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18 July 2019

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320 Pitt Street
Sydney NSW 2001

Dear William

Re: Agency Comments on the Concrush Response to Submissions (SSD 8753)

This letter provides a response to the comments provided by Lake Macquarie City Council (LMCC) and the NSW Environment Protection Agency (EPA) on the *Concrush Increase to Capacity Project - Response to Submissions Report* (Umwelt May 2019).

The key points for each aspect raised by LMCC in its letter to the Department of Planning and Environment (DPE) dated 24 May 2019 are identified in **Table 1** along with a response from Concrush. The issues of scenic values and road design were specifically discussed at a meeting on 4 July 2019 between Concrush, Umwelt and LMCC.

The key points for each aspect raised by EPA in its letter to DPE dated 31 May 2019 are identified in **Table 2** along with a response from Concrush.

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Table 1 Comments from LMCC on the Concrush Response to Submissions Report

Key comments	Response
Scenic Values	
The entire perimeter of the site is to have a minimum four metre width landscaped area comprising mass planting of locally endemic tree, shrub and ground cover species.	The requirement for a four metre wide landscaped perimeter along the entire boundary of the site is not practical given the location of some existing and proposed site features. This includes the existing drainage alignment close to the northern boundary of the site and the existing wetland area on the future western boundary. Additionally, the proposed water management system basins and site entry/exits off Racecourse Road have been designed such that they are located on the outer edges of the site to maximise the area within the site that can be used for the proposed project. Concrush will maintain its previous commitment to incorporate landscape planting into the site layout generally as shown in Figures 3.2 and 3.3 in the Response to Submissions (RTS) Report. There is an existing landscape bund along the frontage to Racecourse Road which will be maintained with a proposed landscape bund to be constructed and maintained along the extended frontage of Racecourse Road. This will provide screening from the east which is the direction most likely to provide views towards the site from Racecourse Road or the residential areas of Boolaroo and Bunderra Estate. Additional landscape plantings would be incorporated into the final site layout during the detail design phase. This is likely to include tree plantings adjacent to the wetland area in the south western portion of the site. The potential for tree planting to be incorporated into the swale drain design along the southern boundary will be investigated during the detailed design. As discussed with LMCC on 4 July 2019 the landscape plantings will aim to screen views towards the site, however, the planted areas would not be a minimum of four metres wide. Whilst the width of the landscape plantings will not be four metres they will still meet the same objective. Concrush will use locally endemic species in landscape plantings.
Acoustic Impact	
Any comment from the EPA should be considered in full.	A response to the EPA comments on noise is provided in **Table 2**.

Key comments	Response
Air Quality	
Prior to the issue of the Occupation Certificate, submit to the Principal Certifying Authority certification from a suitably qualified environmental consultant that the existing Air Quality Management Plan has been updated to include the management and mitigation measures detailed in the Environmental Impact Statement (EIS) (Umwelt November 2018) and the Air Quality Impact Assessment (AQIA) (RCA November 2018).	As identified in Section 7.1.2 of the EIS, the existing Concrush Air Quality Management Plan will be revised and updated to reflect the Project changes and to include the management and mitigation measures detailed in the EIS and AQIA. The updated Air Quality Management Plan will be submitted to DPE and certification provided to the Principal Certifying Authority prior to issue of the Occupation Certificate.
At 90 days of operation, engage a suitably qualified environmental consultant to prepare an air quality validation report that confirms that the odour, PM_{10} and $PM_{2.5}$ emissions from the facility comply with the relevant impact assessment criteria at the nearest sensitive receptors.	As the Project is a State Significant Development (SSD) it is anticipated that there will be a condition of approval requiring regular independent environmental audits. The independent environmental audit would address air quality impacts, validation of emission predictions from the EIS and compliance with the relevant impact assessment criteria at the nearest sensitive receptors. If approved, it is anticipated that the operational throughput of the site would gradually ramp up over a period of many months towards the proposed limit of 250,000 tonnes per annum. It is not proposed to undertake an air quality validation report at 90 days of operation as it would be captured as part of the independent environmental audit. Concrush would provide LMCC with a copy of the independent environmental audit report..
Erosion and Sediment Control	
The Concrush Increase to Capacity Project Teralba, NSW Response to Submissions FINAL April 2019 has satisfactorily addressed the item raised in regard to Erosion and Sediment Control in the LMCC Response to EIS dated 14 December 2018.	Noted. No further response required.

