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Your Ref: 180003

Our ref: 2019-011\Terra Firma Fertilisers RFI Response_16Sept 2020

Coordinator General

Department of State Development, Manufacturing, Infrastructure & Planning

State Development Areas

PO Box 15517

City East QLD 4002

Via email

16th September 2020

**BROMELTON POULTRY COMPOSTING FACILITY
359 SANDY CREEK ROAD, BROMELTON QLD 4285 (LOT 4 RP45231)
RESPONSE TO REQUEST FOR INFORMATION (RFI)
MATERIAL CHANGE OF USE
ERA 53 COMPOSTING AND SOIL CONDITIONER MANUFACTURING & ERA 33 CRUSHING, MILLING,
GRINDING & SCREENING**

Dear Bec & Sally,

On behalf of RJ & TM Earsman SMSF & Terra Firma (Aust) Pty Ltd (the Applicants), please find following a summary of the responses to the Request for Further Information (RFI) dated 2nd April 2019, extracted from the supporting reports also enclosed/attached.

The enclosed/attached reports include;

1. Basic Ecological Assessment (by Natura Pacific);
2. Revised Site-based Environmental Management Plan (by Drapper Environmental Consultants);
3. Revised Stormwater Management Plan & Flood Report (by Synergy Solutions & Drapper Environmental Consultants);
4. Odour Assessment letter (by Astute Environmental);
5. Noise Assessment letter (by Simpson Engineering Group);
6. Revised Layout & Civil Earthworks plans (by ACS Engineers);
7. Traffic Impact Assessment Letter (by Cambray Consulting);
8. Planning Report v4 (16/9/20) (by ACS Engineers);
9. Biosecurity Management Plan (by Terra Firma)

The table following collates the RFI items from the two requests and itemises them as "A#" for those from the Coordinator General, and "B#" for those from the referral agency requests.

No.	Issue	Information requested	Response
A1	Manufacturing process	<p>The proponent is requested to update the report titled ‘<u>Planning report</u>’, <u>revision 2</u>, prepared by ACS Engineers and dated 4 March 2019 (Planning report), to provide additional details on the following aspects of the manufacturing processes:</p> <ul style="list-style-type: none"> • raw material point-of-origin • raw material consumption per annum • total throughput (tonnes/annum) • windrows: <ul style="list-style-type: none"> ○ frequency of windrow turning i.e. how many turns during the 8-week processing period ○ duration of windrow turning (the length of time to turn one 720m³ windrow and time uncovered per day to turn windrow) ○ maximum number of uncovered windrows at any given time • internal operations, such as <ul style="list-style-type: none"> ○ interrelationships between work areas (what is occurring in each of the areas of the facility and sequence, including workshop, undercover composting, manufacturing and storage) ○ mixing, pelletizing and packaging of the composted material and machinery associated with these processes ○ function of the storage building and capacity (i.e. is it storing unpackaged material or packaged end-product) 	<p>For details on the manufacturing process, please refer to the Planning Report (v4, 15/9/2020), Section 3.2: Proposed Use and Manufacture Procedures and Section 4 of the SBMP.</p> <p>The raw material (poultry manure & litter) is sourced from Scenic Rim farms.</p> <p>The Raw material consumption per annum is estimated to be approximately 40,000 m³ when the site is fully developed.</p> <p>The manufacturing process evaporates a percentage of the moisture such that the bulk density of the finished product is ~500 kg/m³. It is estimated, therefore that total throughput (tonnes/annum) of saleable product will be approximately 20,000 tonnes/annum when the site is fully developed.</p> <p><u>Windrows</u></p> <p>Under the revised proposal, composting of the raw material will be completed within the composting shed. Therefore, there will be no uncovered windrows.</p> <p>Composting will occur on an 8-week process. The material would be turned ~4 times depending on the condition of the material. Refer to SBMP for the detailed process and considerations in relation to the composting process. Composted material will then be distributed from the composting shed to the packing shed via a closed/covered system.</p> <p><u>Internal Operations</u></p>

		<ul style="list-style-type: none"> • proposed internal manoeuvring and movement (see information request item 18) Enclosure 1: Coordinator-General request for additional information Page 2 of 11 • details of the dust housing and storage shed (future) included on plan titled 'Detailed site layout', reference ACS-DWG-180003-GEN, Revision E (1 of 19) (e.g. function, access, materials etc.) • location, timing and method to test initial moisture content (e.g. before or after delivery vehicle unloading) to determine if the raw material must be returned to the supplier • hazards and risks, including but not limited to health, fire, reactivity explosivity, associated with: <ul style="list-style-type: none"> ○ composting, manufacturing and processing fertiliser composting, and ○ storing noxious or hazardous materials and chemicals on-site. 	<p>Interrelationships between work areas - The Bromelton facility layout replicates the applicants shed layout from the existing facility in Beaudesert. The Composting shed (shown on plan ACS-DWG-180003-GEN.E) receives the raw material. The poultry litter is composted for approximately 8 weeks, blended with the required additives to satisfy industry standards for the product. Once the composting process is complete, it will be transported into the Manufacturing shed (shown on plan ACS-DWG-180003-GEN.E).</p> <p>The Processing Shed contains the screening, blending, pelletizing and bagging equipment that forms part of the pelletizing process of turning the composted loose product into pellets. Pellets are then packed into the various bag sizes of 5kg, 15kg, 25kg or 1 tonne bulk bags.</p> <p>The Storage Shed (shown on plan ACS-DWG-180003-GEN.E) – Contains the plastic rolls of film and other raw ingredients in bulk bags, as shown in Appendix F of SBMP. The storage shed also contains pallets, pallet racking and finished Terra Firma products awaiting dispatch. Maximum capacity of the storage shed is approximately 500 tonnes.</p> <p>Internal Manoeuvring and Movement – Semi-trailer movement is shown on Drawing number ACS-DWG-180003-GEN.E dated 25/6/2020. The proposed traffic flow requires the trucks to reverse into the Composting shed to deliver the raw product. Once empty, the trucks can then drive out of the shed and off the site. It is unlikely that multiple trucks will be delivering product simultaneously, however, it will</p>
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			<p>be a site requirement that they check-in at the office before proceeding to the Composting shed. This eliminates the potential for opposing trucks to pass on the ramp to the Composting shed. Traffic within the site will be limited to 20km/h to reduce the potential for vehicles leaving the access ramp into the drainage corridor adjacent the rail corridor.</p> <p><u>Dust Housing</u></p> <p>A Dust collection and suppression system will be implemented in the Composting Shed. This will consist of an air extraction system and baghouse to capture any dust present in unacceptable levels in the Composting shed. The Planning Report Pictorial Appendix shows the dust houses at the current Terra Firma site. This system will be replicated at the Bromelton facility.</p> <p><u>Initial Moisture Content testing</u></p> <p>The Applicant has been receiving raw materials from the same Suppliers at the Beaudesert factory for more than 10 years and have contractual arrangements in place that will be transferred to the Bromelton facility. Trucks delivering Raw material are weighed at the onsite weighbridge, and compared with an inspection of the material. Loads that exceed the anticipated mass (i.e. High moisture content) will be manually tested to identify if leachate can be extracted. Raw material with high moisture content (i.e. Producing leachate) will be refused and sent back to the Supplier.</p> <p><u>Hazards and Risks</u></p>
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			<p>A full list of the Hazards and Risks are outlined in the Site-based Management Plan (SBMP). As indicated previously, an extraction & dust suppression system will be implemented to reduce the potential for explosive concentrations. Health warnings and Staff Training are outlined in the SBMP. Section 6.6 of the SBMP refers to the type of stored noxious or hazardous materials and chemicals on-site. These will be stored according to their MSDS and manufacturer's guidelines.</p>
A2	Staging	<p>The proponent is requested to</p> <ul style="list-style-type: none"> • provide further details in relation to site operations and construction during the various stages of development • if staging is proposed, ensure plans clearly identify location and extent of works for each stage • update supporting technical reports to reflect staging, as required. 	<p>The Planning Report has been revised to reflect the new proposed layout and construction program. The Applicant intends to develop the Composting Shed and Office as part of a single Stage. The Processing Shed and Storage Shed will be developed as part of Stage 2. In the interim, the composted material will be transported to the Beaudesert facility for packaging. This is reflected in the supporting documentation.</p>
A3	Perimeter and compound bunds	<p>The report titled 'Site based environmental management plan, prepared by Terra Firma Fertilisers Pty Ltd and dated 4 March 2019 (SBEMP report) and the report titled 'Site based stormwater management plan, prepared by ACS Engineers and dated 25 February 2019 (SWMP report) refer to the construction of bunded compounds (for windrows and hazardous chemicals) and permanent perimeter bunds, the Planning report and plans of development do not</p>	<p>ACS-DWG-180003-GEN03.A indicates the perimeter and diversion drains proposed, and these are also included in the Stormwater Management Plan (SWMP). Modelling indicated that surface runoff from Sandy Creek Road was impacting on the property and to remedy this, a diversion drain was added along the western boundary. Similarly, site inspection indicated that there was a broad, undefined overland flow path from the rail corridor generally through the centre of the site, though it was clear that historical clearing and grazing had highly modified</p>

