:*
    - Similar inconsistency as outlined in points 25 & 26 above.

7. *(Plan F-030) Errors/inconsistencies include:*
    - Northern section of Lanes Pit. Contours stop at RL22.50 (approximate existing water level of this void) Sections shown on Drawing F-043 provide data at least 22m below

[1] Our correspondence dated 5 November 2020

water level. Either the existing levels below RL22.5 are assumed, or data has been omitted from this plan.

8. *(Plans F-032 & F-033) Errors/inconsistencies include:*
   - Stage 5 groundwater collection point is not at the low point of stage 5;
   - Stage 4 & 7 groundwater collection points within the 'in cell sediment pond' shown on F-036;
   - Stage 3 groundwater collection point within the 'in cell sediment pond' shown on F-036;
   - Stage 2 groundwater collection point is not at the low point of stage 2.

9. *(Plan F-035) Errors/inconsistencies include:*
   - Stormwater Runoff will pond in remainder of void until clean fill has reached final profile.

10. *(Plans F-036 & F-040) Errors/inconsistencies include:*
    - Staging hasn't considered the need to construct adjacent cells prior to filling as per points 25 &26, above.

11. *(Plan F-050) Errors/inconsistencies include:*
    - Details are not consistent with the description in Appendix H, e.g., point 18 above;
    - No specifications for the HDPE and cushion geotextile;
    - No leachate & groundwater sump details;
    - It is surprising that the facility would propose only 600mm of compacted clay when the adjacent facility [redacted] has 900mm;
    - Constructability of side wall liner and aggregate drainage layer is considered difficult/dubious especially during extended wet weather, refer to point 19 above.
    - No details re the construction of the subgrade at 1:1 slope.

Appendix D – Amended Landfill Project Engineering Report

A review of the document titled "Landfill Project Engineering Report" (**Revision 3 October 2020**) by Taft Engineering was undertaken by [redacted] Pty Ltd. The points below summarise a number of inaccuracies, inconsistencies and questions that were found during this review. As indicated below, there **remains** considerable doubt as to the engineering, environmental and operational feasibility of the proposal. Several issues have been previously raised; however, the proponent has not responded to these issues. As such, these issues are presented again below with the view of seeking a cogent response by the applicant.

12. (**p1, Section 1**) This report states: *WRP propose to undertake landfilling in these voids to create a rehabilitated landform in alignment with the ICC planning scheme and will include the disposal of Municipal Solid Waste (MSW), Construction and Demolition Waste (C&D), Commercial and Industrial (C&I) waste and Clean Fill to the following voids:*
    - *Tailings Dam (C&D and dry C&I)*
    - *Ironbark Pit (MSW and Clean Fill)*
    - *Lane's Pit (MSW and Clean Fill).*

    How does the proponent propose to ensure only dry C&I is landfilled in the former tailings dams, as the industry does not collect waste this way? C & I waste is predominantly collected via front lift trucks where they have no guarantee of the mix in the waste load.

13. ***(p2, Section 1.1)*** This report states: *Waste acceptance at a rate of 100,000 tonnes to 1,000,000 tonnes per annum under these ERAs are anticipated to comprise the following:*

- *Solid Waste (MSW)*
- *Contaminated soils only from EMR/CLR sites at contaminate levels in accordance with the landfill acceptance criteria*
- *Commercial and Industrial waste (C&I)*
  - *Putrescible commercial and industrial waste (office waste, papers, food, shopping centre waste and the like)*
- *Construction and demolition (C&D) waste (concrete, timber, metals, etc. – residuals from reprocessing will be landfilled)*
- *Any combination waste types in Schedule 9, Part 3, Division of the EP regulation*
- *Limited regulated waste including:*
  - *Animal effluent and residues, including abattoir effluent and poultry and fish processing waste*
  - *Asbestos*
  - *Biosecurity waste that has been rendered non-infectious*
  - *Food processing waste*
  - *Sewage sludge or residue produced in carrying out an activity to which section 63 applies*
  - *Tyres.*

This statement is different to the previous statement from the original report, also of note it is not consistent with the description provided in **(13**) above. In (**13**) they only refer to C&D, Dry C&I, MSW and Clean Fill - there is no mention of the other waste products. Waste acceptance criteria therefore remains not clearly stated in the application.

14. ***(p2/3, Section 1.1)*** This report states: *Waste acceptance at a rate of 100,000 tonnes to 1,000,000 tonnes per annum under these ERAs are anticipated to comprise the following:*

- *Limited regulated waste including:*
  - *Animal effluent and residues, including abattoir effluent and poultry and fish processing waste.*

As previously queried, these wastes are very odourous however it appears that there has been no consideration of their presence in the Air Quality /odour report. Also, the report states (**p3**):

Acceptance and management of these waste types into the facility will be addressed in the Site Based Management Plan (SBMP).

A review of ***Appendix F, Wanless Recycling Park Site Based Management Plan (Rev 2, October 2020)*** however indicates that that these waste streams have not being specifically included.

15. ***(p3, Section 1.2)*** This report states: *The indicative butter distances provided in the Department Environment and Science (DES) Guideline – Landfill Siting, Design, Operation and Rehabilitation (2013) are:*

- *100 metres from surface waters and the '100-year flood plain'*

As previously stated, a review of ***Appendix B: Flood and Stormwater Management Plan, (24 June 2020)*** indicates that this revised proposal still doesn't meet this guideline as the tailing's dams are immediately adjacent to the 1 in 100-year flood-line.

16. ***(p3, Section 1.2)*** *This report states: The proposed facilities distance from the sensitive locations are provided in* ***Figure 004*****.** This is incorrect, as a review of **Figure 004** indicates that it is titled "Site Hydrogeological Conditions".

17. ***(p6, Section 3)*** This report states: *The landfill concept design has been developed based on the outcomes of the risk assessment included in the Receiving Environmental Monitoring Program (REMP).*

With reference to the amended REMP (**9Rev 2, October 2020)** included in the set of documents, we believe the comments/queries posed previously have not being addressed. It appears that the document is clearly focused on landfilling - with no mention of the proposed Resource Recovery Facility (RRF). This is particularly concerning as the proposal is promoted as a recycling facility, yet it appears to be primarily a landfilling operation.

The DES website defines the need for a REMP as:

A Receiving Environment Monitoring Program (REMP) may be required for an activity that releases contaminants to waters. The aim of a REMP is to monitor and assess the potential impacts of contaminants releases to the environment. A REMP will help evaluate whether the conditions on the licence are effectively maintaining or protecting environment values over time.

With reference to **Attachment 2/Appendix H** of [redacted] objection (**3 June 2020**), the revised landfill engineering report is considered fundamentally flawed due to its reliance on the this amended REMP.

18. ***(p6, Section 3.2.1)*** This revised report states: *As part of the development reprofiling void batters will be undertaken, dewatering and removal of all of the tailings and subgrade improvement works to support the containment system.*

Refer to **Attachment 2/Appendix E** of [redacted] objection (3 June 2020).

The proponent proposes to dewater the tailings dam and remove the tailings sludge. Yet there has been no discussion regarding the feasibility/management protocols of removing the tailings sludge. Refer to **Part 2** of this submission **Appendix A & B**.

Discussions with the former mining superintendent suggests that the tailings water was comprised of some 20% to 25% of **super saturated solids**. Further, there is some confusion regarding where this sludge could be deposited. Experience shows that the safe removal of tailings sludge to be very difficult. As such it would be reasonable for the removal methodology to be discussed, with a management approach clearly defined (and considered in the feasibility assessment of the proposal).

Further, the history of the tailings dam development is unknown and not described in the documentation. The drawings suggest the tailings dam is formed within an excavated pit, extending to levels as low as RL-20m. The existing tailings has a high likelihood of requiring an Acid Sulphate management plan. This is confirmed in **Appendix H** "Sediment Testing Report" by Douglas Partners where it states: "*An acid sulfate soils management plan (ASSMP) will be required to detail the management procedures required to reduce the potential environmental impacts associated with the disturbance of PASS at the site."*

The amended engineering report does not address this issue.

The development of the pit used for the tailings dam development has direct relevance to the proposed landfill construction. In particular, excavating a dedicated pit for tailings storage purposes in the times when mining at Ebenezer occurred is uncommon. It would be more likely that the excavation (particularly to the depth indicated) was formed as a pit for coal extraction. In this case, it is also possible that the pit was backfilled to an extent by waste rock. In either case, difficulties with excavation to the pre-tailings dam development profile presents challenges which have not been addressed. A further Geotechnical investigation would be required to confirm these conditions.

It is also assumed that the base of the Tailings Dam used for design purposes is based on pre-deposition conditions (i.e., the base of the pit prior to placement of any tailings). This would need to be confirmed as part of planning and design for the facility.

The amended engineering report does not address this issue.

19. ***(p7, Section 3.2.1.1)*** This revised report states: *The landfill base is proposed to be built on natural subgrade following removal of the coal fines.*

Refer to **Attachment 2/Appendix E** of [redacted] objection (**3 June 2020**).

As discussed in **point 18** above, this can be extremely difficult. Also, the proponent is incorrect in assuming that all of the tailing's sludge would be coal fines, as it is all the solid particles removed in the wash plant, therefore will contain a significant quantities of very finely ground rock particles, which exhibit very soft soil characteristics.

It is implied that all tailings will be removed from the existing tailings dam to expose a natural subgrade for base liner construction. There are no details of the method proposed to remove the tailings and to contain these materials in an alternative location to allow for testing – i.e., as suggested in **section 7 of Appendix H,** "Sediment Testing Report" by Douglas Partners where it suggests *that further sampling & testing of stockpiled material needs to be undertaken to confirm that the material is not contaminated.*

Although not acknowledged or addressed in any form, it can be expected that tailings were pumped into the storage area as a low-density slurry. Coal tailings typically comprise a low solids density (possibly less than 2t/m^3), are fine grained (likely comprising a high plastic fines and clay fraction) and therefore possess poor drained and undrained settling properties which do not consolidate well. Historical Google imagery of the tailings dam area indicates that is has maintained a water pond over time, therefore no opportunity for air-drying of the tailings surface has existed. Even if exposed, industry experience would indicate that an upper desiccated layer would have formed, however the majority of the tailings profile would remain at low density. As such, any proposal to remove the tailings in its current form would likely require repulping and pumped transfer to a new site.

In the event that the tailings transfer is viable and not economically prohibitive, a new tailings dam would need to be establish. Due to the nature of the tailings and characteristics of the site, this storage would likely be a Regulated Structure under the EP Act, requiring stringent engineering and approvals effort. Also, considering the current site conditions, a new dam structure would need to be constructed, requiring considerable earthworks and internal lining (to comply with DES requirements, in a similar vein to a landfill). The method of deposition would also be critical, recognising that a similar geotechnical condition would result, therefore requiring a considerable timeframe for rehabilitation of that area. Only with techniques such as pipe head flocculation would a more competent relocated tailings profile be possible to facilitate a more rapid decommissioning and rehabilitation approach. Beyond these aspects, operating provisions including an emergency spillway and maintenance of design storage allowances and other freeboard capacities would be required.

Considerable planning and engineering works are required to facilitate the transfer and relocation of tailings materials. If not feasible, this proposition could well be economically prohibitive in the context of the overall landfill development.

On balance, this is considered to be a fatal flaw in the overall concept and as such should undergo more detailed investigation by the applicant and scrutiny by the regulating authorities.

20. ***(p7, Section 3.2.2)*** This revised report states: *The final landform for the site has been developed to provide a landform conducive to post closure use for industrial development.*

This statement has been unsubstantiated by the applicant, given experience shows that any structures would need extensive engineering design where placed on former landfills. Normal convention for landfill closure and end-uses is to return the landform to its previous state, in this instance open grass lands, with ongoing settlement expected and monitoring required.

21. *(**p8, Section 3.2.2**)* This revised report states: *Waste settlement analysis over the life of the facility is expected to be approximately 5% of over depth of facility based on primary and long-term secondary settlement analysis of the proposed waste types.*

That report however also states that the:

- *Top of cap maximum height of 50mAHD pre settlement;*
- *Top of cap maximum height of 45mAHD post-settlement*.

These figures do not support the stated 5% waste settlement. This is further evidenced by a review of drawing **F007** *Tailings Proposed Base* which shows the lowest point at approx. -20m AHD.

22. *(**p8 & p10, Sections 3.2.3 & 3.3.3**)* This revised report states: *Landfilling of C&D and dry C&I is proposed for the tailings dam void, which is expected to have a high recovery rate. Based on an assumed residual disposal rate of 15,000 tonnes per annum increasing to 150,000 tonnes per annum with soil cover and compaction density the total life of the void would be approximately 60 years. Also Landfilling of General Waste (MSW and C&I) is proposed for the LIP voids, which is expected to have a lower recovery rate. Based on an assumed residual disposal rate of 40,000 tonnes per annum increasing to 400,000 tonnes per annum with soil cover and compaction density the total life of the void would be approximately 13 years.*

As such the proposed facility only has landfill capacity for General Waste of only 13 years but capacity for C&D waste (inert waste) for some 60 years. How does it intend to operate in the future once this imbalance comes into play? There is no discussion of this scenario within the documents in terms of how the facility will operate post-closure of the LIP voids, when General Waste (MSW and C&I) operations would be expected to cease.

23. *(**p9, Section 3.3.1**)* This revised report states: *As part of the development (LIP) reprofiling void batters will be undertaken, dewatering and subgrade improvement works to support the containment system.*

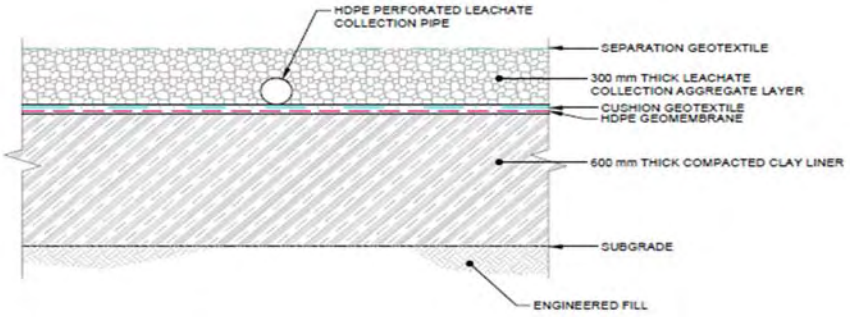
The report in **Appendix H** only refers to sediment testing of the **tailings dam** – i.e., there is **no mention of Lanes and Ironbark Pits** (LIP).

There are no details/management protocols on the dewatering of LIP. As there is a considerable volume of water retained within the pit, that will need to be removed prior to any earthworks or landfill development being possible (controlled by the need to access the base of the void for reprofiling purposes). It cannot be considered to be safe to undertake works in one portion of a pit while another portion holds a depth of water, regardless of the extent of containment or separation. Therefore, it will be necessary to dewater the void to the fullest extent practical from the outset, then maintain ongoing inflows (surface water and groundwater) as the development progresses to ensure that the landfill is not inundated. The quality of water contained within the void is critical to pit dewatering. No baseline water quality data has been provided, although it can be expected that the upper water column would be relatively fresh, however due to the anticipated depth of water in the void, a temperature or salinity-controlled interface would likely exist at some depth (possibly as shallow as 1.5m from the surface). It can be expected, particularly due to the period since mine closure and the enclosed nature of the pit, that water quality conditions below this interface would be very poor, likely being saline, anoxic, and with a high organic content. Typically, such water is very difficult and costly to treat to a standard required for discharge to the receiving environment. The required process may

require aeration, biological (bacterial) treatment in addition nitrification/ denitrification and possibly reverse osmosis. Such a process would be very costly to establish and operate, with the treatment period likely to extend over a lengthy period, therefore compromising the overall development program. Groundwater is addressed in Section 3.4, however in the absence of a hydrogeological assessment, there is no understanding of the potential groundwater inflows to the dewatered pit, and the effort and cost required to keep the pit dry for landfill development purposes. This will be a long-term issue, until the landfill base rises above any potential groundwater level. In support of this concern, the drawings indicate a groundwater level around the LIP of around RL25m, which is some 35m above the proposed base.