Key comments	Response
Road Design	
Appendix E of the Response to Submissions document (April 2019), identifies only a BAL turning treatment is required. However the submission appears to use incorrect figures from Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings (Austroads 2017). Figure 2.26 (b) graph shall be used to determine the required turning treatments, as the speed limit of the road is 80 kph, rather than Figure 2.26 (c).	Better Safety Futures identified that there is a typographical error in the *Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings* (Austroads 2017) which resulted in the incorrect figure being referenced in Appendix E of the RTS. The correct figure reference is 2.26(b) for the existing speed limit of 80 km/h on Racecourse Road. At the meeting with LMCC on 4 July 2019 Concrush identified that a more appropriate speed limit for the section of Racecourse Road in the vicinity of the Concrush site would be 60 km/h. LMCC did not disagree with Concrush on this matter but identified that it was NSW Roads and Maritime Services (RMS) that determined speed limits and that the timeframes involved in a review of speed limits are often lengthy. If the speed limit for Racecourse Road was to be reduced to 60 km/h then the turning treatments identified in the RTS Report would be appropriate. Concrush has identified that in discussions with residents along Racecourse Road the issue of traffic speed is generally their greatest concern.
A CHR(s) and AUL(s) treatment are required at the entry to the development site. Racecourse Road also has a high volume of heavy vehicles (approximately 11%) increasing the risk of rear end crashes involving vehicles entering the site. Therefore turning treatments of CHR(s) and AUL(s) are required to be installed as part of the development. These entry treatments are required to be designed to cater for the largest vehicles expected to enter the site.	The turning treatments identified in the Ausroads 2017 guideline for a road with 80 km/h speed limit and the relevant turning and traffic volumes are a channelised right turn with a short turning lane (CHR(s)) and an auxillary left turn with a short turning lane (AUL(s)) as per Figure 2.26(b). The majority of heavy vehicles accessing the Concrush site do so from the south. This is because the route through Teralba is a more direct route from the majority of the Newcastle/Lake Macquarie area, it is closer to a main road being Five Island Road and also because there is a 4.2 metre height restriction on the railway bridge on Racecourse Road to the north of the Concrush site. LMCC has informed Concrush that it plans to place a 5 tonne weight restrictions on the weir on The Weir Road to the north west of the Concrush site, the access road to Concrush from the north. This would effectively restrict heavy vehicles from accessing the Concrush site from the north. As such, heavy vehicle access will be from the south resulting in a left turn from Racecourse Road into the site and a right turn when exiting the site. During the meeting with LMCC it was agreed that an AUL(s) is an appropriate turning treatment for vehicles turning left into the Concrush site from the south. It was also discussed that a CHR(s) is not warranted as there would not be heavy vehicles turning right into the site following the 5 tonne weight restriction on the weir. It was agreed that a basic right turn (BAR) would be appropriate in this circumstance and that if in the future there was a change such that there was no weight restrictions on the road leading to Concrush from the north then the need for a different right turn treatment into the Concrush site could be investigated. Concrush will engage a civil engineering consultant to design a AUL(s) and BAR for the site entry/exit.
Cycle lane provision (northbound) and shoulder provision (southbound) is required to transition cyclists safely through the treatments.	Cycle lane provisions would be accommodated in the turning treatment design to be developed by a civil engineering consultant to be engaged by Concrush.

Key comments	Response
Council retains the position that permanent drainage structure such as a concrete v-drain with drainage pits and associated piping or K&G with appropriate drainage should be constructed for the full frontage of the facility. Driveway access is to comply with Council Standard EGSD 202 -2 and be constructed of concrete.	As discussed with LMCC at the meeting on 4 July 2019, it is not considered practical to establish kerb and guttering or concrete v-drains along the proposed frontage to Racecourse Road as there are no other existing drainage structures to tie in with. It is not considered practical to design or construct drainage structures for an isolated section of Racecourse Road without consideration of the adjoining land. In the local area the closest kerb and guttered area is within the residential area of Teralba approximately 1.65 kilometres to the south. The Concrush access driveway will be designed to comply with LMCC Standard EGSD 202-2 and be constructed of concrete.
The CHR and AUL treatments and associated signage and linemarking are required to be endorsed by Council's Traffic Facilities and Road Safety Committee (TFC) and approved by Council prior to construction.	The turning treatments designs will be developed by a civil engineering consultant and submitted to LMCC's Traffic Facilities and Road Safety Committee for approval prior to construction.
Site Contamination	
Council concurs with RCA's response to the EPA comments, which confirmed Council's initial review and evaluation of the RCA report, that an EPA accredited Contaminated Site Auditor was not required. The EPA has withdrawn that requirement and is now in acceptance to the report being prepared or certified by an accredited Contaminated Site Consultant.	The RCA report has been certified by an accredited Contaminated Site Consultant.
The PFAS testing suggested by the EPA has also been debated by RCA as unnecessary due to the historic use of the site and lack of evidence to suggest that PFAS was ever used. The EPA has also accepted RCA's response, and PFAS testing is no longer required.	PFAS testing is not required and will not be undertaken.
A Site Remedial Action Plan is to be incorporated into a construction site Environmental Management Plan (EMP) and also the long term Environmental Management Plan for ongoing operations.	As identified in Section 4.5.1.1 of the RTS Report, if the Project is approved Concrush will prepare a Remedial Action Plan (RAP), a Construction Environmental Management Plan (CEMP) and an Operational Environmental Management Plan (OEMP) to be submitted to DPE for approval. The RAP will be incorporated into the CEMP.