		<p>provide sufficient information on the proposed bunding.</p> <p>The proponent is requested to</p> <ul style="list-style-type: none"> • submit a plan clearly illustrating the location, height, width and length of the proposed bunds • provide details on bund construction materials, containment capacity and corrective actions for bund wall failure • identify the changes in flood water behaviour arising from the displacement and/or redirection of overland flow / flood water as a result of bunding. 	<p>it. To ensure upstream flows were not obstructed, a new diversion drain has been designed along the rail boundary.</p> <p>The drain along the Sandy Creek Rd boundary is designed to be 3m base width with 1 in 2 side batters, longitudinal grade varies from 2% up to a maximum of 10%. Therefore, the drain will be rock lined to prevent scour. The diversion drain alongside the rail corridor is designed to be 5m base width with 1 in 2 side batters, and a 3% longitudinal grade. This drain will be protected with turf covering/hydoturf or dense planting, to minimise maintenance. Modelling confirms that the proposed diversion drains have negligible impact on flood waters both downstream and upstream. Please refer to the SWMP for more details, and ACS DWG ACS-180003-GEN-04A for more details.</p>
A4	Power pole	<p>The potential need to relocate the power pole proximate to the access point was raised during pre-lodgement discussions. The matter has not been addressed in the application material.</p> <p>The proponent is requested to provide details in relation to the requirement to relocate the power pole (e.g. site access relocation, impact on sightlines). Details of any advice or feedback received from the service provider should be submitted.</p>	<p>The site access has been adjusted and relocated south of the originally proposed location. The new access location eliminates any conflicts with existing infrastructure, including power poles running alongside the property boundary. Please refer to the updated access plans (drawing ACS-DWG-180003-GEN-05A).</p>

A5	Hours of operation	<p>The report titled Environmental Noise Report, prepared by Simpson Engineering Group and dated 28 November 2018 (Noise report) states the future uses proposed by the proponent comprise the relocation of existing manufacturing operation which is a 24-hour operation however, no other reference or statement is provided in relation to the proposed hours of operation.</p> <p>The proponent is requested to</p> <ul style="list-style-type: none"> • confirm the proposed hours of operation • provide details of the proposed night-time activities and provide justification as to the necessity for night-time activities • provide an assessment of the associated noise generating activities, including movement of heavy vehicles, use of machinery, and pelletizing and packaging processes. (see item 12) 	<p>The hours of operation and proposed night-time activities are outlined in Section 3.2 of the Planning Report. The Composting activities are proposed to operate 24 hours per day.</p> <p>Night-time activities include the operating of the pelletising equipment and a forklift, will all be undertaken within the Manufacturing shed. No heavy vehicles will be used outdoors during night shifts, and raw material deliveries will not be accepted at night. The fertiliser industry is seasonal, therefore, to meet demand in the busier months, dual shifts are required. The proposed development is within a State Development Area identified for industrial activities, and adjacent to industrial land uses that currently operate 24 hours per day, therefore the impacts of the proposed activities are considered minimal.</p> <p>The Environmental Noise Report & Letter, prepared by Simpson Engineering Group (28 November 2018, 4 August 2020) concludes that the daytime noise levels comply with the 40 dB(A) objective, and the evening noise level objective will be met. The night-time noise level may be exceeded by the dust suppression system, however, additional silencers can be installed if this is confirmed onsite. The dust extraction system will be located on the eastern side of the sheds to shield the closest sensitive receptor. It should be noted, however, that the closest receptor (house at A.J. Bush) is not used for residential purposes.</p>

A6	Lighting	<p>The proponent is requested to submit details on the proposed lighting, including use, direction, duration, and management of potential light spill, for proposed night-time activities.</p>	<p>The Planning Report addresses the <u>lighting details in both Section 3.3 Site Design and 8.3 SRRC Codes (SO17)</u>. Majority of the proposed night-time activities will occur indoors and therefore eliminate the possibility of any obtrusive lighting. All carpark and security lighting are to be designed in accordance with AS4282 (1997) - Control of the Obtrusive Effects of Outdoor Lighting. As indicated above, the proposed development is within a State Development Area identified for industrial activities, therefore, some night-time lighting is to be expected. The Applicant has been advised that the house on the A.J. Bush site is not used for residential purposes, and therefore lighting impacts are expected to be minimal.</p>
A7	Industrial building	<p>The Planning Report notes the industrial building will be constructed of masonry block, concrete walls and colorbond with concrete floors. Given that undercover composting is proposed within the building envelope, the proponent is requested to</p> <ul style="list-style-type: none"> • confirm if the undercover composting area, workshop, manufacturing workshop and the storage area are located on a single concrete slab • submit plans illustrating elevations, materials, fenestration (if any), articulation (horizontal and vertical), ventilation (output locations) of the industrial building. 	<p>Section 3.3 of the <u>Planning Report</u> outlines the details of the proposed sheds. The footprints of the industrial buildings are shown on the proposed plans. The floors of all industrial buildings including the workshop, staff amenities, manufacturing shed, storage shed & undercover composting shed will be constructed in concrete and stepped through the different work areas within the sheds. Shed infrastructure will be constructed from a combination of Masonry Block, Concrete walls and Colourbond. Examples of the building type are shown in Appendix 8.5 of the Planning Report.</p>
A8	Storage shed		