24. ***(p13, Section 3.4.3)*** This revised report states: *A groundwater drainage blanket comprising an aggregate layer spread across the whole of the base of the cell with a series of collection pipes within the aggregate with a minimum permeability of 1 x 10^{-3}m/s.*

There are considerable irregularities and contradictions between the written description and associated drawings – i.e., this fact was pointed out in **Attachment 2/Appendix E** of [redacted] objection (**3 June 2020**). Refer below (**Appendix I: Dwg F-050**) As can be seen below, this typical concept landfill base liner profile has no groundwater collection layer.



TYPICAL CONCEPT LANDFILL BASE LINER PROFILE
SCALE 1:25 mm

25. ***(p14, Section 3.5)*** This revised report states: *The lining system will be a single composite liner (DES double liner) comprising a minimum 600 mm thick low permeability clay liner for the base of the landfill, and 1,000 mm for the side walls together with a high-density polyethylene (HDPE) geomembrane. Although the minimum requirement for the clay is 600 mm, construction methods include overthickening and cutting back. The cutting back process will cease at 1,000mm to ensure the minimum 600 mm thickness is maintained.*

Refer to **Attachment 2/Appendix** E of [redacted] objection (3 June 2020).

Batter Reprofiling

Reprofiling of internal batters to slopes of 1(H) to 1(V) within both the tailings dam void (following removal of tailings) and the LIP (following dewatering) are proposed. Batter reprofiling however does not seem to be reflected in the concept drawings (*refer **Appendix F, Dwg. F-020, F-043***). Therefore, there is no understanding as to the extent of excavation and filling required is available, including whether an earthworks balance exists, or where excess materials will be sourced from or stockpiled to.

Batter reprofiling in the tailings dam void is of particular concern due to the criticality of the tailings transfer process, the uncertainty of existing geotechnical conditions, and the possible impact on long term saturation across the exposed substrate following tailings removal (refer **Point 19**).

Sidewall Liner Construction

It is understood that a 1m thick clay fill layer is proposed for sidewalls in both the tailing dam and LIP area, to be lined with a geomembrane. Whilst this liner thickness exceeds DES's current landfill standard, construction to this thickness is not considered safe or viable.

The design report describes construction of the liner to 2m thickness, then cut back to 1m, expecting that this work will be completed in stages. The first concern is that construction of a 2m wide clay fill section to a height over 1m is unsafe, with no opportunity for fall protection of the plant used, and the impracticality of placing fill in thin layers to achieve acceptable compaction. Secondly, the cutting back process to 1m width will require the subsequent 2m wide liner stage to be formed partially over waste material, which is not acceptable practice, particularly with the potential for local failures of the compacted section at a slope of 45 degrees. Both aspects are "Safety in Design" issues that would not comply with current standards to achieve an appropriate level of quality assurance.

Geomembrane lining of steep batters is also a significant concern, with the need to establish anchor trenches at the crest of each lift. No detailing is provided of how this can occur with a proposed final crest width of 1m. Also, under these circumstances, the geomembrane liner design is critical, with the need to limit strains to acceptable levels, which is difficult on steep slopes. Textured and geomembranes greater than 1.5mm thickness would be expected, all of which increase construction costs.

The report suggests that the lining system has been developed based on the outcomes of the hydrogeological risk assessment included in the REMP. On reviewing Appendix H Receiving Environment Management Plan, it isn't evident how these conclusions were drawn. It seems highly inappropriate to recommend a lesser thickness of compacted clay liner than the adjacent [redacted] Facility. Also, the proposal to construct a 1000mm liner on a 1:1 batter is fraught with danger, as it is not possible to have earthmoving equipment work on such a slope. It is proposed that the liner and drainage layer will be constructed just in front of the waste placement, while this sounds feasible in theory it is extremely difficult to achieve and to provide QA in the field especially after extended periods of wet weather. This if based on experience and we would recommend that the permitting authorities have discussions with some landfill operators.

Further the report states in *Table 6 Side Wall Lining System, p14 & p15. Leachate Collection Layer -300mm thick layer of free draining aggregate placed during filling to provide collection leachate against the sidewall.* It is impractical if not impossible to place granular drainage aggregate to a 300mm thickness on a 45-degree slope. Whilst the angle of repose for such material maybe close to 45 degrees, there is no means to practically place this material to a thickness of 300mm. The only practical opportunity to place this material is during the waste placement process, although quality control would be very difficult to maintain, with the likelihood that a much wider zone of aggregate would need to be placed and the loss of considerable aggregate material.

26. ***(p19, Section 4.1.1)*** This report states: *The weather data used in the modelling was derived from the Bureau of Meteorology (BoM) Amberley AMO Weather Station 040004, which is approximately 10 km from the site and has been in operation since 1941.*

    The HELP model referenced in section 4.1 utilises historic data, there has been no allowance made for possibly more intense rainfall events due to the changes from climate change. It seems that it would be prudent to allow for this as it is likely that rainfall intensities will increase in the future. As such there is some doubt as to the robustness of the leachate generation model presented in section 4.1.2.

27. ***(p23, Section 4.3.3)*** This report states: *Leachate is proposed to be stored on site and evaporated in a lined leachate pond and recirculated through the waste mass. On site and off-site treatment are emergency measures and are not currently proposed for the standard landfill operations*.

The reference to the contribution of evaporation to leachate disposal is of note. Experience indicates that over the life of any landfill within the south east Queensland region that evaporation from an open storage is ineffectual. The use of floating covers is of benefit, although the engineering and costs associated with such systems for the size of ponds required is expected to be substantial.

To consider the potential leachate disposal demand with the use of a pond or open storage, a detailed (daily time step) water balance model is required, which also considers the loss of potential evaporation due to the high TDS of leachate. This should be a minimum requirement to consider the viability of the concept. This proposal intends to have open air leachate dams, however, they have not been included in the Air/Odour report.

28. *(**p23, Section 4.3.3.2**)* This report states: *Lined storage and evaporation ponds will be used as part the overall leachate management plan. A retractable or floating cover for the storage pond will be considered to manage surface water ingress during periods of high rainfall whilst utilising the evaporation potential when weather conditions are favourable*.

As discussed in point 26, given the high probability for increased rainfall intensities and point 34 experience in SEQ, this would be considered necessary for any robust management regime - not just proposed if needed.

29. ***(p28, Section 4.3.4.2**)* This report states: *If a trade waste approval can't be secured with QUU then tankering options to alternative utility providers (e.g., Unity Water) or regulated waste treatment providers will be sought. Wanless understands that the emerging contaminate PFAS has impacted some of the utility providers ability to accept landfill leachate. Wanless will engage with the treatment providers to assess options in providing long term solutions such as treatment plant enhancements that enable the providers to accept and treat the leachate.*

The above statement implies that trade waste (including PFAS) has not been considered in any detail. Given that the ability to treat and dispose of leachate is critical to the viability (financial and environmental) of the facility in what is currently an unsewered area, it would be expected that further detailed investigation and planning would be undertaken for this essential element of the proposal.

30. *(**p32, Section 6.3.1**) This report states: The Australian Rainfall and Run-off data (ARR) for the site shows that an intensity of 143mm/24hr for the 1 in 10-year 24-hour event.*

Refer to point 26 re an allowance for more intense storm events due to climate change.

Appendix E – Amended Receiving Environment Management Plan (REMP)

It appears that the entire document (REMP) seems to be devoted to landfilling with no mention of the proposed Resource Recovery Facility (RRF). This is particularly concerning as the proposal is promoted as a recycling facility, yet it appears to be nothing but a landfilling operation. A review of the report was undertaken by [redacted] Pty Ltd with inconsistencies listed below, once again previous concerns have not been addressed, as such they are presented again in the hope of a cogent reply:

31. ***(p11, point 5**) This report states: A pump test conducted in November 1986 showed that maximum groundwater inflows into mining areas would be approximately 138 to 413 m^3/day.*

There is some doubt as to whether a test conducted in 1986 is representative of today.

32. ***(p21, section 3.2.1)*** As discussed previously the proposed cell construction and liner systems are questioned. (Refer to points above)

33. *(**p23, section 3.3.1**) This report states: Leachate levels will be maintained at a maximum level of 300mm above the base of the composite liner system.*

    Most licences require this at the lowest point (the sump) of a cell. This isn't clear in this context.

34. *(**p23& p24, section 3.3.2.1**) This report states: Potential sources of contamination from previous mining activities include the following:*
    - *Weathering of remanent raw and processed coal material;*
    - *Old haul roads;*
    - *Tailings dam;*
    - *Existing surface water bodies.*

    Even though these sources are acknowledged there is no discussion regarding the dewatering of the tailings dam and removal of tailings sludge, or the dewatering of Lanes & Ironbark Pits. Also, it doesn't mention the past open composting of paunch adjacent to Lanes Pit.

35. *(**p28, Figure13 & section 3.3.2.4**) This report states: A pathway is a means by which contaminants can migrate from the source (waste mass) and an may come in contact with the identified receptors.*

    As previously stated, the report totally ignores the dewatering of the tailings dam and the removal of the tailings sludge plus the dewatering of Lanes & Ironbark Pits. Also, once again it is focussed on the operation of a landfill and totally ignores the resource recovery facility (RRF) which is supposed to be the cornerstone of the proposal. The continued dismissal of the environmental outcomes of the RRF raises serious questions as to what the real intent of the facility is – i.e., a landfill proposal with limited focus on resource recovery.

36. *(**p30, section 3.4**) Risk Assessment.*
    As discussed previously the report is inherently flawed as it ignores activities which may contaminate the environment. The DES website defines the need for a REMP as: *A Receiving Environment Monitoring Program (REMP) may be required for an activity that releases contaminants to waters. The aim of a REMP is to monitor and assess the potential impacts of contaminants releases to the environment. A REMP will help evaluate whether the conditions on the licence are effectively maintaining or protecting environment values over time.*

    Considering this description, it is obvious that the construction of the facility including the operation of the RRF need to be also considered in the REMP. Because this has not been undertaken, the **section 3.4 Risk Assessment** of the report is considered flawed and as such any conclusions drawn from this report are also flawed.

37. ***(p37, section 4.2**) Water Quality Data.*
    As discussed in point **36** above, all conclusions drawn from this REMP are considered to be not accurate and/or robust enough for use in designing the facility.

Appendix F – Amended Site Based Management Plan (SBMP)

The amended SBMP appears that it has been recycled from another location without thorough thought given to this facility. Its title is *Wanless Recycling Park Site Based Management Plan*, yet the entire document seems to be devoted to landfilling with no mention of the proposed Resource Recovery Facility (RRF). In fact, the document doesn't refer to resource recovery facility but instead uses the terminology resource recovery area. This is particularly concerning as the proposal is presented as a recycling facility, yet it appears to be primarily a landfilling operation. This is supported in the fact that Resource Recovery Facility is mentioned some 45 times in the *"Waste Industry Management: Expert Report"* by MRA Consulting Group, whilst this report does not use the terminology Resource Recovery Area at all in relation to this proposal. A review of the amended SBMP was undertaken by [redacted] Pty Ltd with inconsistencies listed below, with no attempt having been made by the applicant to answer previous legitimate queries. As such they are presented again below in the hope of a more cogent response by the applicant:

38. ***(p5, Section 1.4)*** *This report states: The proposed facility will achieve a Landfill Compaction Efficiency >1.4t/m³.*

    Once again, the constant inconsistencies between reports is very concerning, given the original Expert Report (**Appendix C** of original submission) cites that*: The proposed landfill would target a high compaction rate (1,000kg/m³)* – which is more than a significant variation.

39. *(**p6, Section 2**) The report details reviewing, reporting and training procedures.*

    Given there are so many inconsistencies within reports and between reports, it seems unlikely that the proposed operations will do any better.

40. *(**p9, Section 3.2**)* This report states: *The site was previously a coal mine operated by Zedemar.*

    This is incorrect as the previous operator was Indemitsu. Zedemar had never operated the site as a coal mine although had sought extensions to the current Mining Lease premised on winnable resourced being held with the current Mining Lease. It needs to be acknowledged that the Mining Lease, when last renewed for a term of 15 years was premised on, inter alia, the following:

    It is not immediately obvious to me why the Minister should not accept the statement of the applicant for renewal. There is little incentive for an applicant for renewal of a mining lease to pursue such a course unless it is satisfied that there is ore worth mining in the area of the lease. Zedemar's information provided to the Minister referred to reserves of more than 12,000,000 tonnes. One of his ministerial briefing notes said that technical assessment by the Department of Employment, Economic Development and Innovation had revealed a high degree of coal resource within the "Bremer View Coal Deposit (MVL172)" and that there were approximately 30,000,000 tonnes of coal remaining on the mining lease area which was described as "a stand alone viable coal mining operation."

    Wright & Bright v The Minister for Employment, Skills & Mining [2012] QSC 112

    The site is under a current Resource authority (ML 4712) with apparent significant resources (based on the above) which were accepted in the Supreme Court, Brisbane to be representative of 'ore worth mining in the area of the lease'.

It remains unclear as to why no economic assessment of the value and viability of extracting the resource has been undertaken or required by the State, given the approval of the current Wanless DA will clearly result in the quarantining of the resources.

41. *(**p14, Table 6**) This table references SOPs that will address the pre control impacts.*

    The referenced SOPs are not provided in the supporting document, as would be expected in any application which was seeking a development approval and environmental authority of this magnitude.

42. *(**p16, Section 4.2**) This report states: The control of environmental impacts will be through the following: Site Operating Procedures (SOPs).*

    As mentioned in point **41** above these procedures which will ameliorate environmental impacts are not provided. It is also important to note that there is no SOP proposed for the landfilling of asbestos.

    Of particular concern is the applicant's apparent dismissal of matters relating to Bird Management (relying on an SOP which clearly has not been developed with reference to any detailed environmental assessment). This remains of significant concern, given the proximity to Amberley RAAF and how the facility will impact on the existing management practices at [redacted] which were well established in environmental assessment before approval of [redacted] was gained via the PO&E Court. DoD's response to the application has not considered the potential conflicts that may arise from the new facility in terms of the development creating an ecological 'sink', attracting significant species and increasing the numbers of these birds within the facilities and the buffer zone to the Base. Refer to Griffith University - Environmental Futures Research Institute assessment of these matters.

43. *(**p18, Section 5.2**) This report states: Site operating hours will be 6am – 6pm Monday to Sunday. The site will not be operated, and waste will not be received on Sundays or Public Holidays unless approved by Ipswich City Council.*

    There is obvious conflict in this statement as on one hand they say the site will operate from 6am to 6pm, Monday to Sunday and then it says that the site won't operate on Sundays. It is interesting to note that in a previous response to SARA the proponent claimed that the site was proposed to operate for 24 hours a day, as such the facility would be run in three shifts.

    Elsewhere in other reports, the applicant states that it won't operate on race days of QLD motorsports. This matter has not been sufficiently considered in recognition of the Strategic importance of the Ipswich Motorsports Precinct – recognised under the SEW Regional Plan as a regionally, state and nationally significant motorsport and outdoor recreational facility that hosts a range of national and international events.