Key comments	Response
Sewer Management	
There is no sewer connection point or nearby sewer infrastructure to service the site. An application under the provisions of Section 68 of the Local Government Act 1993 for the installation of a system of sewerage management will be required. In this regard, a pump-out system will be required due to the limited area available after development of the site.	Concrush will apply to LMCC for the installation of a system of sewerage management in accordance with Section 68 of the Local Government Act 1993.
Heritage	
The heritage recommendations contained within the EIS are concurred with and should be applied as conditions of consent.	The heritage recommendations from Sections 6.8.2 and 6.9.3.3 of the EIS will be implemented for the Project.
Section 7.11 Contributions	
Developer contributions are applicable under Council's Section 7.11, (2016) Toronto Plan, which includes levying the development for additional Gross Leasable Floor Area and an annual Haulage levy. The levy for additional Gross Leasable Floor Area is $9.00. The annual haulage levy is $24,050.00 when access along Weir Road is available or $6,045.45 when access along Weir Road is not available (adjusted as applicable for the duration that the payment relates).	Concrush agrees to the identified Section 7.11 contributions.

Table 2 Comments from EPA on the Concrush Response to Submissions Report

Key Comments	Response
Attachment A – EPA Recommended Comments for Approval	
Air	
The premises must be maintained in a condition which minimises and prevents the emission of air pollutants, including dust, from the premises.	Noted.
Activities at the premises must be carried out in a manner that will prevent and or minimise the emission of air pollutants, including dust, from the premises.	Noted.
The proponent must prepare and implement an Air Quality Management Plan (AQMP) for the premises. For all emission sources at the site the AQMP must include: a) Proactive and reactive management strategies; b) Key performance indicators); c) Monitoring method(s); d) Location, frequency and duration of monitoring; e) Record keeping; f) Response mechanisms; and g) Compliance reporting.	Noted. The existing Concrush AQMP would be updated.
Noise	
Construction hours are limited to: a) 7 am to 6 pm (Monday to Friday) b) 8 am to 1 pm (Saturdays) c) c. No work (Sundays and Public Holidays)	Noted.
All feasible and reasonable noise mitigation measures must be applied to manage construction and operational noise impacts at the premises. Noise mitigation measures are outlined in the Environmental Impact Statement (Umwelt, 9 November 2018) and Appendix H Noise Impact Assessment (RCA Australia (RCA ref 13155-601/4 November 2018)).	The construction and operational noise mitigation measures identified in Section 7.1.1 of the EIS and Section 8.2 of the Noise Impact Assessment will be implemented for the Project through a Construction Environmental Management Plan and revised Noise Management Plan.