		<p>The footprint of a storage shed (future) has been shown on a number of plans submitted for the application. This storage shed is not referred to elsewhere in the application material.</p> <p>The proponent is requested to provide details regarding the future storage shed, including what the shed will be storing, access to the shed and elevations.</p>	<p>The proposed plans show the footprint of the Composting building, the Processing building and Storage building. The Planning report contains details of the buildings.</p>
A9	Waste management	<p>Section 4.1 of the <u>Planning report</u> identifies plastic, paper, general manufacturing and general office waste as the types of waste generated by the site. The report also states solid waste will be removed from the site by a licensed contractor and that scrap metal or steel will be recycled. Based on the content of the application material, other waste sources may include noxious and hazardous chemicals, natural products, mineral and synthetic inputs.</p> <p>The site layout drawings have not identified a location and access for waste storage and collection.</p> <p>The proponent is requested to</p> <ul style="list-style-type: none"> • Provide details on the type of waste and collection access should be included • Identify on a revised site layout plan the location of waste storage and collection areas • Confirm there is zero spoil / wastage arising from the manufacturing process or 	<p>The <u>Terra Firma SBMP, Section 6.7</u> details the Waste Management Plan. Please refer to the updated Site layout plan (<u>ACS-DWG-180003-GEN-01, 1A and 1B</u>) for location of the designated waste storage and collection areas. The SBMP outlines the anticipated wastes from the activity and management procedures.</p> <p>A licensed waste collection contractor will be engaged to regularly empty the waste and recycling bins from the storage areas.</p> <p>All raw material delivered into the Composting shed is processed and delivered to the Manufacturing/ Packaging shed. There is no waste product from this process.</p> <p>Hazardous chemicals, cleaning product containers, and any other noxious chemical containers will be disposed of via a trade waste contractor, in accordance with manufacturer's guidelines.</p>

		provide details on the potential waste (liquid or solid, separation, containment etc.).	
A10	Materials and other inputs	<p>The Planning report states the compost will either be directly pelletized into pellets/granules/fines or will be blended with other naturally occurring products and minerals or synthetic inputs to achieve the guaranteed nutrient analysis.</p> <p>The proponent is requested to provide further details about the 'other inputs' specified in the Planning report including type, quantity, hazards or risks associated with alternate inputs, storage, delivery frequency, waste generated by alternate inputs.</p>	<p>As previously submitted, Terra Firma produces a number of products, with over 80% certified as organic. A list of these inputs is now listed in Table 2, Section 3.2 of the Planning Report. Inputs may include Feather meal, Bone meal, Meat meal, Sulphate of Potash, Powdered Seaweed, Lime, Gypsum, Trace Mineral Elements. The hazards and risk analyses for these inputs is detailed in Section 6.6 of the SBMP.</p> <p>Any waste generated from these inputs (which is predominantly plastic or woven bags) is addressed in Section 6.7 of the SBMP. Materials that can be recycled will be separated and collected by a recycling contractor.</p>
A11	Noxious and hazardous materials	<p>The Planning report and the SBEMP report (Hydrocarbons and Chemical Management Plan) state noxious or hazardous materials and chemicals will be safely stored at all time however no details are provided in relation to what noxious or hazardous materials will be stored on site and where they will be physically stored.</p> <p>The proponent is requested to identify what noxious and hazardous materials and chemicals are proposed to be stored on-site.</p>	<p>The Section 6.6 of the SBMP describes the types of Hydrocarbons & Chemicals that may be stored onsite including:</p> <ul style="list-style-type: none"> • Diesel fuel (e.g. fuel for stationary and mobile engines) • Oils and greases (e.g. lubricants and hydraulic oils for stationary and mobile equipment) • Miscellaneous chemicals (e.g. weedicide, paint, solvents). <p>Bulk fuel will be stored in a covered, bunded area to capture any incidental leaks or spills. A spill kit will be co-located to ensure any larger spills during re-fuelling are adequately captured and cleaned up. Smaller</p>

			volumes of lubricants and chemicals will be stored in a locked, Hazardous Items Cabinet and appropriately marked. These items are proposed to be stored in the Workshop/Packaging Shed.
A12	Noise assessment	<p>The Planning report states during peak demand times processing and packaging of product may occur at night. The Noise report states night-time noise level is likely to be exceeded based on reading taken at the current facility. In addition, the Noise Assessment report has assumed operation will take place within an industrial building thereby generating no external noise, with dust collectors (situated externally) the main noise source associated with these operations.</p> <p>The proponent is requested to</p> <ul style="list-style-type: none"> • provide further details to demonstrate how activities within the industrial building will not generate external noise or that noise generated will be within an acceptable range (e.g. fully enclosed, truck arrivals, shed opening, pelletising / packaging machinery) • provide an assessment of the potential noise impacts during the night-time peak periods and provide mitigation measures to address impacts arising from these night time operations during peak periods. 	<p>Further information regarding the noise assessment is detailed in the Noise Report prepared by Simpson Engineering Group, dated 4th August 2020.</p> <p>The Noise report predict daytime operations of the proposed facility fall within acceptable levels. Activities occurring within the Manufacturing shed, Composting shed, and Storage shed at night are all performed in fully enclosed sheds. There are no incoming or outgoing raw material trucks at night. The Noise report concludes that the night-time noise from the dust extraction system will be <20dBA at the nearest sensitive receptor, 600m south of the proposed facility.</p>
A13		The report titled 'Odour Assessment Report and Recommendations',	The revised proposal fully encloses the Composting activities within the

	Odour assessment	<p>prepared by Astute Environmental Consulting and dated 4 December 2018 (Odour report), states the operator’s proposed moisture content of the windrows is to be 20% to minimise odour emissions, and that the windrows will have a base width of 6 metres, 60 metres long and 3m high.</p> <p>Page 15 of the SBEMP (Air Quality (Dust) Management Plan) states the operator’s specification is to maintain the windrow moisture content in the range of 30 – 40% and recommends to limit the height of the windrows to less than 6 metres (nearly double the height proposed in the Odour Report). Further, page 30 of the SBEMP (Odour Management Plan) goes on to stipulate that consideration is to be made to maintain appropriate windrow moisture content of less than 60% while gradually adding dry material to avoid the generation of odorous compounds associated with anaerobic decomposition.</p> <p>The proponent is requested to •</p> <ul style="list-style-type: none"> • provide details on the proposed windrows to address the inconsistencies in the application material • confirm the findings and recommendations of the Odour report are relevant to the proposed operations, or update as required. 	Composting Shed. Subsequently, the discrepancies regarding the windrow dimensions is removed. The revised Odour Assessment letter from Astute Environmental (dated 4 August 2020) concludes that the revised proposed offers a lower odour risk than the previous design.
A14	Consistency of information	The proponent is requested to clarify and provided amended documentation to ensure consistency	The discrepancies between the SWMP and the Planning Report have been remedied.