44. *(**p19, Section 5.6.1**)* This report states: *All reasonable and practicable measures must be undertaken to stop any unapproved waste from entering the site. Site staff will, where possible, immediately remove the unapproved waste from the waste stream and arrange for the waste to be transported to a facility that can lawfully accept the waste.*

    It is concerning that there is no mention of the sorting of all waste prior to landfilling, as has been consistently suggested in the *"Waste Industry Management: Expert Report"* by MRA Consulting Group. The lack of SOPs additionally remains of significant concern, in terms of how the operator intends to ensure compliance with waste acceptance criteria under an environmental authority.

45. *(**p21, Section 6.1**)* This report indicates: *That the Tailings dam landfilling will continue till 2078 while the landfilling of Lanes & Ironbark Pits will continue until 2035.*

As mentioned previously, there has been no discussion of how the facility will continue to operate past 2035 when there is no landfill capacity for General Waste.

46. ***(p21, Section 6.1.1)*** This report indicates: *Shaping/Groundwater Relief Layer Granular fill placed over the floor of the cell to provide a dry stable subgrade surface. Then a Compacted Clay Liner 600mm thick low permeability layer compacted to provide a maximum coefficient of permeability of 1x10^{-9}m/s.*

    There is no provision for a separating geotextile to ensure that the fine-grained clay layer doesn't migrate into the gravel collection layer. Also as discussed earlier (point **24)** the typical detail for the Base Liner Profile doesn't show this groundwater relief layer.

47. ***(p22, Table 10)*** *Side Wall Lining System*: As previously discussed it is considered that the construction of the side wall lining system isn't possible and requires further consideration and detailed engineering assessments**.**

48. ***(p22 & p23, Sections 6.2 & 6.3)*** *Site Preparation & Site Services and Infrastructure:* There is no discussion of site preparation for the RRF facility and likewise sheds of some 26,880 sqm of floor area, which will require fire hydrants and other fire protection systems to satisfy the BCA.

Appendix G – Groundwater Rebound Report

A review of the report *"Water level changes and groundwater rebound in the Ebenezer Coal Mine opencast pit voids: Wanless Recycle Project, Queensland"* prepared by Amanzi Consulting (September 2020) was undertaken by [redacted] Pty Ltd, with an overview provided by ATC Williams.

49. ***(executive summary, p1)*** This report states: *Major dewatering was not required during mining and should not be required during landfill development and waste disposal.*

    This statement is incorrect. Discussions with the mining superintendent of the former Ebenezer mine have established that there were times that major dewatering was necessary during the active life of the coal mine.

50. ***(executive summary, p1)*** This report states: *The first will develop around the Lane's and Ironbark pits as landfilling commences in 2024. The second cone will develop later and around the Tailings Pit when tailings are removed prior to waste deposition in 2035.*

    This statement is contrary to all previous statements regarding the landfilling timing for the facility. It preposes that LIP will start landfilling in 2024 and the Tailings Pit in 2035. The Amended Landfill Project Engineering Report included as **Appendix D** makes the following statements.

    Landfilling of C&D and dry C&I is proposed for the tailings dam void. Based on an assumed residual disposal rate of 15,000 tonnes per annum increasing to 150,000 tonnes per annum with soil cover and compaction density the total life of the void would be approximately 60 years. General Waste (MSW and C&I) is proposed for the LIP voids. Based on an assumed residual disposal rate of 40,000 tonnes per annum increasing to 400,000 tonnes per annum with soil cover and compaction density the total life of the void would be approximately 13 years.

    These statements had previously raised doubt as to the real nature of the facility especially when considering that the facility has been represented in the Waste Experts Report as: *The Project has been designed to focus on the resource recovery of general wastes which would otherwise largely be disposed of to landfill in Queensland. Wanless propose to target predominately non-putrescible and inert general waste which does not have an established market. This is to distinguish the waste from source separated recyclables such as in domestic kerbside recycling, which is directed to Material Recovery Facilities (MRFs).*

    This current report now suggests that the disposal of C&D and dry C&I would not commence until 2035 – i.e., 11 years after commencement of General Waste (MSW and C&I) disposal for the LIP

voids. If this is the case, how then would this project be considered a Resource Recovery Facility and simply not a landfill.

51. ***(executive summary, p1)*** This report states (in relation to LIP): *Rapid dewatering may lower pit lake levels faster than the groundwater table levels in the unmined materials and in the spoil. This may enhance highwall and spoil instability. The mixed nature of the spoil material creates perched water tables which may induce slip failures in the spoil face.*

    The amended landfill engineering report doesn't consider any of these engineering issues as previously highlighted in this response. As previously suggested the consultant reports have not dealt with the most important issues, both engineering and environmental.

52. ***(p1, section 1.3)*** The report states: *The groundwater assessment involved desk top study reviewing, assessing, evaluating, and compiling available data from various sources, reports and publications listed in Section 12. Interpretation of the data and information was done by applying standard hydrogeological principles and specialist knowledge of open cast coal mine pit hydrogeology. A site visit was not included in the scope of work.*

    It is inconceivable that the landfill designs would be completed based on conceptual hydrogeological works. How can any designer have a reasonable level of confidence with respect to such an important element of the design, when it is based on a desktop review? Is there any reason why field works could not be done to support any assumptions?

53. ***(p18, section 8.1)*** The report states: *Dewatering the LIP final voids will;*

    - *Lower the groundwater levels, disrupting the west to east movement of groundwater through the unmined adjacent strata and through the backfilled overburden spoils.*
    - *Result in changes in the groundwater flow directions within the adjacent unmined ground, to be towards the pit floor in both pits. The flow direction within the spoil will be towards the final void floor.*
    - *Expose the pit highwall and side walls which may have weathered and soften after being inundated by pit lake water.*
    - *Result in water seepage in the highwall and spoil faces as they are exposed, especially if dewatering is rapid and the lowering of groundwater levels lags behind pit lake water levels. This may occur until groundwater levels in final void wall faces lower to that of the pit floor.*
    - *Cause instability on the weathered and softened highwall faces while groundwater seepage occurs and during rain events when surface runoff on faces may occur.*
    - *Expose the low wall spoil faces, which have been saturated and softened.*
    - *Destabilise spoil slopes and faces because;*
        - *Spoil will continue to hold water during dewatering.*
        - *Perched water tables created by the heterogenous nature of the spoil may be exposed with rapid drawdown of the pit lake water. These could result in seepage destabilising the face*
        - *The spoil faces would be more prone to potential slip failures as there is no longer the weight of pit lake water to hold material in place.*
    - *Result in a muck layer of mud and sludge in the base of the final void due to the dispersive nature of the materials in the spoil and weathered materials in the high and side walls.*

    A review of the amended landfill engineering report shows that none of these issues have been considered. It appears that each of the consultant reports are completed in isolation of each other, which should be of significant concern for both Council and SARA / DES when making its decision on the application – given the inherent associated risks above.

54. ***(p19, section 8.3)*** The report states: *Removal of the tailings water cover as well as the tailings is needed to create the landfill in the TP. The tailings are likely to be saturated and unstable after*

the water cover is removed. Coal tailings pumped to coal mine open pits and which are left exposed and allowed to dry take up to ten (10) years to dewater and stabilise to a sufficient bearing strength to allow safe tramming of equipment over their surface.

A review of the amended landfill engineering report shows that none of these issues have been considered. Refer to previous sections of this and previous responses highlighting some of these issues. The proposal is unfeasible until a review of all the consultant's reports has been undertaken and each report amended depending on their interactions with other reports.

This application therefore has a number of reports in discord with each other.

Appendix H – Sediment Testing Report

As discussed previously, in **section 7** of the report by Douglas Partners it recommends *that further sampling & testing of stockpiled material needs to be undertaken to confirm that the material is not contaminated.*

It would be apparent that testing of samples was undertaken in regard to the tailings dam only, with the expectation that no other fill material is proposed in regard to the voids intended as clean earth.

It however remains questionable as to:

A. Whether voids intended for 'clean earth' will be able to be restricted to 'clean earth', noting that minimal testing has been provided;

B. Whether additional sampling and analysis to confirm that the material is not contaminated is able to be regulated by DES – i.e., given that 'clean earth' is not an ERA and that no verification of suitable sampling density or assessment criteria has been established; and

C. Whether the applicant is able to rely on the definition of 'clean earth' under the *Waste Reduction and Recycling Act 2011* – given this relates to exempt waste under the levy and not the definition of 'clean earth' that applies for the purpose of ERA 60.

Notwithstanding the above, nowhere else in the documents produced to date is there any discussion with respect to the feasibility and management protocols for excavating and stockpiling this **super saturated material**. As has been suggested a number of times, this proposal still has significant unanswered questions. Discussions with experts indicate that there are numerous environmental and engineering issues to be considered in the draining and removal of sludge from tailings dams.

Consultants involved in the project have clearly not coordinated a consistent response to information requests and as such reports have a numerous inconsistencies.

Part 2.

Note: *Headings below are in reference to the Appendices as submitted by the applicant in their response (13-11-2020) to* ***2001-15045 SARA - Additional Response to SARA Information Request – On Site Dewatering.*** *The following discrepancies, shortcomings and comments have been prepared by* [redacted] *Pty Ltd. Note the proponent has not attempted to resolve previous issues/concerns for the development as provided in* [redacted] *objection of the 3rd June 2020 and* [redacted] *comments (dated 10-08-2020) to the response to Advice Notice -2001-15045 SRA (dated 18-02-2020).*

The following comments are only with respect to the information provided in the response to 2001-15045 SARA - Additional Response to SARA Information Request – On Site Dewatering.

Appendix A & B – Baseline and Impact Assessment – Wanless Recycling Park & Discharge Management Strategy

A review of the documents titled "Baseline and Impact Assessment – Wanless Recycling Park" and "Wanless Recycling Park – Discharge Management Strategy" (prepared by Hydrobiology and dated November 2020), was undertaken by ATC Williams & [redacted] Pty Ltd. The points below summarise a number of questions and discrepancies that were found during this review. As can be seen there is a major flaw with the study as the scope of the study was a baseline assessment to:

- Review and assess historical environmental data from Ebenezer Creek;
- Acquire new baseline data to determine the current environmental condition, including geomorphological, chemical and ecological data;
- Characterise Lanes pit, Iron bark pit and the tailings dam in terms of their physical and chemical attributes; and
- Assess the potential environmental impacts of the discharge of water from Lanes pit, Ironbark pit and the tailings dam, to Ebenezer Creek.
- A strategy to manage discharges to minimize and, where required, mitigate or offset against any potential impacts of releasing these waters in the intermittent Ebenezer Creek.

These studies **are irrelevant** in terms of the engineering development of either the tailings dam void or Lanes Pit. In both cases, these studies address water quality issues, which is related to the "supernatant", with **no information submitted** relating to the actual physical removal of tailings solids in the tailings dam or any sludge/solids at the base of Lanes Pit.

There is no discussion of the issue of whether dewatering of either area or the removal of the super-saturated solids is actually feasible.

As stated on many occasions previously (refer to item **26** of [redacted] objection of the 10-08-2020) the removal and stabilisation of a former tailings dam is very difficult.

The study undertaken by Douglas Partners Sediment Testing reporting (refer to **Appendix H** of following section) confirms this difficulty as it has found: "*The results indicated that potential acid sulfate soils (PASS) may be present."*

"*However as detailed below in Section 6.2, the material would require neutralisation, through liming, due to the presence of acid sulfate soils*."

In **section 7** of this report, it suggests that further sampling & testing of stockpiled material needs to be undertaken to confirm that the material is not contaminated. **Yet there is no discussion with respect to the feasibility and management protocols for excavating and stockpiling this super saturated material.**

[redacted]

22 March 2021

Qld Treasury / SARA
(Ref: 2001-15045 SRA)
DAAT@dsdmip.qld.gov.au
Att: Andrew Finch, Principal Planner

Dear Andrew

Re: Submission (Objection) - Supplementary concerns
Development Application No.: 10674/2019/CA

We refer to [redacted] previous submission (objection) made to the assessment manager dated 3 June 2020 and supplementary matters detailed in our letters dated 10 July 2020, 5 November 2020 and 24 December 2020.

We have reviewed recent correspondence on Council's e-pathway, being the applicant's response (dated 1 March 2021) to SARA **Third Advice Notice** (dated 21 January 2021) and provide the following comments and concerns in respect to those responses.

On behalf of our client, we maintain that the recently submitted documentation does not support approval of the application in its current form and there remains insufficient engineering, environmental, or town planning reason which would otherwise justify approval of the application.

As stated in our previous written submission dated 24 December 2020, there has been a plethora of discrepancies in the application - as identified in [redacted] original submission and subsequent correspondence to SARA and Council - in regard to key engineering, environmental and planning issues, which continue to raise serious concerns and to date have not been adequately addressed – including in the most recent response (1 March 2021) by the applicant or their consultants.

The multiple information requests and numerous extensions have given the public an expectation of viewing additional supporting material, however instead has led to confusion by the applicant (and SARA), including overlooking key matters (such as the EPBC referral - which was proposed to occur in April 2020) or have been misleading (in regard to dewatering the voids; and with regard to the applicant's continued confusion concerning the definition of *clean earth* under the EP Act 1994 for fill in void areas identified as a 'buffer' area under the TLPI No. 2 of 2020).

The current applicant response to the SARA Third Advice Notice has only attempted to respond with a narrow focus regarding the latest requests for information from SARA. The amended documents haven't attempted to track changes in the development application and have been completed in a manner not acknowledging the conflicts with previous documents lodged on behalf of the applicant's consultants. For example, whilst SARA has requested changes to the Plan of Development, the applicant has now amended the plan of development in a manner so that all of the proposed development is <u>not</u> shown - with no reference to any revisions to said plan. As such, a detailed or coherent understanding of the proposal or how the development will be staged is not possible.

The latest response to the SARA Third Advice Notice thereof only creates further confusion for the community and lacks any actual response to matters which have been raised in the submissions and / or subsequent correspondence submitted on behalf of [redacted]

[redacted] has queried certain aspects and highlighted innumerable (i.e. hundreds) of mistakes and errors in the proposal. To date, the applicant has made no meaningful attempt at responding to these queries, with the application (as it stands) having numerous conflicting and contradictory statements. [redacted] considers that the level of confusion caused by the multiple submissions to information requests that the only way that it can be resolved is by the authorities refusing this application, with the applicant re-submitting the proposal in a clear and coherent manner that enables all stakeholders the opportunity of understanding the development proposal.

As was noted in previous correspondence (24 December 2020), Ipswich City Council has further requested (on two occasions) that the applicant provide:

- '*a detailed response to **all matters** that have been raised by submitters including the supplementary submission material'*.

To date, the applicant has yet to provide an adequate response to Council on those matters.

[redacted] therefore reiterate that **all matters** outlined in its original submission (3 June 2020) and supplementary submission material should be considered in the context of the current application. [redacted] also consider that until such time as all of those matters have been appropriately addressed (including possible undertaking of the public notification for a second time), determination of the current development application by either the State or Council would be considered premature.

As was noted in the original submission and previous correspondence, to the extent it relates to the prescribed ERAs, submissions are taken to be a **properly made submission about the application for the environmental authority**[1]. SARA is again requested to ensure that the Department of Environment and Science take into consideration all relevant matters contained in [redacted] original submission (with additional matters raised in correspondence dated 10 July 2020, 5 November 2020, 24 December 2020 and this letter) as part of its assessment of the prescribed ERAs.