Key Comments	Response
Written confirmation from residents in NCA1 to DPE is recommended to confirm their position on the proposed noise mitigation management measures as referenced in the RtS section 4.1.1.2.	Written confirmation regarding noise mitigation measures has been received from one of the two residents in NCA1 to date. Please see **Attachment 1** to this letter. Umwelt, on behalf of Concrush, have contacted the other resident in NCA1 and they have indicated that they will respond in writing as requested. At the time of preparing this letter no written confirmation has been received from the resident despite several follow up requests.
Activities are not permitted to be carried out at the premises during night time periods. Note: Time of day is defined in the EPA's Noise Policy for Industry guidelines as follows: • Day: 7 am to 6 pm Monday to Saturday; 8 am to 6 pm on Sundays and Public Holidays. • Evening: 6 pm to 10 pm. • Night: the remaining periods.	As identified in Section 3.1 of the RTS Report, Concrush is not seeking to operate during the night time period, 10 pm to 7 am.
Noise barriers on the eastern and southern perimeter of the premises must be completed prior to the commencement of construction and must be maintained during operations.	Section 6.2.6 of the EIS identified that no residences will experience noise levels above the relevant criteria during the construction phase. The construction noise predictions did not include mitigation from noise barriers on the eastern and southern perimeter of the premises as these are proposed for the operational phase. The noise barriers on the eastern and southern perimeter of the premises will be established during the construction phase and as such will not be completed prior to the construction phase.
Only one of the following activities, and associated plant, may be carried out at any time during the evening period: a) Screening and stockpiling of material; or b) Loading and dispatch of trucks. Note: This condition applies when the site is operational (I.e. when the licence has been varied to permit operations).	As identified in Section 3.1 of the RTS Report, only one activity being 'screening and stockpiling' or 'loading and dispatch of trucks' would be carried out in the evening.
Contaminated Land	
A Data Gap Investigation (DGI) is required during construction to establish groundwater quality and hydrology at the premises.	Noted.
The DGI must include the installation and investigation of a third groundwater well.	Noted.

Key Comments	Response
A summary report of the DGI must be prepared and submitted to the EPA prior to the commencement of operations.	Noted.
The proponent must prepare and implement an Environment Management Plan (EMP) and Remedial Action Plan (RAP) to manage any residual contamination throughout the construction phase.	Noted.
The EMP and RAP may be included in the premises' Construction Environmental Management Plan (CEMP).	Noted.
The proponent must engage a certified consultant to prepare a Section A Site Audit Statement to confirm suitability of the land for its proposed use.	Noted.
The Section A Site Audit Statement must be submitted to the EPA prior to the commencement of operations.	Noted.
Water	
Prior to commencement of operations, the proponent must prepare a Discharge Impact Assessment (DIA). The DIA must: a) be prepared by a suitably qualified and experienced expert/s; b) demonstrate that all practical and reasonable measures have been investigated and will be implemented to avoid, minimise or mitigate water pollution impacts; c) estimate the expected volume and frequency of discharges from each proposed discharge point; d) characterise the expected quality of discharges from each proposed discharge point in terms of the concentrations and loads of all pollutants potentially present at levels that pose a risk of non-trivial harm to human health or the environment; e) assess the potential impact of discharges on the environmental values of the receiving waterways with reference to the relevant Australian and New Zealand Guidelines for Fresh and Marine Water Quality guideline values; and f) where relevant propose changes to the water management system to address potential impacts and revise the discharge characterisation and impact assessment.	Concrush commit to preparing a DIA but does not agree that this should be prior to operations and are proposing an alternate timeframe. If the Project is approved, Concrush would undertake the monitoring required to inform a DIA during the construction and initial operational phases. The reasons for this are as follows: • The length of time required to collect sufficient water quality data (in particular metals) to obtain results across a suitable range of rainfall events is highly variable and may potentially take a substantial period of time which may unnecessarily delay commencement of operations. • The retention capacity of the proposed sediment basins and leachate dam will immediately result in the Project reducing the volume and frequency of discharges from site and therefore off-site impacts on water quality will be improved. • The most appropriate way to assess the magnitude of the positive impact and whether further mitigation measures are required is to monitor the proposed water management system once in place. This will allow enhanced calibration of the site runoff model utilising known runoff volumes to site water storages from known rainfall events (using site monitored rainfall data).

Key Comments	Response
	• Concrush is committed to investigating and implementing additional mitigation measures should there be the potential for spills from the Water Management System to contain pollutants at non-trivial concentrations. • Concrush commit to ongoing water quality monitoring of existing site runoff while the Project is in the detailed design and construction phase. This will include water quality monitoring of runoff discharging from the north west corner of the site throughout a significant rainfall event to further understand pollutant concentrations generated across the rainfall event.
Prior to commencement of operations, the proponent must prepare a Discharge Verification and Mitigation Plan (DVMP) to verify the quality of operation stage discharges and identify management triggers and responses. The DVMP must: a) be prepared by a suitably qualified and experienced expert/s; b) detail methods to determine the frequency and volume of discharges; c) detail sampling methods to verify the quality of discharges, specifying: i. the sampling location/s; ii. the sampling frequency, number and conditions (ensuring sampling is timed to be representative of operational conditions); iii. the analytical suite based on a risk assessment of the types of materials that will be processed and stored onsite, the pollutants that could be mobilised from these and monitoring results for similar sites (e.g. the existing development); iv. identify management triggers to be applied to the characterisation and ongoing monitoring results; v. identify mitigation measures to be implemented in response to these triggers (e.g. increasing the size of sediment basins, at-source pollution controls, additional or alternative water treatment measures); and vi. specify the timeframe for implementation of mitigation measures.	Noted.
Within 12 months of commencement of operations, the proponent must provide a Discharge Verification and Mitigation Report (DVMR). The DVMR must: a) be carried out by a suitably qualified and experienced expert/s; b) be prepared consistent with the methodology set out in the DVMP; and c) detail any exceedances of management triggers and associated mitigation measures implemented.	Noted.