		<p>between the Planning report and technical reports, in relation to the below.</p> <ul style="list-style-type: none"> the SWMP report states the outdoor composting area is 12,094m² whereas the proposed plans of development show the outdoor composting area is 13259m². Page 4 of the SWMP report states the current fraction impervious of 0% will increase to 23% for Catchment A, however, Table 1 – Catchment Characteristics indicates that the increase between pre and post development is only 10%. Plans referenced ACS-DWG-180003- SECMP, revision A (11 of 19) and ACS-DWG-180003- SECMP, revision A (12 of 19) show a void in the undercover manufacturing and processing facility that has not been shown on any other plan or documented in the planning report. 	<p>The revised SWMP models the hydrology and hydraulics including the impervious fraction of the Sandy Creek Road as a pre-development case, and then adds the roof and hardstand/road areas assuming 100% impervious surfaces.</p> <p>From a stormwater quality perspective, the MUSIC modelling has been based on the proposed development area only, not the entire site. Since a large proportion of the site will remain undeveloped, it is unreasonable to require standard water quality objectives (80% TSS, 60% TP and 45% TN load reductions) on landuse that will not be modified. Therefore, the developed areas have been detailed as;</p> <ul style="list-style-type: none"> 0.496Ha Roof; 0.854Ha Hardstand/road; and 0.15Ha Ground;
B1	Sediment and leachate pond	<p>The application material provides insufficient detail regarding outflow design details of the sediment and leachate ponds relative to the existing or designed 1% AEP flood line. Further, the application material provides insufficient detail on the functioning of the sediment and leachate ponds particularly regarding how each pond will treat its contents and what water quality standards of-release are being proposed.</p> <p>The proponent is requested to provide:</p>	<p>The Composting activities are now proposed to be fully enclosed. Therefore, the need for a leachate basin is removed. However, the SWMP describes a requirement for a detention basin to maintain pre-development discharge flowrates. Since the site is proposed to be developed from a predominantly pervious use, to a predominantly impervious use, a 1,248m³ detention basin is required to mitigate all flows up to the 1% AEP event.</p> <p>MUSIC modelling for stormwater quality improvement indicates that a 322kL rainwater tank and 130m² bioretention</p>

		<ul style="list-style-type: none"> • The sediment basin and leachate pond outflow design details (AHD), relative to both the existing and designed 1% AEP flood line • Details on the expected levels of contaminants both entering and exiting the sediment and leachate ponds • Details on the treatment processes for the sediment and leachate ponds, and • The proposed water quality standards-of-release for the sediment and leachate pond. <p><i>Note: Scenic Rim Regional Council advise the use of a permanent sediment pond is not generally consistent with industry best practice as such devices are generally utilised during construction periods only. The site is mapped as posing a 'medium' sediment pollution load risk under the Catchment Management, Waterways and Wetlands Overlay in the Beaudesert Shire Planning Scheme 2007. In this regard, the minimisation of erosion is preferable to sediment capture/treatment.</i></p> <p><i>Alteration to the hardstand, gravel-stand, parking, and truck manoeuvring area surface types may result in the ability to replace the sediment basin with a bio-retention design. The benefit of the bio-retention design is that it requires less ongoing mechanical maintenance and alteration to the leachate processing. This may benefit.</i></p>	<p>basin is required to achieve the WQO's on the developed area.</p> <p>The revised proposal requires only 364m³ of fill below the pre-development flood line, and the flood modelling indicates no worsening of afflux and in fact, improvement in some locations (Section 9, SWMP).</p> <p>The detention basin will remain accessible to floodwaters during major events, to maintain flood storage and minimise afflux to surrounding properties. Since leachate will no longer be captured and stored in the basin, because activities will be undercover, SEQwater's concerns about floodwaters becoming contaminated are addressed.</p>
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B2	Biosecurity	<p>The proposed use poses as a biosecurity risk given the nature of the raw material being transported to the site.</p> <p>The proponent is requested to prepare and submit in support of the SDA application:</p> <p>A Biosecurity Plan to mitigate the risks of infectious disease, pests or weeds which includes, but is not limited to, transport, handling, contaminant risks (internal and external to operations), proposed actions and controls measures to mitigate or eliminate potential risks associated with the entry or spread of infectious diseases, pests and weeds.</p>	<p>Please refer to the Biosecurity Plan by Terra Firma Fertilisers. The risks of infectious diseases, pests and weeds are addressed by the heat treatment applied during the pelletizing process. Employees are inducted and provided PPE for their protection during their work activities.</p>
B3	Beautesert Planning Scheme 2007 – Catchment	<p>The Beautesert Planning Scheme 2007 – Catchment Management, Waterways and Wetlands Overlay identifies a stream running through the subject property. Based on the</p>	<p>The Beautesert Planning Scheme 2007 – Catchment Management Waterways and Wetlands Overlay identifies a stream running through the property, and Sandy Creek at the southern</p>