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours Faithfully

[redacted]

[1] Pursuant to s.115 (4) of the Environmental Protection Act 1994

CC
Ipswich City Council
Development Services
Email: plandev@ipswich.qld.gov.au
Att: Assessment Manager - Sandeep Nanjappa

Department of Environment and Science
palm@des.qld.gov.au

[redacted]

29 July 2021

Ipswich City Council
Development Services
Email: plandev@ipswich.qld.gov.au
Att: Assessment Manager - Sandeep Nanjappa

Dear Sandeep

Re: Submission (Objection) - Supplementary concerns
Development Application No.: 10674/2019/CA

We refer to [redacted] previous submission (objection) made to the assessment manager dated 3 June 2020 – including those supplementary matters detailed in letters dated 10 July 2020, 5 November 2020, 24 December 2020 and 22 March 2021.

We have reviewed recent correspondence on Council's e-pathway, being SARA's concurrence agency response dated 2 June 2021 – which included the applicant's further response to SARA dated 6 May 2021 - and provide the following comments and concerns in respect to the current development application.

As stated in our previous written submission dated 22 March 2021, there has been a plethora of discrepancies in the application - as identified in [redacted] original submission and subsequent correspondence to SARA and Council - in regard to key engineering, environmental and planning issues, which continue to raise serious concerns and to date have not been adequately addressed by the applicant and their consultants. These have been briefly summarised in the list of attached issues (**Attachment 1**).

Further to the above, information requests and numerous Advice Notices (from SARA) and subsequent applicant responses and changes made to the original development application have also resulted in a ***substantially different application*** to the one originally submitted, such that Council should **refuse** the development application.

The original development proposal by the applicant was for the disposal of Municipal Solid Waste (MSW), Construction and Demolition Waste (C&D), Commercial and Industrial (C&I) waste and Clean Fill to the following voids:

- **Tailings Dam (C&D and dry C&I):**

  Capacity: 8.52m million cubic meters;
  Disposal Rate: 150,000 tonnes per annum
  Estimated Lifespan: 56 years

  Source: Waste Industry Expert Report (MRA Consulting - 24 April 2020)

- **Ironbark Pit (MSW and Clean Fill)** and **Lane's Pit (MSW and Clean Fill)**:

  Capacity: 5.59m million cubic meters;
  Disposal Rate: 400,000 tonnes per annum
  Estimated Lifespan: 12 years

  Source: Waste Industry Expert Report (MRA Consulting - 24 April 2020)

More importantly however, the focal point of the original development application was based **primarily** on the development being for a ***Resource Recovery Facility*** (with waste disposal being a **secondary** component) consisting of:

- Four Transfer and Resource Recovery Facilities (primary operations) – two for Construction & Demolition (C&D) / Commercial & Industrial (C & I) waste (dry waste) associated with Tailing Dam and two for municipal waste (wet / putrescible waste) associated with Ironbark Pit and Lanes Pit; and
- Four Transfer and Resource Recovery Facilities (secondary operations) with the purpose to take sorted goods from primary operation to either store, recycle, or recover further material. Two facilities will be associated with dry waste and two will be associated with general / municipal waste.

In the majority of information provided by the application in response to SARA, there has however been little or no emphasis on the ***Resource Recovery Facility*** as being the primary focal point of the proposal, rather the applicant appears to have focused its responses almost entirely on waste disposal – the concept of which is contrary to Queensland's *Waste Management and Resource Recovery Strategy*; the waste hierarchy enshrined in the *Waste Reduction and Recycling Act 2011* and Ipswich City Council's *Waste and Circular Economy Transformation Directive*.

The recent SARA concurrence agency response further takes no account of the sequencing or staging of the development, with the SARA approval further now resulting in a **substantial change to the application** - by way of ***excluding*** the Tailings Dam for acceptance of residual C&D and dry C&I waste. The Tailings Dam represented a significant part of the originating development application – constituting around 60.4% of the total landfill void space in the original application and proposed to operate over an estimated lifespan of 56 years, at a Recycling rate target of around 49% to 50%.

The change to the application (removal of the tailings dam) is considered to result in ***substantially different development***, given it changes the ability of the proposed development to operate as originally intended. The change to the application further questions the viability of development shown on the SARA approved plans for the *Resource Recovery Facility* – given the removal of the Tailings Dam void for waste disposal.

This matter is further evident in the latest Hydrobiology Report dated the 6 May 2021, which states:

Ironbark Pit will then be developed as the first waste cell, which will be in operation for approximately 5 to 7 years. During that time of operation, Stage 2 will involve pumping water from Lanes Pit to the Tailings Dam to then be discharged to Ebenezer Creek. [1]

The above matters (including the SARA Concurrence agency response and DES Environmental authority EA0002905) raise a number of significant further issues including the following:

[1] Hydrobiology Response to DES Experts Email received 12th March 2021

1. Removal of the Tailings Dam from the proposal (by the applicant and/or as conditioned by SARA and DES) results in a **totally different application** to the one originally received by Council and one which should have been dealt with as **change application** (**not minor**)[2];

2. Pursuant to Cl 16.4 of the DA Rules, **a** (**not minor**) **changed application would have required public notification to be undertaken again** - providing the **opportunity for the public** to fully understand the changed development proposal and review those changes that have been made to the original development application;

3. Removal from the Tailings Dam further questions **whether the applicant intends to receive any C&D and dry C&I waste for sorting and recovery** – given SARA's Concurrence agency response and the environmental authority stops the acceptance of waste disposal by removing the Tailings Dam from the application;

4. There has also been no explanation in these changes to the application in regard to **where the residual C&D and dry C&I waste stream will be disposed of**, given the removal of the Tailings Dam from the application;

5. The original development application also presented the proposal as a ***Resource Recovery Facility*** - with disposal of residual waste to landfill occurring only **after resource recovery / recycling processes**. This was detailed in the *Waste Industry Expert Report* (MRA Consulting - 24 April 2020) which stated:

   The Lanes Pit and Ironbark Pit are both large coal mining voids, excavated between 1986 to 2002. ***Accepted material for disposal in these voids is the residual output of the putrescible and non-putrescible recycling sheds at the Resource Recovery Facility.*** *The southernmost ends of both pits would be filled with clean fill only, in accordance with the TLPI.*

   No additional external waste would be brought onsite for direct disposal to these voids *(with exception to clean earthen materials to rehabilitate sections of the voids that fall under the TLPI Waste Activity Buffer Area).*

   And

   Materials to be disposed of in the Tailings Dam void would be the residual output of the non-putrescible and inert recycling sheds at the Resource Recovery Facility.

6. The changes to the application however now represent (as modified by Conditions of SARA and DES) waste disposal in Ironbark Pit and Lanes Pit only, with **no apparent evidence provided by the applicant of their intentions for *Resource Recovery Facility*** (i.e. landfill diversion or development of the originally proposed recycling sheds for the ***Resource Recovery Facility***);

7. There are also **inconsistencies in the environmental authority EA0002905**, which provide further confusion:

   i. Condition G1 of EA0002905 states that '*Only the Lanes Pit and Ironbark Pit may be utilised for waste disposal*'

      Appendix A – Site Plans - Figure 1: F-100 Plan of Development included in the environmental authority however includes:

[2] s.52 of the Planning Act 2016

- Tailings Dam (Non-Putrescible Fill Area) – albeit that the Tailings Dam has been excluded from landfill;
- Ironbark Pit (Putrescible Fill Area) – see item ii. below; and
- Lane's Pit (Putrescible Fill Area) – see item ii. below.

ii. Condition W1 of EA0002905 permits disposal of waste to landfill including:

a) Construction and demolition waste;

b) Commercial and industrial waste;

c) Municipal solid waste;

d) Contaminated soil; and

e) Asbestos.

The above waste acceptance criteria are however considered inconsistent with the original development application, especially given the removal of the Tailings Dam which accommodated C&D and dry C&I waste.

iii. Condition A13 of EA0002905 also allows for delivery of **waste directly to the landfill unit for disposal** – which is contrary to the submitted *Waste Industry Expert Report* (MRA Consulting - 24 April 2020) which stated that all waste would be delivered and processed via the ***recycling sheds at the Resource Recovery Facility***;

iv. DES have also **included land relating to Tailings Dam** (Lot 1 and Lot 2 SP16788 - which is **not** permitted to be used for waste disposal), as **holding ERA 60 for waste disposal** under the current EA0002905 (Page 1 *Environmentally relevant activity and location details*), which is contradictory to Condition G1 of EA0002905;

8. The sum of the above concerns question the applicant's intended strategy to reconcile the concept of the *Recycling Park*, given the proposal (as amended by SARA and DES) now appears to represent a **landfill for waste disposal site for Ironbark Pit and Lane's Pit only, with confusion over the waste acceptance criteria to these voids and with no apparent incentive to build the *Resource Recovery Facility* for recovery and recycling of waste**;

9. Given the above matters, it remains unclear as to how the changes to the proposed development occasioned by SARA's Concurrence agency response (and conditions of the environmental authority) can be reconciled without **review and amendment of all the supporting reports** to the original application, given critical supporting specialist assessment and reports would now be considered flawed in consideration of changes made to the application. This would include the submitted *Waste Industry Expert Report* (MRA Consulting - 24 April 2020) and *Economic Needs Assessment* (LocatinIQ - April 2020) which have not anticipated the changes relating to removal of C&D and dry C&I waste from the Tailings Dam.

Notwithstanding SARA's recent correspondence to Council (undated – Ref: OUT21/3647), [redacted] support Council's recent correspondence to SARA (dated 6 July 2021) in regard to the fact that ***dewatering and filling of the Tailing Dam with 'non putrescible waste' formed an integral component of the subject landfill proposal*** **and that** ***removal of this aspect of the proposal***

cannot simply be conditioned out or marked up on the approved plans. In addition, [redacted] further consider this matter:

- **Fundamentally changes the application**;
- Results in the development proposal being now **substantially different development**;
- Should have required a (**not minor**) **change application**;
- Should have required the applicant to **fully detail the nature of the current (changed) proposal, including revisions of all relevant specialist assessments**;
- Should have required **public notification (again) of the changed application**.

In the current form of the development application, [redacted] considers that the level of confusion caused by the multiple submissions to information requests (including SARA's recent concurrence agency response and DES issue of an environmental authority) can only be resolved by the **assessment manager refusing the current application**, with the applicant otherwise **re-submitting the proposal in a clear and coherent manner that enables all stakeholders the opportunity of understanding the actual development proposal and staging of the proposed uses, inclusive of public notification**.

As was noted in previous correspondence, Council has also requested (on multiple occasions) that the applicant provide *a detailed response to **all matters** that have been raised by submitters including the supplementary submission material*. The applicant has yet to provide an adequate response to Council on those matters. To reiterate this issue, attached is a summary of key points / issues raised by [redacted] (**Attachment 1**) – to which no response (or an inadequate response) has been provided by the applicant and its consultants to date.

[redacted] therefore reiterate that **all matters** outlined in its original submission (3 June 2020) and supplementary submission material (including this correspondence) should be considered in the context of the current application, including those changes discussed above resulting from the SARA concurrence agency response and issue of the environmental authority by DES. [redacted] also consider that until such time as all of those matters have been appropriately addressed (**including undertaking of the public notification for a second time**), determination of the current development application by Council would be considered premature.

On behalf of our client, we maintain documentation submitted in support of the application does not support approval of the application in its current form and there remains insufficient engineering, environmental, or town planning reason which would otherwise justify approval of the application.

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours Faithfully

[redacted]

CC

Qld Treasury / SARA
(Ref: 2001-15045 SRA)
DAAT@dsdmip.qld.gov.au
Att: Andrew Finch, Principal Planner

Attachment 1: List of matters raised by [redacted] which (to date) no response or an inadequate response has been provided by the applicant or its consultants

Date Submission	Issue No	Issue/Concern/Comment	Response (Urbis)	Response TTB
3/06/2020 TTB Submission - ICC	1	*Inconsistencies with and misrepresentation of the proposed land uses and staging of the development:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	2	*Need for the development has not been demonstrated:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	3	*The value and viability of extraction of existing mineral resources within ML4712 has not been addressed:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	4	*Value and loss of environmental opportunities from site rehabilitation requirements under environmental authority EPML00594013 has not been assessed:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	5	*Lack of comprehensive management measures which deal with wildlife attractants within the buffer area to Amberley Air Base have not been assessed, including cumulative effects from the existing waste management activities operating at [redacted]*	No Response	Not Required
3/06/2020 TTB Submission - ICC	A1	***Attachment 1*** ***Griffith University Review***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A1	*Refer to [redacted] Submission (6 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	6	*Significant errors and inconsistencies in the design and proposed operation of the Wanless Recycling Park, including contradictions in specialist assessments, lack of sufficient detail and inadequate engineering design, including environmental assessment.*	No Response	Not Required
3/06/2020 TTB Submission - ICC TTB Submission	A2	***Attachment 2 –*** ***Review – [redacted] Pty Ltd and ATC Williams***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A2	*Items 1 to 86 (Refer to [redacted] Submission) (26 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	7	*Access proposed via Champions Way is not supported and contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	A3	***Attachment 3*** ***Traffic Review – Bitzios Consulting***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A3	*Refer to [redacted] Submission (8 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	8	*Potential for significant residual impact on MSES, MNES and inadequate ecological assessment provided:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	A4	***Attachment 4*** ***Ecological Review – 3D Environmental***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A4	*Refer to [redacted] Submission (5 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	9	*Clearing of vegetation in Champions Way does not reasonably meet the test for a 'Relevant Purpose' determination under section 22A of the Vegetation Management Act 1999.*	No Response	Not Required
3/06/2020 TTB Submission - ICC	10	*Land uses under the TLPI and prescribed ERAs applied for are unclear, in particular as they would relate to filling the southern void areas under the TLPI no. 2 / 2018 (Waste Activity Regulation) with clean fill:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	11	*Noise impacts not adequately addressed:*	No Response	Not Required

Attachment 1: List of matters raised by [redacted] which (to date) no response or an inadequate response has been provided by the applicant or its consultants

3/06/2020 TTB Submission - ICC	A5	***Attachment 5*** ***Noise Review – Air Noise Environment Pty Ltd***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A5	*Refer to [redacted] Submission (7 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	12	*Air quality impacts not adequately addressed:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	A6	***Attachment 6*** ***Air Quality Review - Air Noise Environment Pty Ltd***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A6	*Refer to [redacted] Submission (7 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	13	*Potential negative outcomes associated with solid waste disposal for the City of Ipswich, including potential environmental and amenity impacts and negative image connotations of Ipswich as a 'Dumping Ground' for SEQ and other regions*	No Response	Not Required
3/06/2020 TTB Submission - ICC	14	*Reconfiguration inconsistent with Covenant No 719512481*	No Response	Not Required
3/06/2020 TTB Submission - ICC	15	*Inconsistency with existing development approvals and other land uses within the development footprint:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	16	*Inconsistency with the Regional Business and Industry Zone - Sub Area RBIA1 – Ebenezer Willowbank and Precinct 3, expanded Ipswich Motorsport Precinct and SEQ Regional Plan:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	17	*Inconsistencies with the strategic outcomes of the planning scheme:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	18	*Non-compliance with planning scheme codes*	No Response	Not Required
3/06/2020 TTB Submission - ICC	19	*Inconsistencies with the planning scheme Implementation Guideline No 32:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	20	*Avoidance of assessing the environmental impacts from Dewatering of the Tailings Dam and Pits - by way of a proposed amendment of the mining EA that is inconsistent* *with the rehabilitation requirements of that EA:*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	1	*There is an assumption in this instance that the Applicant is reliant on amending conditions of an unrelated approval to allow for dewatering of the mining voids and avoiding rehabilitation obligations that exist under the current Mining EA;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	2	*Whilst Council and the public have not been informed as to the nature of the amendments proposed to the Mining EA, it nonetheless is of significant concern as to how the Mining EA could possibly require an amendment at this stage - given no decision has been made on the Wanless development application and that any d main subject to the appeal rights conferred under the Planning Act 2016;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	3	*At present, conditions of the current Mining EA require the holder (Zedemar Holdings Pty Ltd) to rehabilitate Tailings Ponds; Dams and ponds; and Active Pit areas for Water Storage / Fauna Habitat purposes – as specified in the Rehabilitation landform criteria pursuant to*	No Response	Not Required