Key Comments	Response
The DIA, DVMP and DVMR must be submitted to the EPA for review. Note: Timelines for submission of reports to the EPA will be negotiated via a licence variation.	Noted.
There must be no discharges to waterways except as a direct result of rainfall in excess of the design capacity of the final water storages. The final design capacity and equivalent rainfall depth will be determined based on assessment and the DIA.	Noted.
All wastewater storages, with the exception of the garden and wood waste leachate dam and constructed wetland, must be lined consistent with the design specifications for leachate dams recommended by the *Environmental Guidelines Solid Waste Landfills* (EPA, 2016).	Noted.
Garden and wood waste leachate must not be reused outside of the leachate barrier system. This condition may be reviewed by the EPA, subject to the applicant demonstrating that the potential water pollution risks will be appropriately managed.	Concrush do not propose to use untreated leachate outside of the green waste catchment. Concrush is seeking clarification from EPA as to whether treated leachate from the constructed wetland can be reused outside of the green waste catchment. It should be noted that the expanded Concrush site will be surfaced with compacted road base. The road base material to be used has been laboratory tested for permeability (or hydraulic conductivity) with results indicating a permeability ranging from $9x10^{-9}$ to $1x10^{-8}$ m/s. This is less than the in-situ permeability of $1x10^{-7}$ m/s required by the *Environmental Guidelines for Composting and Related Organics Processing Facilities* (NSW Department of Conservation, 2004) for the Green Waste catchment leachate barrier system.
No more than 200 tonnes of Garden and Wood Waste may be stored at the premises at any one time.	Noted.
No more than 5,000 tonnes of Garden and Wood Waste may be processed at the premises per annum. Note: "per annum" is defined by the anniversary date of an environment protection licence.	Noted.

Key Comments	Response
Attachment B – Assessment of Water Management in Response to Submissions	
Stormwater Management	
1.1 Treatment Sediment retention basins are designed to capture and treat stormwater containing 'uncontaminated' sediment. Monitoring from the existing site indicates runoff contains elevated metal concentrations. Chromium VI ranged up to 53 µg/L, 53 times the guideline value, and copper ranged up to 76 µg/L, 54 times the guideline value. The RtS indicates storage and processing of waste concrete is the source of these pollutants. Further assessment is required to determine whether the proposed stormwater management system will adequately treat runoff or if alternative and/or additional measures are required to minimise and mitigate potential impacts (e.g. to reduce metal concentrations).	Concrush is continuing to monitor water quality following rainfall events to inform the DIA which has been identified by EPA as a likely condition of approval for the Project. The further assessment will be undertaken as part of the DIA and reported in the DVMR.
1.2 Sediment retention basin sizing The EPA indicated that the type C sediment retention basins, proposed in the EIS, may not be appropriate or adequate to treat runoff that contains pollutants other than coarse sediment. The RtS now proposes type D sediment retention basins, sized to treat runoff from the 5-day 85th percentile rainfall event, citing the recommendations of the Blue Book (*Managing Urban Stormwater: Soils and Construction, Volume 1* [Landcom, 2004]). Landcom (2004) provides guidance on stormwater management during the construction-phase of urban development, which may not be appropriate for longer-term operation-phase stormwater management. *Managing Urban Stormwater: Soils and Construction, Volume 2b Waste Landfills* (DECC, 2008) provides relevant guidance for ongoing stormwater management at the proposed waste management facility. DECC (2008) recommends that where the duration of disturbance is more than three years and the receiving environment is not sensitive, Type D sediment retention basins should be designed to achieve the required water quality for storms up to the 90th percentile 5-day storm event (i.e. 51.8mm at Newcastle). The proposed basins appear undersized for ongoing management of sediment laden stormwater.	The proposed sediment basins have been revised in line with *Managing Urban Stormwater: Soils and Construction, Volume 2b Waste Landfills* (DECC, 2008). Type D sediment retention basins are proposed with capacity to accommodate the runoff from a 5-day storm 90th percentile event (i.e. 51.8mm at Newcastle). The Revised Universal Soil Loss Equation (RUSLE) was applied to size the sediment storage zone assuming a six month sediment removal frequency.