	<p>Management Overlay</p>	<p>level of detail provided in the application material, the specific outcomes of the Catchment Management, Waterways and Wetlands overlay have not been achieved, including SO4, SO5, SO6, SO8, SO10, SO11.</p> <p>The proponent is requested to:</p> <ul style="list-style-type: none"> • Demonstrate how the proposed facility achieves the relevant specific outcomes (SO4, SO5, SO6, SO8, SO10, SO11) or alternatively, the associated prescribed solutions of the Beaudesert Planning Scheme’s Catchment Management, Waterways and Wetlands overlay. <p>The proposed development diverts and reconstructs a waterway that traverses the subject site. While the remediation and restoration of the waterway can be supported in principle, the proponent is also requested to:</p> <ul style="list-style-type: none"> • Amend the application material to demonstrate how the proposed facility achieves the Specific Outcome SO9 of the Beaudesert Planning Scheme’s Catchment Management, Waterways and Wetlands overlay. 	<p>boundary. A Basic Ecological Assessment was completed by Natura Pacific (dated 30 June 2020) concluding that the “stream” was a broad, undefined overland flow path, and actual flows may be more likely flowing in the defined, deep channel along the eastern boundary of the lot as a result of historical earthworks to construct the railway.</p> <p>SO4 requires the <i>incorporation of best practice water quality management including water sensitive urban design to protect, maintain and enhance water quality values of Waterways and Wetlands</i>. The proposed development (SWMP) now includes rainwater harvesting and bioretention for stormwater management.</p> <p>SO5 requires that the <i>Development retains or establishes a riparian Buffer to a Waterway or Wetland to maintain and enhance ecological functioning, water quality, habitat values and associated Nature Conservation Values</i>. The proposed development will not encroach or impact on the Sandy Creek waterway, and the Applicant proposes to revegetate the rail corridor, and fence off and manage weeds to enable natural revegetation in a buffer along Sandy Creek.</p> <p>SO6 requires that <i>Development protects and enhances Ecologically Significant Areas including Waterways, Wetlands, riparian and aquatic vegetation and habitat for State and regionally significant flora and fauna</i>. The Basic Ecological Assessment does not identify any Ecologically Significant Areas within the proposed development boundaries.</p>
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			<p>SO8 requires that <i>Development avoids adverse impacts from sediment, nutrient filtration and groundwater seepage to protect water quality values and the ecological and hydrological functioning of a Waterway, Wetland and riparian community.</i> The proposed development is more than 100m away from Sandy Creek and its riparian corridor. The SWMP proposes the implementation of a bioretention basin to maintain stormwater quality from the new facilities. This will avoid adverse impacts from sediment and nutrients that may arise from the proposed development.</p> <p>SO10 requires that <i>Development maintains, protects or enhances the natural hydrological regimes and water quality values of Wetlands and Waterways, including water quality, quantity and surface and groundwater conditions.</i> The SWMP proposes a detention basin and bioretention filter to maintain the hydrological regime of the site post-development to pre-development levels, and improve stormwater quality, satisfying this Specific Outcome.</p> <p>SO11 requires that <i>Development protects Wetlands and Waterways and their associated Nature Conservation Values from the adverse impacts of on-site sewage treatment systems.</i> An onsite Ozzi-kleen wastewater treatment plant is proposed for the northern section of the site. A 10EP (standard) system is proposed and the effluent disposal area</p>
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			<p>will initially be sized based on experience of the local area. A minimum 240m² effluent surface irrigation area will be located in the hatched area shown on the Layout Plan (ACS-DWG-180003-GEN). This will be confirmed onsite with AS1547:2000 permeability testing. Allocation of 900m² is shown indicatively to allow for the appropriate buffers to site boundaries and flow paths.</p> <p>SO9 requires that <i>Development provides that a degraded Wetland, riparian community or Waterway is rehabilitated to enhance ecological functioning and habitat values</i>. Please refer to Figure 10 of the Basic Ecological Assessment by Natura Pacific dated 30/6/2020. It identifies that the mapped waterways traversing the site on the overlays and Government mapping are no longer in existence. Except for Sandy Creek, any riparian communities have been long ago removed and the watercourse altered such that it is non-descript and more likely to occur along the rail corridor, and as sheet flow across the surface. The Applicant proposes to revegetate the diversion corridor adjacent the rail, and undertake a weed management regime in the Sandy Creek riparian zone.</p>
A15	Staging	The report titled Traffic Impact Assessment Report, prepared by Cambray Consulting and dated 5 March 2019 (TIA report) only discusses impact upon the completion of Stage 3. If the development is proposed to be staged, the proponent	Please refer to Cambray Consulting RFI letter dated 29 April 2019. Traffic assessments are typically performed on the most intense usage of the site as a conservative approach. The TIA

		<p>is requested to revise the TIA Report and detail the expected traffic impacts during the three different stages of the proposed development (construction and operational impacts).</p>	<p>concludes that the most intense use (Fully Operational phase) has no impact.</p>
A16	Construction traffic	<p>The proponent is requested to provide information on the estimated number and type of construction vehicles, the suitability of the existing access for these vehicles, the proposed duration of construction and the potential impact on the road network. These matters should be addressed for each stage of construction.</p>	<p>Refer to Cambray Consulting letter dated 29 April 2019. The existing site access is suitable for the entry and exit of expected construction traffic.</p> <p>The number and type of construction vehicles, proposed duration & potential impact on the road network for each stage is subject to detailed design and a condition requesting the submission of a Construction Management Plan for approval would address this concern, once the detailed design is resolved, following Development Approval.</p>
A17	Sandy Creek Road	<p>The estimated development trip generation in the TIA Report is based, in part, on B-Double vehicle movements however the existing B-Double route on Sandy Creek Road terminates at Swan Gully Road.</p> <p>The TIA report notes that until the extension of the B-Double access route to the site access is obtained, the proponent must use semi-trailers, rigid trucks and truck and dogs to service the development.</p> <p>If the proponent is intending to operate the development without B-</p>	<p>Refer to Table 1 of the Cambray Consulting letter dated 29 April 2019. This reduces the B-double movements to zero, and increases the semi-trailer movements accordingly. Based on the revised information, the conclusions of the original traffic assessment remain unchanged.</p>

		Doubles, the proponent is requested to provide an assessment of development traffic impact where B-Doubles are not used.	
A18	On-site manoeuvring and circulation	<p>The Planning report states internal roads will be a combination of gravel and concrete noting that the material structure will be determined by the level of use of these roads. The plans submitted in support of the application, including those contained in the TIA Report, confine the on-site vehicle circulation arrangements to the perimeter of the proposed industrial buildings.</p> <p>As heavy vehicles will be on-site daily, having regard to raw product delivery, end-product removal, and the internal operations of relocating raw material and turning windrows, the proponent is requested to submit:</p> <ul style="list-style-type: none"> • a revised plan identifying all internal circulation areas for heavy vehicles • details on the material structure in areas where heavy vehicles will be frequenting • a parking layout to accommodate larger vehicle parking or confirmation as to why heavy vehicle parking is not required • proposed internal manoeuvring and movement for both light and heavy vehicles (e.g. articulated vehicles delivering raw material to the site, front-end loaders transporting material from point of delivery in undercover building to the 	<p>Refer to Cambray Consulting letter dated 29 April 2019.</p> <p>Refer to on-site manoeuvring and circulation plan: ACS-DWG-180003-GEN-06, 7A and 6B.</p> <p>Refer to the site layout ACS-DWG-180003-GEN-01 for details of surface treatments across the site.</p> <p>Refer to carparking plan ACS-DWG-180003-GEN-15 for light and heavy vehicle carparking.</p>