Attachment 1: List of matters raised by [redacted] which (to date) no response or an inadequate response has been provided by the applicant or its consultants

		Condition F1 and Table F1 (Final land use and rehabilitation schedule) of theEA;		
10/07/2020 TTB Submission to response from Applicant - ICC	4	*The Applicant has additionally previously stated that dewatering of the mining voids is a condition that exists under the Mining EA, which is factually incorrect and misleading - the current Mining EA clearly has no condition which requires dewatering of the mining voids;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	5	*The Applicant further appears to have avoided responding to SARA information request (18 February 2020), which required significant environmental information in regard to dewatering of the voids, based on the factually incorrect and misleading statement above;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	6	*It remains inappropriate to amend the Mining EA for the purposes of avoiding assessing environmental impacts from dewatering of the Tailings Dam and Pits (including sludges) that are as a direct result of a 'separate application' for a prescribed Waste management ERA which has not yet been approved and which will be subject to Appeal rights under the Planning Act 2016;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	7	*Wanless Recycling Park Pty Ltd, is further not directly entitled to amend the Mining EA, which is held by another entity Zedemar Holdings Pty Ltd;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	8	*There would be no basis or reasoning for dewatering of the Tailings Dam and Pits (including sludges) in absence of the current Wanless development application, given the required for Water Storage / Fauna Habitat under environmental obligations and conditions of that Mining EA;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	9	*If the development application is refused (by Council or the P&E Court), and the Mining EA has been amended to suit the development proposal, then the outcomes would be potentially catastrophic for the community – given the loss of rehabilitation requirements that would have otherwise been expected by the State, Council and by the community;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	1	*The applicant carried out Public Notification prior to adequately responding to issues raised in information requests by relevant authorities.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	2	*There was a lack of meaningful, community consultation and engagement.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	3	*Inconsistencies with the Strategic Outcomes of the Planning Scheme, Planning Scheme Codes and Implementation Guideline No. 32.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC		*Inconsistencies with and misrepresentation of the proposed land uses and Staging of the Development.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	5	*The applicant is likely to develop the landfill prior to the full development of the Resource Recovery, which will be*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020

Attachment 1: List of matters raised by [redacted] which (to date) no response or an inadequate response has been provided by the applicant or its consultants

		contrary to the intent of the submitted development application.		
05/11/2020 TTB Submission to response from Applicant - ICC	6	*Incorrect representation/ description of the proposal on DA forms and Public Notification Material.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	7	*The waste recovery targets are well below Queensland's waste recovery targets, which does not support the contention that the development is primarily for resource recovery with only a residual component going to landfill.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	8	*Rehabilitation of mining voids should not be via landfilling with waste.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	9	*There is no need for the facility, specifically, no need for additional landfill airspace in the general local government jurisdiction.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	10	*There are many shortcomings in the Waste Industry Management Expert Report and the Needs analysis. Therefore, there can be limited reliance on the statements, assertions and conclusions stated in these reports and these reports should be treated with extreme caution.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	11	*The applicant makes a number of claims in the Waste Industry Management Expert Report with no supporting evidence for issues raised by Council in their information request.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	12	*There is no evidence that the applicant or their consultants made sufficient contact with the relevant landfill operators with regard to sourcing the information required by Council in regard to existing landfill facilities in terms of Capacity or Estimated Lifespans such that would warrant the conclusions made in the Waste Industry Management Expert Report and the Needs Analysis.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	13	*Non-compliance with the Queensland government's Waste Management and Resource Recovery Strategy*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	14	*Non-compliance with all aspects of he Temporary Local Planning Instrument No. 2 of 2018 (Waste Activity Regulation).*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	15	*Value and loss of environmental opportunities from the site rehabilitation requirements under the sites' existing ERA's.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	16	*Non-compliance with site rehabilitation requirements under the sites' existing ERA's.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	17	*The site is subject to an existing environmental authority (EA) EPML00594013 (dated 28 April 2020) which contains specific Rehabilitation landform criteria pursuant to Condition F1 and Table F1 (Final land use and rehabilitation schedule)*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	18	*Wanless Recycling Park Pty Ltd is not entitled to amend the Mining environmental authority (EPML00594013) which is held by Zedemar Holdings Pty Ltd.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	19	*The existing environmental authority (EA) EPML00594013 makes it abundantly clear that there is*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020

Attachment 1: List of matters raised by [redacted] which (to date) no response or an inadequate response has been provided by the applicant or its consultants

		no condition which requires dewatering of the mining voids.		
05/11/2020 TTB Submission to response from Applicant - ICC	20	*There was a community expectation, secured by way of the Condition F1 and Table F1 of the EA, that at completion of mining activities under EA EPML00594013, the 'Tailings Ponds' 'Dams and ponds' and 'Active Pit' areas would be rehabilitated for 'Water Storage / Fauna Habitat'. It is therefore impossible to understand how the applicant considers that there could possibly be a condition of the current Mining environmental authority which requires Dewatering of the mining voids.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	21	*There are significant errors and inconsistencies in the design and proposed operation, including contradictions in specialist assessments, lack of sufficient detail and inadequate engineering design, including environmental assessment.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	22	*Inconsistencies with existing development approvals and other land uses within the development footprint.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	23	*Risks of leachate seeping to the groundwater system.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	24	*Gas and fire risk associated with landfill operation.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	25	*Lack of any management measures which deal with wildlife attractants (given the proposed putrescible waste landfill operations).*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	26	*Risk of wildlife (bird) strikes at RAAF Amberley Air Base.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	27	*Introduction of new and increase in existing pests and vermin in the general area.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	28	*Clearing of Vegetation on Champions Way with respect to meeting 'Relevant Purpose determination under s 22A of the Vegetation Management Act 1999.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	29	*Traffic impacts on Cunningham Highway, particularly intersection of Cunningham Highway and Southern Amberley Road.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	30	*Traffic impacts as a result of increased traffic on local road network (Coopers Road & Champions Way etc).*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	31	*Environmental (air quality, noise, water quality, soil, light etc) impacts on the local community, and local flora and fauna.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	32	*Visual, social, health and wellbeing impact on local residents.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	33	*Adverse impacts on nearby heritage and tourism routes/sites and events.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020

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05/11/2020 TTB Submission to response from Applicant - ICC	34	*Light impacts on RAAF Amberley Air Base and surrounding areas.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	35	*Impacts on ground and underground stability.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	36	*Impact on wildlife, specifically via destruction of koala habitat.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	37	*Proposed use is incompatible with the locality.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	38	*Cost implications to the community.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	39	*Impact on the Willowbank Ipswich Motor Sport Precinct.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	40	*Lack of trust about waste operators.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	41	*Decline in property values.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	42	*Social impact and stigma about adjoining suburbs and Ipswich City as a whole.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	43	*No benefits to the local community.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (1)	*The Applicant is reliant on amending conditions of an unrelated approval to allow for dewatering of the mining voids (and tailings dam sludges) and avoiding rehabilitation obligations that exist under the current Mining EA;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (2)	*Council and the public should be informed as to the nature of the amendments proposed to the Mining EA – as requested by Council on 8 July 2020;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (3)	*It remains however of significant concern as to how the Mining EA could possibly require an amendment at this stage - given no decision has been made on the Wanless development application and that any decision would remain subject to the appeal rights conferred under the Planning Act 2016;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (4)	*The Applicant has previously been incorrect ion advice to SARA and Council on this matter - stating that dewatering of the mining voids was a 'condition' under the Mining EA – i.e. the current Mining EA clearly has no condition which requires dewatering of the mining voids;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (5)	*The Applicant has avoided responding to SARA information request (18 February 2020), which required*	No Response	Not Required

Attachment 1: List of matters raised by [redacted] which (to date) no response or an inadequate response has been provided by the applicant or its consultants

		significant environmental information in dewatering of the *voids, based on incorrect statements made by the applicant;*		
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (6)	*It is inappropriate to amend the Mining EA premised on a 'separate application' by a separate entity for a prescribed Waste management ERA which has not yet been approved* *and which will be subject to Appeal rights under the Planning Act 2016;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (7)	*There would be no basis for dewatering of the Tailings Dam and Pits (including sludges) in absence of the current Wanless development application, given the Tailings Dam and Pits are required for Water St rage / Fauna Habitat under environmental obligations and conditions of that Mining EA;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (8)	*If the development application is refused (by Council or the P&E Court), and the Mining EA has been amended to suit the development proposal, the outcomes would be catastrophic for the community – given the loss of rehabilitation requirement would have otherwise been expected by the State, Council and by the community.*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	1	*Matters of National Environmental Significance (MNES) and Matters of State Environmental Significance (MSES)*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	2	*Dewatering of the voids*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	3	*Engineering review*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	3 (Attachment 1)	*D&H Review – 35 items*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	4	*Traffic impact review*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	4 (Attachment 2)	*Bitzios Consulting Review – 17 pages*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	5	*Air and Noise review*	No Response	Not Required
05/11/2020 TTB Submission to response from	5 (Attachment 3)	*Air Noise Environment Review – 17 pages*	No Response	Not Required

Attachment 1: List of matters raised by [redacted] which (to date) no response or an inadequate response has been provided by the applicant or its consultants

Applicant – SARA/DES				
05/11/2020 TTB Submission to response from Applicant – SARA/DES	6	*ERA Determination*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	7	*Interaction with existing EAs*	No Response	Not Required
24/12/2020 TTB Submission – SARA	1	*Matters of National Environmental Significance (MNES) and Matters of State Environmental Significance (MSES)*	No Response	Not Required
24/12/2020 TTB Submission – SARA	2	*Dewatering of the voids*	No Response	Not Required
24/12/2020 TTB Submission – SARA	3	*Engineering review*	No Response	Not Required
24/12/2020 TTB Submission – SARA	3 (Attachment 1)	*D& H Review – 54 items/24 pages*	No Response	Not Required
24/12/2020 TTB Submission – SARA	4	*ERA Determination*	No Response	Not Required
22/03/2021 TTB Submission – SARA	3 pages	*Submission 3 pages. "As stated in our previous written submission dated 24 December 2020, there has been a plethora of discrepancies in the application - as identified in [redacted] original submission and subsequent correspondence to SARA and Council - in regard to key engineering, environmental and planning issues, which continue to raise serious concerns and to date have not been adequately addressed – including in the most recent response (1 March 2021) by the applicant or their consultants."*	No Response	Not Required

[redacted]

16 August 2021

Ipswich City Council
Development Services
Email: plandev@ipswich.qld.gov.au
Att: Assessment Manager - Sandeep Nanjappa

Dear Sandeep

Re: Submission (Objection) - Supplementary concerns
Development Application No.: 10674/2019/CA

We refer to [redacted] previous submission (objection) made to the assessment manager dated 3 June 2020 – including supplementary matters detailed in letters dated 10 July 2020, 5 November 2020, 24 December 2020, 22 March 2021 and 29 July 2021.

We have reviewed recent correspondence on Council's e-pathway, being the applicant's (second) response to submissions (*Submission Response Report*) dated 5 August 2021 and provide the following comments and concerns in respect to the applicant's response.

The *Submission Response Report* purports to address concerns raised in our correspondence dated 5 November 2020, which was intended to provide Council shortcomings in regard to the applicant's ***previous*** (first) *Submission Response Report* dated 3 September 2020. The (second) *Submission Response Report* however fails again to sufficiently address the objections raised by [redacted] original submission (3 June 2020) or the supplementary matters detailed in our letter dated 5 November 2020, including the supporting information provided in those submissions – i.e. specialist engineering, traffic, environmental and air and noise assessments provided by [redacted] Pty Ltd, Bitzios Consulting, Griffith University, 3D Environmental and Air Noise Environment Pty Ltd.

Having reviewed the *Submission Response Report*, we consider that there has been insufficient response to the objections raised on behalf of [redacted] concerns have also recently been summarised in the list of attached issues provided to Council on 29 July 2021 (**Attachment 1 –** copy attached), with the applicant's (second) *Submission Response Report* providing no substantial additional information that addresses those matters.

We also note that the previous (first) and current (second) applicant *Submission Response Reports* provide no additional supporting information and/or specialist assessments that reasonably respond to those matters that have been raised by [redacted] in the original submission (objection). The applicant's current (second) *Submission Response Report* further does not address any of the supplementary matters raised by [redacted] in its letters dated 24 December 2020, 22 March 2021 and 29 July 2021, all of which remain wholly relevant in the overall construct of the development application.

Key shortcomings in the current (second) *Submission Response Report* include the following (noting that these comments do not replace the original properly made submission or supplementary matters and are provided to demonstrate some of the shortcomings in the current application before Council):

A. There has been no consideration of the effect on the proposed development application process that arises from the SARA's concurrence agency response, which has resulted in a **substantially changed development proposal** – as outlined in our letter dated 29 July 2021 and summarised at the end of this correspondence;

B. Inadequate response has been provided by the applicant to the fact that **not** all of the information requested by SARA had been responded to prior to commencement of the public notice - for example:

Item 8 of the SARA Information request (18 February 2020) required confirmation of lodgement of the required EPBC Act referral and outcomes provided to DES in support of the EA application. **This information was not provided prior to commencement of public notification and remains outstanding**. This information additionally remains outstanding and does not (as the applicant suggests in their (second) *Submission Response Report* page 45) fall within the jurisdiction of DES.

Item 11 of the SARA Information request (18 February 2020) required information about how voids would be dewatered, including detailed risk assessment of potential impacts. **This information was not provided prior to commencement of public notification and remains outstanding.**

The above matters were raised in [redacted] original submission[1].

C. The applicant's (second) *Submission Response Report* states that:

Wanless Recycling Park is following the direction of DES in regard to the alterations of rehabilitation outcomes for the existing and proposed ERAs.

The existing ERA has rehabilitation requirements that are attached to it. It is however noted that the voids are to be left as water storage and do not require filling to return the landform to its original contours.

This is not an outcome that fosters opportunity for the land, especially the wider locality. The land is zoned under the ICC Planning Scheme as a Regional Industry Investigation Zone, a Potential High Impact Industry and Business Area under the ERIA of the Planning Scheme, and a Waste Activity Area under the TLPI that sits with the planning scheme. It is therefore clear that Council intend this area to be developed in the future for industrial type uses where appropriate, not dissimilar to the existing [redacted] operation on the adjacent allotment. The filling of the voids on the site create a financially viable solution to removing large voids on a key development site.

This matter was raised in [redacted] original submission[2].

The applicant's above response is **misleading and does not respond to the original objection** – i.e. in that it does **not** address *lost environmental opportunities* from maintaining permanent **water storages** and **fauna habitat** for the benefit for the Ebenezer Regional Industrial Area (ERIA) - already secured under requirements of the

[1] **Item *20*** *Avoidance of assessing the environmental impacts from Dewatering of the Tailings Dam and Pits - by way of a proposed amendment of the mining EA that is inconsistent with the rehabilitation requirements of that EA*; **and Item *8*** *Potential for significant residual impact on MSES, MNES and inadequate ecological assessment provided*

[2] **Item *4*** *Value and loss of environmental opportunities from site rehabilitation requirements under environmental authority EPML00594013 has not been assessed*

current mining environmental authority EPML00594013 and which would be forgone as a consequence of the development proposal. These areas intended for water storage / fauna habitat further represent a significant contribution to the local community and would contribute to the environmental values of the area in the longer term – given the total surface area of the water storages and fauna habitat equate to around 86ha - or around 24% of the total surface area of the Mining Lease.