Key Comments	Response
1.3 Wastewater storage liners It is unclear whether the sediment retention basins would be lined. The basins would receive leachate overflows and contaminated runoff from waste processing and stockpiling areas. The RtS indicates the wastewater will contain a range of pollutants, including nutrients and metals. Wastewater storages, such as the proposed basins, should therefore be lined consistent with the design specifications for leachate dams recommended in the *Environmental Guidelines Solid Waste Landfills* (EPA, 2016).	The two proposed sediment basins will be lined generally in accordance with the *Environmental Guidelines Solid Waste Landfills* (EPA, 2016) to achieve the required hydraulic conductivity of $1x10^{-9}$ m/s. A leachate collection layer/system is not proposed for the two proposed sediment basins. The proposed leachate dam liner would be designed to achieve a hydraulic conductivity of $1x10^{-14}$ m/s as identified in the *Environmental Guidelines for Composting and Related Organics Processing Facilities* (NSW Department of Conservation, 2004).
1.4 Discharge impact assessment and verification The sediment retention basins would be dewatered to the stormwater reuse system and no controlled discharges to waterways are proposed. This partially mitigates the water pollution risks, however, managed overflows would occur as a result of rainfall in excess of the design capacity of the basins and these are likely to carry a range of pollutants. The RtS does not adequately assess the potential impact of these discharges. Table 4.5 of the RtS estimates concentrations of nitrogen compounds and total phosphorus from SD2. These do not include all pollutants expected to be present at non-trivial levels (e.g. metals) and discharges from SD1 are not characterised. The RtS does not assess whether the discharges will maintain or restore the environmental values of the receiving waterway. A discharge impact assessment is required to ensure residual water pollution risks are appropriately managed. If the development is approved, treatment performance would need to be verified once operational and where necessary mitigation measures implemented to address potential water pollution risks.	As noted above, Concrush is continuing to monitor water quality following rainfall events to inform the DIA. Once constructed, the retention capacity of the proposed sediment basins and leachate dam will immediately result in the Project reducing the volume and frequency of discharges from site. A DVMP will be prepared prior to commencement of operations with a DVMR prepared within 12 months of commencement of operations.

Key Comments	Response
Leachate Management for Garden and Wood Waste	
The EPA previously commented that the garden and wood waste leachate could pose risks to water if it is reused outside the green waste leachate barrier system. The EPA recommended that the applicant considers options to manage this leachate separately, such as increasing the capacity of the leachate dam and storing and processing green waste undercover. The RtS considers roofing over the green waste area, indicating this would be cost prohibitive and does not vary the leachate management measures proposed in the EIS. Monitoring results indicate runoff from the existing site contains elevated nutrient concentrations. Organic waste is likely the main source of these pollutants. The median oxides of nitrogen (nitrate + nitrite) concentration was 18mg/L and ranged up to 74mg/L, 1,850 times the Australian and New Zealand Guidelines for Fresh and Marine Water Quality guideline value (40|jg/L). Treated leachate could contain elevated nutrient concentrations as the wetland treatment performance is uncertain. Given the hardstand surface will be composed of recycled roadbase (which is likely to be highly permeable), leachate reuse outside the leachate barrier potentially poses risks to groundwater and adjacent waterways. The applicant would need to demonstrate that water pollution risks would be appropriately managed before leachate reuse outside the leachate barrier system could be considered.	It is not proposed to use untreated leachate outside of the green waste catchment. The existing Concrush site is surfaced with compacted road base as will be the expanded Concrush site. The road base material has been laboratory tested for permeability (or hydraulic conductivity) with results indicating a permeability ranging from $9x10^{-9}$ to $1x10^{-8}$ m/s. This is less than the in-situ permeability of $1x10^{-7}$ m/s required by the *Environmental Guidelines for Composting and Related Organics Processing Facilities* (NSW Department of Conservation, 2004) for the Green Waste catchment leachate barrier system.

Could you please confirm that the next stage will be receipt of draft Conditions of Approval for review and comment by Concrush.

Please do not hesitate to contact the undersigned on 1300 793 267 should you require clarification or further information.

Yours sincerely

Lachlan Sweeney
Senior Environmental Scientist