		windrows composting area, garbage trucks, staff vehicles).	
A19	Water supply	<p>Section 5.3 (page 17) of the Planning report states the development will be utilising existing privately-owned water supply infrastructure however no details have been provided in relation to this water supply infrastructure. Section 4.7 of the Planning Report states all shed roofs will be connected to rainwater tanks to collect water for potable uses.</p> <p>The proponent is requested to</p> <ul style="list-style-type: none"> • Provide details and capacity of the privately-owned water supply infrastructure • Demonstrate that rainwater tanks are adequately designed to cater for roof water • Provide further details to demonstrate that water capture from the roofs can be safely used for staff amenities (given the particulate matter potentially arising from the land use) • Show on a plan the proposed location of the rainwater tank • Confirm the water collected from the shed roofs will not be used for consumption purposes • Provide details on availability and capacity of emergency water supply for firefighting purposes. 	<p>The proposed water supply for the development is outlined in Section 4.7 of the Planning Report. One (or multiple) rainwater tank/s with total volume of ~322,000 Litres will be used to provide a potable water supply until the Urban Utilities main is extended into the area. An alternate solution to connect into the privately-owned water supply for A.J. Bush is under negotiation but has not been confirmed at this stage.</p> <p>The proposed rainwater tank/s will be located adjacent each of the buildings to maximise the roof area that can be collected. The Building hydraulics details will be submitted with the Building Application. These details will include the water treatment system to provide potable supply from the rainwater tanks. Since the Composting facilities are now undercover, the likelihood of particulate matter contaminating the roof is significantly diminished.</p> <p>Should the rainwater tank/s supply be fully consumed, potable water will be trucked in to guarantee supply for the amenities.</p> <p>Please refer to the Fire Engineers Report (Fire Check Consultants,2020). Dedicated fire water storage will be provided within the main storage tanks off the manufacturing shed. The capacity of the fire water tank will be in accordance with AS2419.1 – 2005 (minimum 288,000L).</p>

A20	Surface water runoff	<p>a) Plan referenced ACS-DWG-180003-GEN, revision E (1 of 19) provides the concept site layout. The Planning Report refers to this plan and states that the compost pad will be a combination of compacted road base and designated concrete hardstand area.</p> <p>The proponent is requested to either confirm that the pink area annotated as 'hardstand' (including the industrial building) is concrete and the compost window area is compacted road base or alternatively submit a revised plan clearly illustrating the compacted road base areas and the designated concrete hardstand areas.</p> <p>b) The proponent is also requested to</p> <ul style="list-style-type: none"> • demonstrate that the diversion of stormwater runoff from clean catchments diverted around disturbed areas will not result in the adverse redirection of flow towards the rail corridor running parallel to the subject site Enclosure 1: Coordinator-General request for additional information Page 9 of 11 • clarify the capacity of the sediment basin and leachate pond to provide capture and treatment of all onsite surface water run-off and stormwater 	<p>a) Composting will now be completed undercover, inside the Composting Shed. This prevents the raw materials from contaminating the stormwater runoff from the site.</p> <p>b) The diversion drains are proposed along the rail and Sandy Creek Road boundaries are designed to redirect upstream flows up to and including the 1% AEP event. The drains are proposed to be contained wholly within the development site and constructed to ensure no additional runoff is directed towards the rail corridor. Please refer to the SWMP for more details.</p> <p>c) Please refer to the SWMP for the capacity of the bioretention and detention basin.</p>
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		runoff while also providing capture and storage of runoff from a major storm event.	
A21	Flood storage area	<p>Plan titled 'Compensatory Cut – Long Section' and referenced ACS-DWG-180003-GEN, Revision C (08 of 19) shows compensatory cut creating additional flood plain capacity and also illustrates fill which is labelled flood plain storage lost. It is unclear whether the ultimate outcome is an overall loss or increase of flood storage area.</p> <p>The proponent is requested to</p> <ul style="list-style-type: none"> • confirm that there is a net loss or net increase or balance in flood storage area • clarify the following details: <ul style="list-style-type: none"> ○ total cut ○ total fill, including location ○ fill required for pad construction and compaction, including location <p>disposal method of any residual fill.</p>	Refer to the Plans by ACS Engineers for further details. ACS-DWG-180003-GEN-14A indicates the loss of flood storage is 364m ³ , and the SWMP confirms that this amount results in negligible afflux to neighbouring properties.
A22	Vegetation	<p>Section 5.5 of the Planning report explains that vegetation clearing because of the development works will significantly reduce the medium risk bushfire hazard present on-site and that the proposed landscaping will incorporate fire retardant species.</p> <p>The proponent is requested to provide a plan identifying the location, species of trees to be cleared and the</p>	Please refer to the Basic Ecological Assessment by Natura Pacific and the proposed development plans (ACS-DWG-180003-GEN-21) for these details.

		extent of proposed vegetation clearing, including buffer areas.	
A23	Bushfire hazard	<p>Insufficient details have been provided to adequately address the risk or management of bushfire. Section 5.5 and 8.2 of the Planning report state that a portion of the site is identified as a 'medium' bushfire hazard risk. The State Planning Policy (SPP) mapping and the draft Scenic Rim Planning Scheme bushfire hazard overlay show that the subject site as being bushfire prone and situated within a 'high' bushfire hazard area.</p> <p>The proponent is requested to provide further detail to demonstrate an assessment of bushfire hazard has been undertaken and provide details on mitigation measures, which may include availability and capacity of emergency water supply, and containment of hazardous and flammable materials.</p>	<p>The vegetation clearing plan, ACS-DWG-180003-GEN18 shows the extent and locations of the vegetation clearing included in the proposed development. This clearing will reduce the developments bushfire risk. The site will include a water tank primarily for fire water storage. This tank will hold a minimum of 288,000L, in accordance with AS2419.1 (2005). Further, the proposed layout maintains a minimum of 10m buffer between vegetation and the buildings, with the bulk of the site becoming hardstand, thereby reducing the bushfire risk.</p> <p>Any hazardous materials/chemicals will be stored in the Workshop (ACS-DWG-180003-GEN-01). Section 6.6 of the SBMP and Section 3.2 of the Planning Report reference the chemicals that may be present on site.</p>
A24	Matters of national environmental significance or matters of state environmental significance	<p>The proponent is requested to confirm whether mapping identified on the site any matter of national environmental significance (MNES) or matter of state environmental significance (MSES) and that the development will not adversely impact on these matters.</p>	<p>The Applicant confirms mapping did not identify any matter of national environmental significance (MNES). Sandy Creek which forms the southern boundary of the subject property is identified as a matter of state environmental significance (MSES). As detailed in the planning report and supporting documents the proposed development is not expected to adversely impact Sandy Creek. Refer to the BEA report by Natura Pacific for further details (v2, 30 June 2020).</p>