The applicant also fails to acknowledge that landfilling of the voids, in any case, effectively limits future opportunities for industrial development of the landfilled voids - given rehabilitation requirements may extend up to a period of 100 years (as conditioned by DES for the environmental authority for this application). Until the landfill units and surrounding site are stable – with no release of waste materials, leachate, landfill gas or other contaminants that may cause environmental harm – it will be unlikely that the finished surface / final landform will be utilised for any purpose.

D. Access via Champions Way has **not** been assessed in terms of the pavement impacts on that part of Champions Way currently constructed or how this will impact on the site access to Queensland Raceway during construction and operation of the facilities. The claims that alternate access via Seppanen Road has been investigated and found not viable is **not** supported by any detailed traffic engineering assessment.

   This matter was raised in [redacted] original submission[3].

   The applicant's response is further **misleading and does not respond to the original objection**. Site access proposed via Champions Way is contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct and inconsistent with Council's Implementation Guideline No. 32 and Figure 5a (ERIA - Transport and Access Network Plan) which includes access via Seppanen Road as being within the preferred strategic road hierarchy and network within the ERIA.

E. The applicant's (second) *Submission Response Report* states that:

   It is expected that the impacts on the RAAF Amberley Base will be conditioned (i.e. pest control, lighting) as directed by the third party referral to from the DoD

   This matter was raised in [redacted] original submission[4], including supporting assessment provided by Griffith University.

   No detailed management measures which deal with wildlife attractants within the buffer area to Amberley Air Base, or assessment by a qualified bird and wildlife management expert providing details of how such measures would be implemented, have been submitted in support of the development application.

   No assessment of the cumulative effects of wildlife attractants from the development proposal on the [redacted] facility (or any other surrounding existing or

[3] **Item *7*** *Access proposed via Champions Way is not supported and contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct*

[4] **Item *5*** *Lack of comprehensive management measures which deal with wildlife attractants within the buffer area to Amberley Air Base have not been assessed, including cumulative effects from the existing waste management activities operating at* [redacted]

proposed waste management facilities) has been considered in the development application.

F. The applicant's (second) *Submission Response Report* states that:

It is acknowledged that the targets that are reported in the Waste Industry Expert Report are targets for the site at the commencement of the operation, which is expected to be mid-2020s. The figures that have been noted in the submission are state recycling targets are 2030. It is the intention of Wanless Recycling Park to replicate their operation at Sydney Recycling Park which has a recycling rate of more than 80%.

At this early stage, without having detailed information regarding the source of the waste and the end user, a detailed evidence base and modelled recycling information is not able to be provided. As such, the estimate and targets are provided. To note, these are modelled off Wanless's existing operations.

The proposed development is intending to target a recycling rate of 45% at commencement of the operation.

It is the applicant's intention to establish a recycling operation on the site, replicating their existing business in Sydney. Recycling is the main focus of the business operation.

This matter was raised in [redacted] original submission[5].

The applicant's above response is **misleading and does not respond to the original objection**. It also remains concerning that the applicant relies upon recycling rates by the mid-2020s that **still remain below the States targets for recycling by 2025** i.e.:

- Municipal Solid Waste (MSW) recovery proposed in the DA is 6%

  The QLD target for 2025 is however significantly higher at 50%

- Commercial & Industrial (C&I) waste recovery proposed in the DA is 49%

  The QLD target for 2025 is however significantly higher at 55%

- Construction & Demolition (C&D) waste recovery proposed in the DA is 50%

  The QLD target for 2025 is however significantly higher at 75%

It remains of concern that the proposed facility is aiming at recycling rates at commencement in mid-2020s (i.e., stated by the applicant as being 45% only) that remain **well below the waste recovery rates for Queensland** (i.e., which expect 50% - 75% by the mid-2020s).

It is further concerning as to why the proposed recycling rate for the proposed new facility at Ebenezer is so **significantly below the recovery rates at the Wanless facility in Sydney** (which has a recovery rate of more than 80%) – i.e., if Wanless are capable of operating a facility which can recovery more than 80% at their Sydney facility, why are they unable to construct a new facility which achieves corresponding Queensland waste recovery targets at commencement in the mid-2020s?

[5] **Item *1*** *Inconsistencies with and misrepresentation of the proposed land uses and staging of the development* **and Item *2*** *Need for the development has not been demonstrated*

G. The applicant's (second) *Submission Response Report* states that:

A need assessment was prepared by a suitably qualified person demonstration the applicant's position on need. This matter is for Council's further consideration.

This matter was raised in [redacted] original submission[6]. The applicant's response merely references the Needs Analysis prepared by Location IQ but does not directly address any of those issues raised in the submission. Specifically, the applicant has provided **no response** to those matters previously raised by [redacted] reiterated below:

- The *Waste Industry Management Expert Report (MRA Consulting Group, 24 April 2020)* statements made regarding 'landfill capacity' within the Ipswich LGA have been based on estimated lifespans for the majority (7 out of 8) of existing landfills being stated as '**Unknown'**.
- That Expert Report further states that the estimated landfill capacity in Queensland and more specially in SEQ is '**not known definitively'**.
- The Expert Report additionally states and that there are proposed landfills and landfill extensions within the Ipswich City Council jurisdiction which are '**not captured in the numbers'** presented within that Expert Report.
- The Needs Analysis (Prepared by Location IQ, April 2020) relies heavily on information from the *Waste Industry Management Expert Report* to which there is considerable doubt as to the veracity of that Expert Report (based on the original [redacted] submission[7]) when considering the need for the proposed development.
- Any conclusions made in regard to determining the capacity of landfills within the region are therefore dubious and unconvincing in terms of both the Waste Industry Management Expert Report and hence the Needs Analysis.
- Given the above clear shortcomings, there can be very limited reliance on the conclusions stated in the Needs Analysis.
- A review of the Needs Analysis was additionally undertaken by [redacted] Pty Ltd (**Attachment 2** to the original submission dated 3 June 2020) which included a range of other inaccuracies such that question the veracity of any figures and conclusions deducted in the Need Analysis.
- The Needs Analysis should therefore be treated with extreme caution.

H. The applicant's(second) *Submission Response Report* states that:

The proposed development has been conditioned through SARA and DES regarding the use of clean fill in the southern portions of the voids.

Offsite material will be utilised as clean fill for the voids. It is acknowledged that this is conditioned through the SARA conditions.

[6] **Item *2*** *Need for the development has not been demonstrated*
[7] **Item *1*** *Inconsistencies with and misrepresentation of the proposed land uses and staging of the development*

This matter was raised in [redacted] original submission[8].

The applicant's current statement above that *'Offsite material will be utilised as clean fill for the voids'* is **contradictory** to the applicant's information response to SARA (27 April 2020) which stated:

The clean fill area to the south of Lanes and Ironbark Pits are is to be filled used soil material on site. In this, soil that is located on site in the current overburden areas as well as areas within the voids that require excavation to create stable walls are proposed to be used as the clean fill in this area. ***It is noted that no material external to the site is proposed to be used as "clean fill" for the purposes of remediating the areas outside of the Waste Activity Area under Ipswich City Council's Waste Activity TLPI No. 2 of 2020****.*

The original application had not factored in traffic movements associated with filling the voids areas outside of the Waste Activity Area under TLPI No. 2 of 2020.

Clean earth means *any natural substance found in the earth that is not contaminated with waste or a hazardous contaminant. Examples- clay, gravel, loam, rock, sand, soil*.

It is additionally noted that the environmental authority (DES) **does not regulate using *clean earth* as fill** – i.e. filling of the void with *clean earth* is not an environmentally relevant activity. It remains therefore of concern as to how Council will ensure external waste deposited in the southern voids (outside of the Waste Activity Area) will be limited to *clean earth* and how the operator will be required to demonstrate that only *clean earth* is being deposited in those voids.

Notwithstanding the above, it also remains questionable as to whether it is feasible to import *clean earth* in the quantities necessary to fill the southern void spaces.

In addition to the above key shortcomings in the current (second) *Submission Response Report*, [redacted] reiterate (as detailed in our letter dated 29 July 2021) that changes made to the original development application as a consequence of SARA's concurrence agency response have resulted in a ***substantially different application*** to the one originally submitted, such that Council should **refuse** the development application.

The focal point of the original development application was based **primarily** on the development being for a ***Resource Recovery Facility*** (with waste disposal being a **secondary** component) consisting of:

- 4 x Transfer and Resource Recovery Facilities (primary operations) – 2 for C&D and C & I waste (dry waste) associated with Tailing Dam and 2 for municipal waste (wet / putrescible waste) associated with Ironbark Pit and Lanes Pit; and
- 4 x Transfer and Resource Recovery Facilities (secondary operations) - to take sorted goods from the primary operation to either store, recycle, or recover further material. 2 x facilities associated with dry waste and 2 x associated with general / municipal waste.

Whilst the applicant has now stated an intent to develop the Resource Recovery Facility at the same time as the first landfill cell, it remains unclear as to whether part or all of the above Transfer and Resource Recovery Facilities are intended to be development in the first material

[8] **Item *10*** *Land uses under the TLPI and prescribed ERAs applied for are unclear, in particular as they would relate to filling the southern void areas under the TLPI no. 2 / 2018 (Waste Activity Regulation) with clean fill*

change of use – considering also SARA's decision to deny the applicant any use of the Tailings Dam for the purposes of waste disposal and Council's current recommendation to refuse all aspects of the application relating to landill.

The recent SARA concurrence agency response has resulted in a **substantial change to the application** by way of excluding the Tailings Dam for acceptance of residual C&D and dry C&I waste. The Tailings Dam represented a significant part of the originating development application – constituting around 60.4% of the total landfill void space in the original application and proposed to operate over an estimated lifespan of 56 years.

The change to the application (removal of the tailings dam) is considered to result in *substantially different development*, given it changes the ability of the proposed development to operate as originally intended. The change to the application further questions the viability of development shown on the SARA approved plans for the *Resource Recovery Facility* – given the removal of the Tailings Dam void for waste disposal.

[redacted] continue to support Council's correspondence to SARA (dated 6 July 2021) in regard to the fact that ***dewatering and filling of the Tailing Dam with 'non putrescible waste' formed an integral component of the subject landfill proposal*** **and that** ***removal of this aspect of the proposal cannot simply be conditioned out or marked up on the approved plans***. In addition, [redacted] further consider this matter:

- **Fundamentally changes the application**;
- Results in the development proposal being now **substantially different development**;
- Should have required a (**not minor**) **change application**;
- Should have required the applicant to **fully detail the nature of the current (changed) proposal, including revisions of all plans and relevant specialist assessments**;
- Should have required **public notification (again) of the changed application**.

In the current form of the development application, [redacted] [redacted] considers that the level of confusion caused by the multiple submissions to information requests (including SARA's concurrence agency response and DES issue of an environmental authority) can only be resolved by the **assessment manager refusing the current application**, with the applicant otherwise **re-submitting the proposal in a clear and coherent manner that enables all stakeholders the opportunity of understanding the actual development proposal and staging of the proposed uses, inclusive of public notification**.

[redacted] [redacted] therefore reiterate that **all matters** outlined in its original submission (3 June 2020) and supplementary submission material (including this correspondence) should be considered in the context of the current application, including those changes discussed above resulting from the SARA concurrence agency response and issue of the environmental authority by DES. [redacted] [redacted] also consider that until such time as all of those matters have been appropriately addressed (**including undertaking of the public notification for a second time**), determination of the current development application by Council would be considered premature.

On behalf of our client, we maintain documentation submitted in support of the application does not support approval of the application in its current form and there remains insufficient

engineering, environmental, or town planning reason which would otherwise justify approval of the application.

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours Faithfully

[redacted]

Attachment 1: List of matters raised by [redacted] which (to date) no response or an inadequate response has been provided by the applicant or its consultants

Date Submission	Issue No	Issue/Concern/Comment	Response (Urbis)	Response TTB
3/06/2020 TTB Submission - ICC	1	*Inconsistencies with and misrepresentation of the proposed land uses and staging of the development:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	2	*Need for the development has not been demonstrated:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	3	*The value and viability of extraction of existing mineral resources within ML4712 has not been addressed:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	4	*Value and loss of environmental opportunities from site rehabilitation requirements under environmental authority EPML00594013 has not been assessed:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	5	*Lack of comprehensive management measures which deal with wildlife attractants within the buffer area to Amberley Air Base have not been assessed, including cumulative effects from the existing waste management activities operating at [redacted]*	No Response	Not Required
3/06/2020 TTB Submission - ICC	A1	***Attachment 1*** ***Griffith University Review***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A1	*Refer to [redacted] Submission (6 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	6	*Significant errors and inconsistencies in the design and proposed operation of the Wanless Recycling Park, including contradictions in specialist assessments, lack of sufficient detail and inadequate engineering design, including environmental assessment.*	No Response	Not Required
3/06/2020 TTB Submission - ICC TTB Submission	A2	***Attachment 2 –*** ***Review – [redacted] Pty Ltd and ATC Williams***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A2	*Items 1 to 86 (Refer to [redacted] Submission) (26 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	7	*Access proposed via Champions Way is not supported and contrary to the intent of maintaining an appropriate, safe and amenable traffic environment for the future planning intent of the Ipswich Motorsport Precinct:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	A3	***Attachment 3*** ***Traffic Review – Bitzios Consulting***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A3	*Refer to [redacted] Submission (8 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	8	*Potential for significant residual impact on MSES, MNES and inadequate ecological assessment provided:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	A4	***Attachment 4*** ***Ecological Review – 3D Environmental***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A4	*Refer to [redacted] Submission (5 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	9	*Clearing of vegetation in Champions Way does not reasonably meet the test for a 'Relevant Purpose' determination under section 22A of the Vegetation Management Act 1999.*	No Response	Not Required
3/06/2020 TTB Submission - ICC	10	*Land uses under the TLPI and prescribed ERAs applied for are unclear, in particular as they would relate to filling the southern void areas under the TLPI no. 2 / 2018 (Waste Activity Regulation) with clean fill:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	11	*Noise impacts not adequately addressed:*	No Response	Not Required

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3/06/2020 TTB Submission - ICC	A5	***Attachment 5*** ***Noise Review – Air Noise Environment Pty Ltd***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A5	*Refer to [redacted] Submission (7 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	12	*Air quality impacts not adequately addressed:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	A6	***Attachment 6*** ***Air Quality Review - Air Noise Environment Pty Ltd***	No Response	Not Required
3/06/2020 TTB Submission - ICC	A6	*Refer to [redacted] Submission (7 pages)*	No Response	Not Required
3/06/2020 TTB Submission - ICC	13	*Potential negative outcomes associated with solid waste disposal for the City of Ipswich, including potential environmental and amenity impacts and negative image connotations of Ipswich as a 'Dumping Ground' for SEQ and other regions*	No Response	Not Required
3/06/2020 TTB Submission - ICC	14	*Reconfiguration inconsistent with Covenant No 719512481*	No Response	Not Required
3/06/2020 TTB Submission - ICC	15	*Inconsistency with existing development approvals and other land uses within the development footprint:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	16	*Inconsistency with the Regional Business and Industry Zone - Sub Area RBIA1 – Ebenezer Willowbank and Precinct 3, expanded Ipswich Motorsport Precinct and SEQ Regional Plan:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	17	*Inconsistencies with the strategic outcomes of the planning scheme:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	18	*Non-compliance with planning scheme codes*	No Response	Not Required
3/06/2020 TTB Submission - ICC	19	*Inconsistencies with the planning scheme Implementation Guideline No 32:*	No Response	Not Required
3/06/2020 TTB Submission - ICC	20	*Avoidance of assessing the environmental impacts from Dewatering of the Tailings Dam and Pits - by way of a proposed amendment of the mining EA that is inconsistent* *with the rehabilitation requirements of that EA:*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	1	*There is an assumption in this instance that the Applicant is reliant on amending conditions of an unrelated approval to allow for dewatering of the mining voids and avoiding rehabilitation obligations that exist under the current Mining EA;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	2	*Whilst Council and the public have not been informed as to the nature of the amendments proposed to the Mining EA, it nonetheless is of significant concern as to how the Mining EA could possibly require an amendment at this stage - given no decision has been made on the Wanless development application and that any d main subject to the appeal rights conferred under the Planning Act 2016;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	3	*At present, conditions of the current Mining EA require the holder (Zedemar Holdings Pty Ltd) to rehabilitate Tailings Ponds; Dams and ponds; and Active Pit areas for Water Storage / Fauna Habitat purposes – as specified in the Rehabilitation landform criteria pursuant to*	No Response	Not Required