A25	Cultural Heritage	Significant earthworks and site disturbance are proposed as part of the development of the site. The proponent is requested to confirm that the works will not disturb, damage or have a detrimental impact on any heritage item or place (indigenous or non-indigenous).	The report from the Aboriginal and Torres Strait Islander Cultural Heritage Database and Register concludes that there is no cultural heritage relative to this lot. Refer to Section 2.2 of the Planning Report.
B4	Site Based Stormwater Management	<p>The Site Based Stormwater Management Plan (SBSMP) and associated development plans indicate that the sediment pond is sized to collect a 1 in 10-year 24-hour rainfall event from all disturbed areas except the compost area. The SBSMP also states that releases of stormwater for events up to and including a 1 in 10-year 24-hour event will be managed to ensure Total Suspended Solids (TSS) of no more than 50mg/L.</p> <p>The site is located in lowland freshwaters, as per the Environmental Protection (Water) Policy 2009 South-east Queensland Map Series Plan WQ1454 (Logan River, including tributaries). The Logan River environmental values and water quality objectives specifies TSS of less than 6mg/L.</p> <p>The SBSMP indicates that the leachate pond is sized to collect a 1 in 10-year 24-hour rainfall event from the compost area. The leachate pond will be aerated to 1.5mg/L dissolved oxygen and water will be reused through a sprinkler system over the</p>	<p>a) The SWMP has been revised and provides for a detention and bioretention basin to detain the flows up to and including the 1% AEP event. Stormwater quality treatment will be provided by a 130 m² bioretention basin for the Q3 month event in accordance with Best Practice guidelines. The release criteria of 50 mg/L for Total Suspended Solids for a 1 in 10-year 24-hour event, is a construction phase criteria.</p> <p>The WQ1454 water quality objectives are noted, however, the stormwater detention and treatment measures will not retain water and have been designed using the MUSIC modelling software to demonstrate that the State Planning Policy load reductions are satisfied.</p> <p>b) The new concept plan and stormwater treatment train removes leachate ponds. Contaminated waters will not be released from any leachate ponds.</p>

	<p>compost area. It is unclear what contaminants will be present in the leachate pond and it is unclear if the proposed aeration is adequate to treat this water to an acceptable standard.</p> <p>In events greater than a 1 in 10-year 24-hour event, contaminated waters will be released from the sediment and leachate ponds into Sandy Creek. Given the nature of the raw material, contaminants are expected to include microbial constituents (pathogens [i.e. bacteria, viruses, protozoa]), high levels of nutrients and sediments. The pathogenic contaminants present significant risk to community health, through presence of disease-causing contaminants at undetectable levels that may not be able to be effectively managed through treatment processes.</p> <p>The frequency of these releases presents an unacceptable risk to Seqwater's ability to deliver a safe, secure and cost-effective water supply to the Beaudesert community and Bromelton SDA.</p> <p>The SBSMP identifies a diversion drain to divert clean stormwater from the upstream catchment of the development to Sandy Creek. This diversion drain is indicated to be sized to contain 1% AEP flows. The plans appear to suggest that the drain will cease to be formally constructed downstream of the sediment and leachate ponds. From this point it is understood that clean surface waters</p>	<p>Stormwater from the site will be treated by the bioretention basin and released to the grassed area on the southern half of the property. There is a buffer of more than 200m before the discharged, treated runoff reaches Sandy Creek. It is considered that this will provide adequate buffer for the runoff to reach the background levels of potential contaminants already observed in Sandy Creek.</p> <p>c) Irrigated wastewater will no longer be sourced from leachate dams and irrigated on the southern half of the property. As indicated above, the leachate dams have been deleted since all activities will now be housed in enclosed sheds. Stormwater treatment measures have been designed using the MUSIC modelling software to demonstrate that the State Planning Policy load reductions are satisfied. Please refer to the SWMP for more details.</p> <p>d) Where gravel hardstands are present (and not concrete) they will be at relatively flat grades (0.5% - 1%). Subsequently, the likelihood of erosion of the hardstand is limited. Even so, all surface flows will be captured and directed to the detention/bioretention basin for treatment. Following discharge of the treated runoff, a buffer of ~200m exists between the release point and the receiving waterway of Sandy Creek. Should some hardstand areas be observed to be prone to erosion, they will be prioritised</p>
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		<p>may cross the irrigated wastewater area, which exacerbates the risk of contaminants entering waterways and contaminating water supply.</p> <p>The SBSMP identifies a drainage path for disturbed area runoff. The annotation on the plan suggests that this will be directed to the sediment pond, however the arrows showing the drainage path suggest that it will drain to the leachate pond. it is unclear what design event this drainage infrastructure will be able to carry. Further the annotation on the plans suggests that the compost area will be bunded and run-off from the compost area will be directed to the leachate pond. The plan does not depict how this will occur.</p> <p>Section 5.5 of the SBSMP indicates that the proposed treatment drain doesn't achieve the required reduction in nitrogen.</p> <p>The proponent is requested to:</p> <ul style="list-style-type: none"> (a) Amend the sediment and leachate ponds to contain the highest volume 1% AEP rain event, amend internal drainage to be able to effectively convey the greatest intensity 1% AEP rain event to the respective ponds and ensure the ponds are located above the 1% AEP flood event (b) Review drainage paths and infrastructure to ensure it is delivering desired outcomes, i.e. drainage of disturbed 	<p>for a concrete surface treatment.</p> <p>e) As indicated above, the SWMP has modelled the stormwater treatment train and demonstrates compliance with the State Planning Policy WQOs of 80% TSS, 60% TP and 45% TN reduction.</p>
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		<p>areas flows to sediment ponds, bunded compost area is directed to leachate pond and is effective to avoid contamination of diverted stormwater flows, diversion of upstream catchment flows is effective so as to avoid contamination with treated wastewater irrigation area</p> <p>(c) Demonstrate that any water discharging from the site, including overland flows, achieves and does not adversely affect the Water Quality Objectives and Environmental Values for the Logan River and achieves the prescribed reduction targets</p> <p>The proponent is also requested to provide:</p> <p>(d) Provide details on the proposed management of stormwater across gravel stand areas and on the proposed maintenance of the gravel-stand areas to appropriately manage ongoing erosion and sedimentation of the gravel stand areas caused by stormwater and heavy vehicle movements, and</p> <p>(e) Amend the SBSMP and the Environment Management Plan so as to incorporate a table, separately detailing the water quality release criteria for both the drinking water catchment and the Logan catchment.</p>	
B5	Irrigation area	<p>The SBSMP identifies a treated water irrigation area. This area is within the floodplain and is proposed to be used to dispose of water from leachate and sediment ponds. There is insufficient detail provided in the application</p>	<p>The leachate ponds have been deleted from this revised concept plan. Subsequently the need to irrigate in the floodplain has also been removed.</p> <p>Treated wastewater from the site amenities will be irrigated in an effluent</p>