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		Condition F1 and Table F1 (Final land use and rehabilitation schedule) of theEA;		
10/07/2020 TTB Submission to response from Applicant - ICC	4	*The Applicant has additionally previously stated that dewatering of the mining voids is a condition that exists under the Mining EA, which is factually incorrect and misleading - the current Mining EA clearly has no condition which requires dewatering of the mining voids;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	5	*The Applicant further appears to have avoided responding to SARA information request (18 February 2020), which required significant environmental information in regard to dewatering of the voids, based on the factually incorrect and misleading statement above;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	6	*It remains inappropriate to amend the Mining EA for the purposes of avoiding assessing environmental impacts from dewatering of the Tailings Dam and Pits (including sludges) that are as a direct result of a 'separate application' for a prescribed Waste management ERA which has not yet been approved and which will be subject to Appeal rights under the Planning Act 2016;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	7	*Wanless Recycling Park Pty Ltd, is further not directly entitled to amend the Mining EA, which is held by another entity Zedemar Holdings Pty Ltd;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	8	*There would be no basis or reasoning for dewatering of the Tailings Dam and Pits (including sludges) in absence of the current Wanless development application, given the required for Water Storage / Fauna Habitat under environmental obligations and conditions of that Mining EA;*	No Response	Not Required
10/07/2020 TTB Submission to response from Applicant - ICC	9	*If the development application is refused (by Council or the P&E Court), and the Mining EA has been amended to suit the development proposal, then the outcomes would be potentially catastrophic for the community – given the loss of rehabilitation requirements that would have otherwise been expected by the State, Council and by the community;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	1	*The applicant carried out Public Notification prior to adequately responding to issues raised in information requests by relevant authorities.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	2	*There was a lack of meaningful, community consultation and engagement.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	3	*Inconsistencies with the Strategic Outcomes of the Planning Scheme, Planning Scheme Codes and Implementation Guideline No. 32.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC		*Inconsistencies with and misrepresentation of the proposed land uses and Staging of the Development.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	5	*The applicant is likely to develop the landfill prior to the full development of the Resource Recovery, which will be*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020

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		contrary to the intent of the submitted development application.		
05/11/2020 TTB Submission to response from Applicant - ICC	6	*Incorrect representation/ description of the proposal on DA forms and Public Notification Material.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	7	*The waste recovery targets are well below Queensland's waste recovery targets, which does not support the contention that the development is primarily for resource recovery with only a residual component going to landfill.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	8	*Rehabilitation of mining voids should not be via landfilling with waste.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	9	*There is no need for the facility, specifically, no need for additional landfill airspace in the general local government jurisdiction.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	10	*There are many shortcomings in the Waste Industry Management Expert Report and the Needs analysis. Therefore, there can be limited reliance on the statements, assertions and conclusions stated in these reports and these reports should be treated with extreme caution.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	11	*The applicant makes a number of claims in the Waste Industry Management Expert Report with no supporting evidence for issues raised by Council in their information request.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	12	*There is no evidence that the applicant or their consultants made sufficient contact with the relevant landfill operators with regard to sourcing the information required by Council in regard to existing landfill facilities in terms of Capacity or Estimated Lifespans such that would warrant the conclusions made in the Waste Industry Management Expert Report and the Needs Analysis.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	13	*Non-compliance with the Queensland government's Waste Management and Resource Recovery Strategy*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	14	*Non-compliance with all aspects of he Temporary Local Planning Instrument No. 2 of 2018 (Waste Activity Regulation).*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	15	*Value and loss of environmental opportunities from the site rehabilitation requirements under the sites' existing ERA's.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	16	*Non-compliance with site rehabilitation requirements under the sites' existing ERA's.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	17	*The site is subject to an existing environmental authority (EA) EPML00594013 (dated 28 April 2020) which contains specific Rehabilitation landform criteria pursuant to Condition F1 and Table F1 (Final land use and rehabilitation schedule)*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	18	*Wanless Recycling Park Pty Ltd is not entitled to amend the Mining environmental authority (EPML00594013) which is held by Zedemar Holdings Pty Ltd.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	19	*The existing environmental authority (EA) EPML00594013 makes it abundantly clear that there is*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020

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		no condition which requires dewatering of the mining voids.		
05/11/2020 TTB Submission to response from Applicant - ICC	20	*There was a community expectation, secured by way of the Condition F1 and Table F1 of the EA, that at completion of mining activities under EA EPML00594013, the 'Tailings Ponds' 'Dams and ponds' and 'Active Pit' areas would be rehabilitated for 'Water Storage / Fauna Habitat'. It is therefore impossible to understand how the applicant considers that there could possibly be a condition of the current Mining environmental authority which requires Dewatering of the mining voids.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	21	*There are significant errors and inconsistencies in the design and proposed operation, including contradictions in specialist assessments, lack of sufficient detail and inadequate engineering design, including environmental assessment.*	*Refer to Report Urbis (03/09/2020)*	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	22	*Inconsistencies with existing development approvals and other land uses within the development footprint.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	23	*Risks of leachate seeping to the groundwater system.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	24	*Gas and fire risk associated with landfill operation.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	25	*Lack of any management measures which deal with wildlife attractants (given the proposed putrescible waste landfill operations).*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	26	*Risk of wildlife (bird) strikes at RAAF Amberley Air Base.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	27	*Introduction of new and increase in existing pests and vermin in the general area.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	28	*Clearing of Vegetation on Champions Way with respect to meeting 'Relevant Purpose determination under s 22A of the Vegetation Management Act 1999.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	29	*Traffic impacts on Cunningham Highway, particularly intersection of Cunningham Highway and Southern Amberley Road.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	30	*Traffic impacts as a result of increased traffic on local road network (Coopers Road & Champions Way etc).*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	31	*Environmental (air quality, noise, water quality, soil, light etc) impacts on the local community, and local flora and fauna.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	32	*Visual, social, health and wellbeing impact on local residents.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	33	*Adverse impacts on nearby heritage and tourism routes/sites and events.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020

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05/11/2020 TTB Submission to response from Applicant - ICC	34	*Light impacts on RAAF Amberley Air Base and surrounding areas.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	35	*Impacts on ground and underground stability.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	36	*Impact on wildlife, specifically via destruction of koala habitat.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	37	*Proposed use is incompatible with the locality.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	38	*Cost implications to the community.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	39	*Impact on the Willowbank Ipswich Motor Sport Precinct.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	40	*Lack of trust about waste operators.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	41	*Decline in property values.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	42	*Social impact and stigma about adjoining suburbs and Ipswich City as a whole.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	43	*No benefits to the local community.*	Refer to Report Urbis (03/09/2020)	Refer to submission TTB 05/11/2020
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (1)	*The Applicant is reliant on amending conditions of an unrelated approval to allow for dewatering of the mining voids (and tailings dam sludges) and avoiding rehabilitation obligations that exist under the current Mining EA;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (2)	*Council and the public should be informed as to the nature of the amendments proposed to the Mining EA – as requested by Council on 8 July 2020;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (3)	*It remains however of significant concern as to how the Mining EA could possibly require an amendment at this stage - given no decision has been made on the Wanless development application and that any decision would remain subject to the appeal rights conferred under the Planning Act 2016;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (4)	*The Applicant has previously been incorrect ion advice to SARA and Council on this matter - stating that dewatering of the mining voids was a 'condition' under the Mining EA – i.e. the current Mining EA clearly has no condition which requires dewatering of the mining voids;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (5)	*The Applicant has avoided responding to SARA information request (18 February 2020), which required*	No Response	Not Required

Attachment 1: List of matters raised by [redacted] which (to date) no response or an inadequate response has been provided by the applicant or its consultants

		significant environmental information in dewatering of the *voids, based on incorrect statements made by the applicant;*		
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (6)	*It is inappropriate to amend the Mining EA premised on a 'separate application' by a separate entity for a prescribed Waste management ERA which has not yet been approved* *and which will be subject to Appeal rights under the Planning Act 2016;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (7)	*There would be no basis for dewatering of the Tailings Dam and Pits (including sludges) in absence of the current Wanless development application, given the Tailings Dam and Pits are required for Water St rage / Fauna Habitat under environmental obligations and conditions of that Mining EA;*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant - ICC	Additional (8)	*If the development application is refused (by Council or the P&E Court), and the Mining EA has been amended to suit the development proposal, the outcomes would be catastrophic for the community – given the loss of rehabilitation requirement would have otherwise been expected by the State, Council and by the community.*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	1	*Matters of National Environmental Significance (MNES) and Matters of State Environmental Significance (MSES)*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	2	*Dewatering of the voids*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	3	*Engineering review*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	3 (Attachment 1)	*D&H Review – 35 items*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	4	*Traffic impact review*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	4 (Attachment 2)	*Bitzios Consulting Review – 17 pages*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	5	*Air and Noise review*	No Response	Not Required
05/11/2020 TTB Submission to response from	5 (Attachment 3)	*Air Noise Environment Review – 17 pages*	No Response	Not Required

Attachment 1: List of matters raised by [redacted] which (to date) no response or an inadequate response has been provided by the applicant or its consultants

Applicant – SARA/DES				
05/11/2020 TTB Submission to response from Applicant – SARA/DES	6	*ERA Determination*	No Response	Not Required
05/11/2020 TTB Submission to response from Applicant – SARA/DES	7	*Interaction with existing EAs*	No Response	Not Required
24/12/2020 TTB Submission – SARA	1	*Matters of National Environmental Significance (MNES) and Matters of State Environmental Significance (MSES)*	No Response	Not Required
24/12/2020 TTB Submission – SARA	2	*Dewatering of the voids*	No Response	Not Required
24/12/2020 TTB Submission – SARA	3	*Engineering review*	No Response	Not Required
24/12/2020 TTB Submission – SARA	3 (Attachment 1)	*D& H Review – 54 items/24 pages*	No Response	Not Required
24/12/2020 TTB Submission – SARA	4	*ERA Determination*	No Response	Not Required
22/03/2021 TTB Submission – SARA	3 pages	*Submission 3 pages. "As stated in our previous written submission dated 24 December 2020, there has been a plethora of discrepancies in the application - as identified in [redacted] original submission and subsequent correspondence to SARA and Council - in regard to key engineering, environmental and planning issues, which continue to raise serious concerns and to date have not been adequately addressed – including in the most recent response (1 March 2021) by the applicant or their consultants."*	No Response	Not Required

ATTACHMENT 2

ATC Williams Review

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Our Ref 113161.15

27 June 2022

Duggan and Hede Pty Ltd
PO Box 496
CLAYFIELD QLD 4011

ATTENTION: MICHAEL MCMAHON

Dear Michael,

WANLESS RECYCLING PARK – REVIEW OF ADDITIONAL DOCUMENTATION IN RESPONSE TO MINISTERIAL CALL-IN

1 INTRODUCTION

1.1 Background and Scope

As requested by Duggan and Hede Pty Ltd (D&H), a review of additional documentation in relation to the above development proposal has been undertaken by ATC Williams Pty Ltd (ATCW). The specific purpose of this review has been to benchmark the standards applied to the engineering of the proposed landfill units, as a means of flagging issues that have the potential to severely constrain the development or, more importantly, to threaten human health or the environment.

This review has been undertaken by Mr Allan Watson from ATCW. Mr Watson has over 30 years' experience in both landfill and tailings engineering practice in Queensland. He has been directly involved in the development of landfills across a range of waste types and sites, more recently in landfill development within water filled mine and quarry voids. He has also practiced extensively in the mining industry, involved specifically in the design, construction, operation and closure of tailings dams for a range of commodities, particularly coal. He therefore has a comprehensive understanding of the critical technical issues that are expected to be encountered in relation to landfill components of the proposed Wanless Recycling Park development.

The documents reviewed include the following:

- Taft Engineering (2022), Landfill Engineering Report – Wanless Recycling Park, Rev 5 May 2022.
- Taft Engineering, Figures supporting Landfill Engineering Report (refer Taft, 2022), prepared in 2019
- Taft Engineering (2022a), Receiving Environmental Monitoring program – Wanless recycling Park, Rev 3 May 2022
- Taft Engineering (2022b), Wanless Recycling Park – Response to Ministerial Information Request, dated 20 May 2022
- Urbis (2022), Response to Information Request – Wanless Recycling Park (Minister's ref: MBN22/109), dated 7 June 2022

Note that this review builds upon a submission (objection) to the proposed development, dated 3 June 2020, prepared by D&H and issued to Ipswich City Council, Development Services in response to the original development application (Ref: 10674/2019/CA). The review reiterates and strengthens the concerns related to engineering aspects of the development expressed within that D&H submission.

1.2 Key Areas of Concern

The key areas of concern from review of the available documentation, in the context of the review scope, include the following:

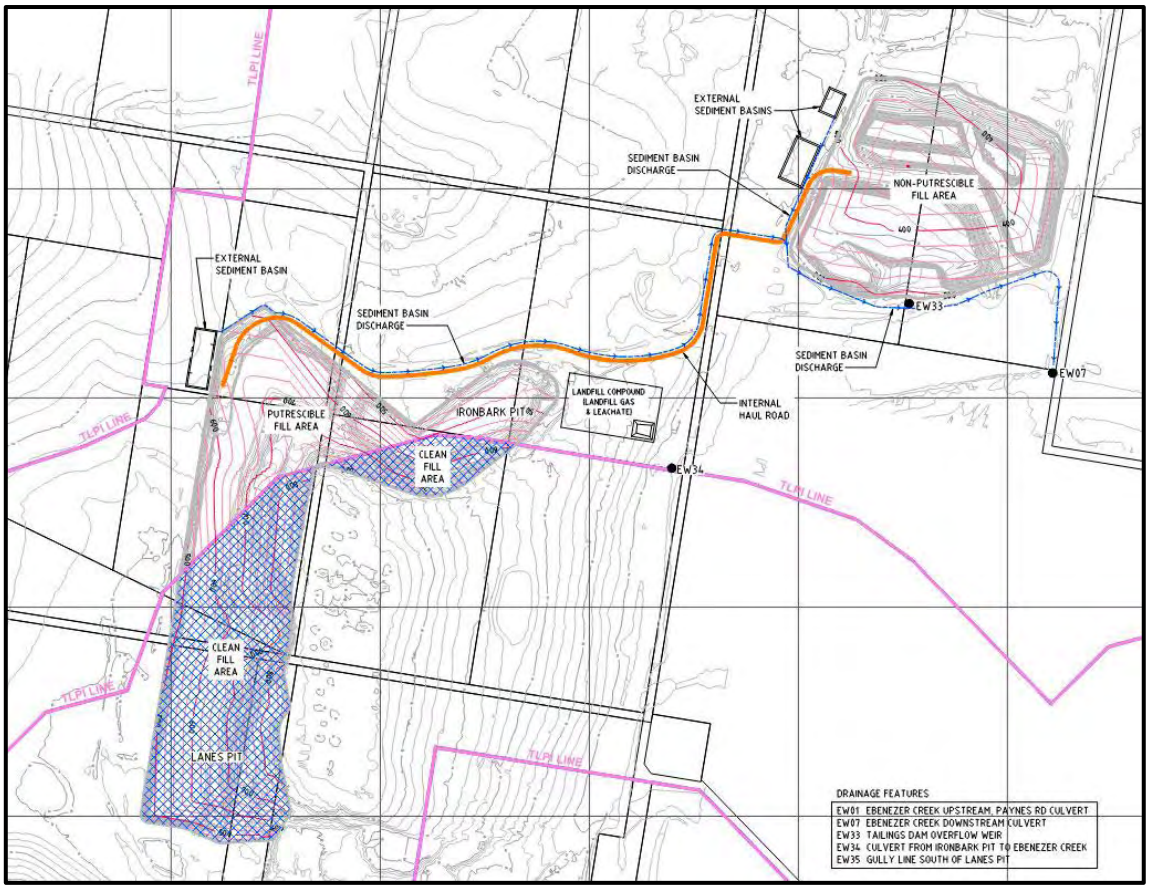
- Development across emplaced coal tailings
- Void dewatering
- Embankment construction (within the void for separation of waste disposal areas)
- Batter lining

In summary, this review supports a view that there is insufficient technical background and assessment to support elements of the proposed landfill development, and that there is no confidence that any level of conditioning with the Environmental Authority (EA) or related approvals documentation will manage the risks that emerge from the development approach. Despite the assertion in Taft (2022b) that the level of engineering related to the landfill is "concept" and that a forward program of engineering works is proposed, this cannot over-shadow the need for fundamental understanding of key development constraints associated predominantly with the condition of the voids in which the landfill facilities are to be sited. A very likely outcome therefore is that the development in its current form will not be "completable", and that any development undertaken will potentially result in unacceptable human health and/or environmental impacts, and/or impacts on local and regional amenity.

1.3 Proposed Development Layout

To provide context for this review, the proposed layout for the landfill development is provided as an excerpt from Taft (2022) in **Diagram 1**.

DIAGRAM 1 – PROPOSED LANDFILL DEVELOPMENT LAYOUT



2 REVIEW OUTCOMES

2.1 Development across Emplaced Tailings

Despite the view expressed in the Response to Information Request (Urbis, 2022) that landfill development within the tailings dam would not proceed, the Landfill Engineering Report (Taft, May 2022) maintains that this part of the development will occur.

The critical issues for any development within the tailings dam area are:

- Removal of tailings, which would require:
  - Dewatering of the tailings surface and disposal of potentially contaminated water.
  - Advanced methods of tailings repulping, pumping as a slurry and deposition into a newly constructed/dedicated tailings storage (subject to current Queensland guidelines, Australian National Committee on Large Dams (ANCOLD) Tailings Dam Guidelines and the Global Industry Standard on Tailings Management, GISTM, all being standards of current practice).
- Creating access to the “emptied” tailings dam area, including managing potential groundwater entry, to facilitate liner construction and subsequent operation, complicated by the likelihood that the facility has been founded into or onto an overburden backfill (into a previously mined void).
- Managing any local contamination (soil or groundwater) as a result of the long-term existence of the tailings dam.

In contrast to these issues and acknowledging the view that development within the tailings dam will not occur, the proposal for water inundation of the tailings (Urbis, 2022) represents a temporary management measure at best in the context of local conditions, which would be applied specifically to limit oxidation of the tailings if prone to potential acid production. The longer-term expectation for a tailings dam in this setting is to dewater and to construct a capping layer for the purpose of inhibiting moisture infiltration and to achieve an acceptable final landform. The responsibility for long term management of the dam is incumbent on the current land occupier/owner.

Notwithstanding any of the arguments presented above, the primary issue related to the application is the lack of understanding of the critical constraints related to coal tailings characteristics and management, and the inability to recognize the inherent risks associated with the current facility as well as the resources and effort needed to advance the proposal.

The key point is that the decommissioned tailings dam remains a human safety and environmental legacy regardless of the long term development and/or management intentions.

2.2 Void Dewatering

Whilst acknowledging the standard of engineering design applied to landfill liner systems, which is the focus on the engineering documentation, there are fundamental technical aspects that challenge the overall feasibility of landfill development within Lanes/Ironbark Pits. These fundamentals are:

- Void dewatering and the ability to maintain a dewatered condition (anticipated dewatering to a level as low as RL10m); and
- Recovered groundwater level (linked to recharge of groundwater into the void), with required dewatering levels to between RL30 and 35m (inferred from Taft, 2022a).

The available documentation does not appear to present a void dewatering plan. The feasibility of void dewatering in general terms is, however, not in dispute, recognizing also that treatment processes are available to ensure that void water meets appropriate discharge standards. The primary issue however is the challenge in achieving and maintaining a dewatered condition within the void, such that landfill construction works can progress safely and effectively. Critical constraints are expected to exist which may threaten the development feasibility, including:

- Variability in water quality in the deeper levels of the water column, which will require flexibility in treatment requirements to achieve licenced/acceptable discharge conditions.
- Increasing rates of groundwater inflow into the void through the course of dewatering as water levels lower and hydraulic gradients increases. These inflows impact on the ability to effectively maintain a dewatered condition for the purpose of void base preparation and liner construction. It must be expected that deepened groundwater dewatering sumps will be necessary across the floor to drawdown the groundwater level to a sufficient depth to enable construction access. The feasibility of achieving the necessary degree of dewatering is therefore questionable.
- Subject to a steady state dewatering regime being achieved, there is no confidence in the geotechnical integrity of the void base, expecting a residual thickness of overburden placed as part of mining, as well as a layer of silt/sludge deposited since inundation of the void. The total thickness of this base material may be significant and expected to be in a very soft/non-trafficable state and un-engineerable. Dry excavation of this material, even after an extended period of exposure (whilst void dewatering continues) may well be unfeasible. Also, regardless of the method of material removal, a disposal location must be developed (refer issues related to Embankment Construction). The resources required to achieve a competent subgrade for liner construction are therefore expected to be considerable, with the potential to impact on project feasibility.
- Ongoing void water management (expecting contribution from both groundwater and surface water/rainfall) is a critical necessity to ensure that operating landfill areas are not inundated. Early phases of landfill development are most exposed to inundation, particularly subject to significant/prolonged rainfall events. This will require careful planning with management systems needing to be made available. Otherwise, an infilling of the void, resulting in significant quantities of impacted water “that has contacted waste”, may lead to abandonment of the area, resulting in an environmental legacy.

Additional to the above, it is clearly demonstrated in the documentation that the recovered groundwater level will be significantly higher than the landfill base liner level. Taft (2022b) appears to support this approach, however experience over an extended period highlights the following issues under these conditions:

- This approach is inconsistent with current landfill design practice, despite examples of “older” landfills maintaining this approach.
- The reason for the current practice (i.e. establishing landfill liners above the recovered groundwater level in any void situation) is the negative impacts arising from a rising groundwater level on landfill integrity and performance, regardless of the provision of groundwater management as part of liner design. The key issue is the exposure created by inundation of the emplaced waste through leakage into the landfill via defects within the liner (such as tears, punctures and separated seams) that inevitably will develop. This creates a perpetual legacy in terms of landfill management, with a high potential for leachate/contaminant migration to the environment.

In summary, industry experience demonstrates that landfill development and waste disposal below the recovered groundwater level is commonly unmanageable, resulting in unacceptable risks to the environment, regardless of the regulatory standards applied related to operational performance and environmental monitoring needs.

2.3 Embankment Construction

A line separates the Lanes/Ironbark Pit void, with the southern side of the line to be filled using “clean fill” and the northern side by general waste (referred to as municipal solid waste). This line is identified in a Temporary Local Planning Instrument (TLPI) defined under the Ipswich City Council planning scheme.

From Taft (2022), the separation of waste areas coinciding with the TLPI line will be formed by an engineered fill bund, shown in section on the Taft drawings. The engineering of this “bund”

is of considerable concern. Scaling from the plans provided indicate a height for the "bund" of up to 30m, with batter slopes as steep as 1.3(H) to 1(V). The issues include the following:

- As flagged in **Section 2.2**, *there is no confidence in the quality of the void base* (following dewatering)*, expecting a residual thickness of overburden placed as part of mining, as well as a layer of silt/sludge deposited since inundation of the void. The total thickness of this base material may be significant and expected to be in a very soft/non-trafficable state and un-engineerable.* Foundation conditions will be critical to stability of the bund/embankment. The unknowns associated with these conditions may control the feasibility of achieving a stable structure subject to the range of embankment loading conditions associated with containment of either waste or water, which may include:
    - Static failure, given the very steep batter slopes, regardless of the quality of engineered embankment fill material.
    - Exposure to differential surcharge on either side of the embankment, possibly through a rapid drawdown of groundwater situation as a result of dewatering.
    - Piping of embankment materials where water is contained.
    - Other loading conditions, such as a seismic event causing liquefaction of foundation sequences or embankment materials (noting that static liquefaction is also a possible mechanism of failure under unfavourable/unknown conditions).

  Any of these mechanisms may cause catastrophic failure of the embankment, which would threaten the lives of any workers within the void/landfill and impact on the ongoing viability of the landfill.
- There is no detail provided related to embankment fill materials, being a significant element of embankment design, which also is a major contributor to geotechnical stability.

Whilst acknowledging that the above represents worst case conditions, embankment failure based on the conditions inferred in the drawings is certainly a credible outcome. Under current Queensland standards or practice, which replicates international standards, structures of this scale are subject to significant scrutiny and high level of governance through the design, construction and operational phases. The lack of understanding or acknowledgement of key conditions related to engineering of the embankment is a flaw in the current level of documentation. Furthermore, based on this current lack of knowledge, it is inconceivable that the engineering of the embankment could be effectively conditioned within an EA, due to the extent of the potential consequences of the current unknowns.

2.4 Batter Lining

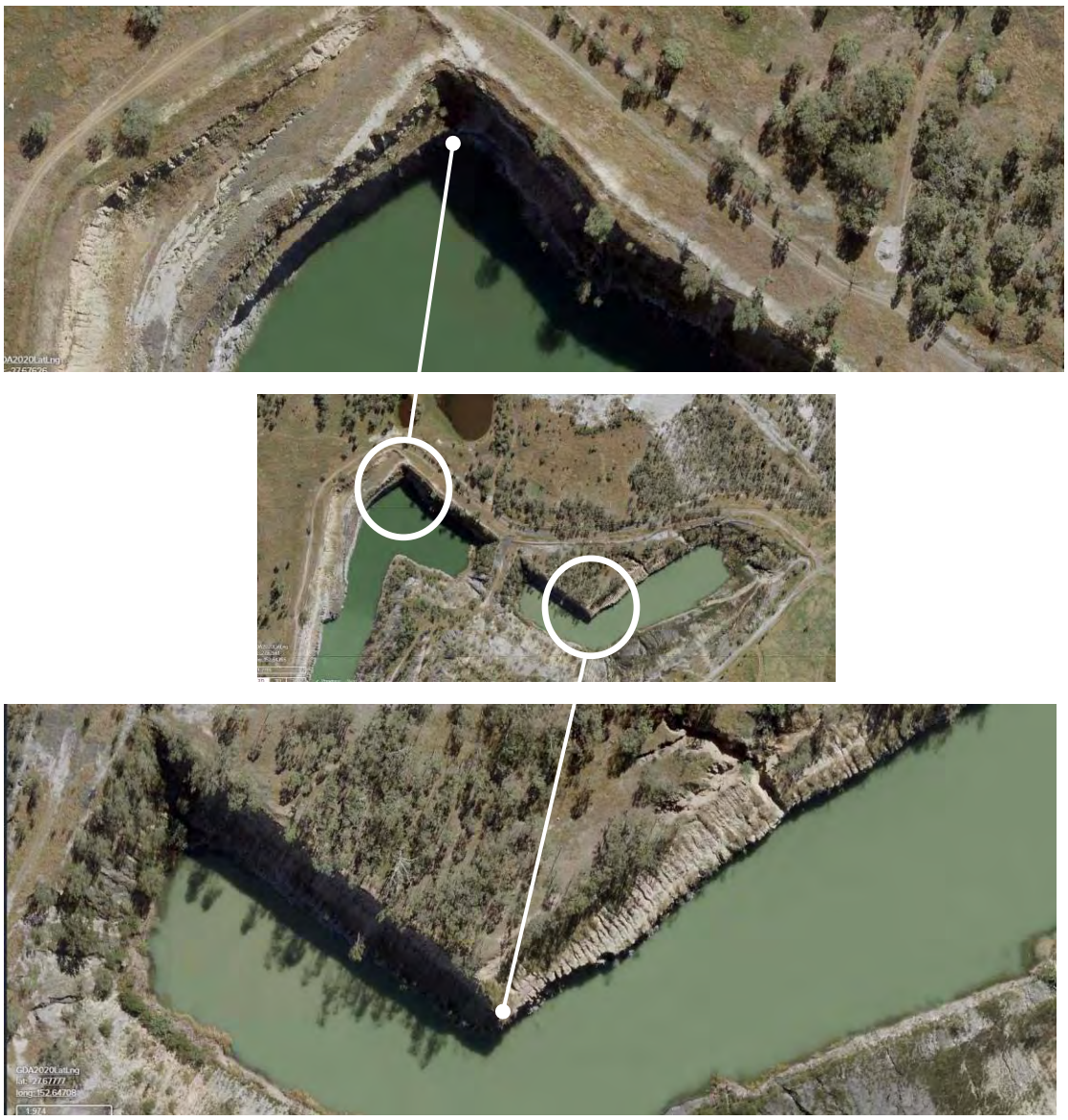
A review of the Taft drawings, showing contours within the Lanes/Ironbark Pit, together with readily accessible aerial photographs of the site, indicates that void batters are very steep in areas. Although the drawings suggest maximum slopes of the order of 1.5(H) to 1(V), past knowledge of the site supported by readily available aerial photos indicates that sections of batter are considerably steeper, particularly in high wall areas that are formed by insitu sequences. These slopes are not unusual for an open cut coal mining operation. Overburden backfill slopes are considerably flatter, however there is only limited exposure of these batters in the general waste portion of the void, where batter lining is required.

Taft (2022) indicates that side wall liners will comprise a 1,000mm thickness of compacted clay. Whilst emphasizing that a clay fill side wall liner is no longer accepted as best practice in Queensland (based on the liner standards adopted for recently approved landfills, which have been accepted as such by Queensland regulators), a 1,000mm (horizontal) thickness of compacted clay is to all intents and purposes not constructable given the steepness and irregular configuration of existing batter slopes. These conditions are shown clearly in **Photo 1**.

It is acknowledged that the proposal for liner earthworks is to overfill and cut back to the design thickness, however this approach cannot compensate for the steepness and irregularity of the current batters.

The lack of consideration of the engineering constraints to landfill liner design is of significant concern, with a higher level of design consideration at this stage of project development expected given the significance of the potential long-term risks and legacies.

PHOTO 1 – CURRENT BATTER CONDITIONS WITHIN LANES/IRONBARK PITS



We trust that this review meets with your current requirements. Please contact the undersigned should you have any queries.

Yours sincerely,

Digitally signed by
Allan Watson

ALLAN WATSON
Senior Principal

ATC Williams Pty Ltd

ATTACHMENT 3

Figure 1 Core koala habitat area - impact area

Attachment 3

Figure 1 Core koala habitat area - impact area c.0.49ha