		<p>material in relation to the soil characteristics in the irrigation area, the quality of the wastewater or the method of wastewater irrigation (i.e. subsurface, trenches). In this regard, it is also unclear if the proposed irrigation area is capable of sustainably managing the dispersion of treated wastewater discharge.</p> <p>The irrigation of treated wastewater within the 1% AEP flood level is considered to present an unacceptable risk to water supply.</p> <p>The proponent is requested to:</p> <ul style="list-style-type: none"> (a) Identify the standard that wastewater will be at on entry to the ponds and post treatment prior to irrigation from both the sediment and leachate ponds, including identification of contaminant/pollutant levels (microbial, nutrient, sediment, chemical), and (b) Identify an alternate disposal method or location of treated wastewater that does not pose adverse impacts to water quality (i.e. is located outside the 1% AEP, is informed by a site and soil evaluation which concludes the area is adequately sized to sustainably manage the wastewater application avoiding adverse impacts to surface waters and groundwaters and is setback at least 50m from a stream order 1-3 and at least 100m from a stream order 4-8). 	<p>disposal area on the northern portion of the lot, in accordance with AS1547:2000.</p>
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		<p><i>Note: Surface spray is not an acceptable irrigation method for wastewater within the Water Supply Buffer Area or Water Resource Catchment which applies to the subject site.</i></p>	
B6	Domestic on-site wastewater treatment system	<p>The material supporting the application indicates that a domestic on-site wastewater treatment system will be used to manage the wastewater generated by the use of site amenities and toilets. The development plans identify the land application area (dispersion area) for the proposed on-site wastewater treatment system (OWTS) to be in an area with slope exceeding 15%. The soil conditions in this location are unknown and it is unclear if this area is suitable as a dispersion area. The project plans also indicate that stormwater flows from the upstream catchment will run immediately south of the dispersion area.</p> <p>The proponent is requested to:</p> <p>(a) Provide information, in the form of a site and soil evaluation report, that demonstrates that this area, and an identified 100% reserve area, is suitable as the dispersion areas for the domestic OWTS, and</p> <p>Amend the upstream stormwater catchment diversion infrastructure to avoid surface waters from the dispersion area entering clean stormwater.</p>	<p>a) A 10EP Ozzi-kleen OWTS is proposed for the site to treat wastewater generated from the employees. This is considered to be conservative, since the site is unlikely to have the equivalent of 10 persons full-time onsite, and without town water supply, the usage is likely to be less also. In a typical application of this capacity, an effluent disposal area would be ~240 m², and this is initially proposed within the 900 m² area identified on the Concept Layout plans. This area will also provide adequate secondary area, should it be required. A full Site and Soil Evaluation report (in accordance with AS1547:2000) will be provided at the Building Application stage. The proposed effluent disposal area provides the necessary buffers to stormwater drains.</p>

B7	Flooding	<p><i>Flooding and climate change</i></p> <p>Notwithstanding the risk posed by the irrigation of wastewater within the floodplain has been detailed in Item 5 above, insufficient detail has been provided to determine if the 1% AEP design event used includes a factor for climate change.</p> <p>The proponent is requested to:</p> <p>(a) Describe the 1% AEP flood event that has been used.</p> <p><i>Flooding and free boards</i></p> <p>Based on the application material, the design flood line is equal to the existing flood line. Considering the potential for leachate and other waste release from the site, a suitable free board or similar should be incorporated into the design and described in the supporting specialist reports to ensure no contamination of floodwaters is permitted.</p> <p>The proponent is requested to:</p> <p>(b) Amend the application material and supporting plans to incorporate an adequate free board to demonstrate that contamination of floodwaters in a 1% AEP flood event will not occur, and</p> <p>(c) Provide outlet details/heights and finished floor levels using AHD.</p>	<p>The flood levels shown on the layout plans are informed by Council’s Flood models. Council’s website advises that the flood modelling has been based on the 1% AEP event and includes State Government mapping. Building pad levels have been designed to be at least 600mm above the 1% AEP level as informed by Council’s flood mapping.</p> <p>As indicated in earlier sections, the leachate dams have been deleted from the revised concept and replaced with a detention and bioretention basin. Freeboard requirements for the detention basin will be designed in accordance with the QUDM requirements. Please refer to the detailed drawings by ACS Engineers for the outlet design and finished floor levels.</p>

B8	Water quality impact on adjoining lands	<p>Lot 1 RP186498, to the south of the subject site, is identified as being partially flood affected. The area of the property that is affected features a dam. It is unclear if this dam is used for potable water/domestic purposes, however there is a significant risk that the water in this dam would be adversely affected by the release of contaminants, expected to be present from the irrigation of wastewater associated with the proposed use, in the event of a flood.</p> <p>The proponent is requested to:</p> <p>Demonstrate how the risk of adverse impacts to adjoining properties and persons in the event of a flood have been avoided and mitigated.</p>	<p>The revised concept deletes the leachate treatment dams and encloses the composting activities within a building. The risk of adverse impacts to adjoining properties from contamination during a flood have been removed.</p>
B9	Stormwater and flooding	<p>The SBSMP, prepared by ACS Engineers, dated 15/05/2019 reference 180003, revision 3 has not adequately demonstrated that the stormwater and flooding impacts of the proposed development will not adversely impact on the railway corridor.</p> <p>The proponent is requested to provide amended application documentation that:</p> <p>a) Demonstrates there will be no runoff from the development flowing into the railway corridor and that the management of stormwater and flooding post development can achieve a no worsening impact or actionable nuisance to the</p>	<p>a) Please refer to the SWMP for hydrologic and hydraulic modelling demonstrating that there is no worsening on the rail corridor from stormwater because of the development.</p> <p>b) Please refer to the SWMP that identifies the relevant flow paths into and leaving the development site.</p> <p>c) Please refer to the SWMP that demonstrates the proposed diversion drains have adequate capacity to accommodate the 1% AEP Event.</p> <p>d) Please refer to the SWMP that demonstrates there will be negligible afflux because of the proposed development.</p>

		<p>railway corridor, including rail transport infrastructure, caused by peak discharges, flood levels, frequency/duration of flooding, flow velocities, water quality, sedimentation and scour effects</p> <p>b) Clarifies whether there is an overland flow path or culvert within the railway corridor where run-off from Catchment A (shown in Figure 3 of the SBSMP) crosses the railway corridor. Identify all relevant legal points of discharge for the development site</p> <p>c) Provides an RPEQ certified hydraulic/hydrological analysis and calculations which demonstrate that the proposed diversion drain will have sufficient capacity to accommodate the external upstream catchment for all relevant design events up to a 1% AEP. Hydraulic capacity (Hydraulic Grade Line) calculations and longitudinal and cross sections should be provided</p> <p>d) Demonstrates that the works will not increase the head or tail waters at culvert/bridge inlets and outlets</p> <p>e) Demonstrates that the proposed diversion drains, and bund will occur on the subject site and be maintained by the development proponent at the intersection of the existing railway culvert drainage line at 922.610km, and</p> <p>f) Demonstrates that all irrigation areas, sedimentation, leachate ponds, diversion ponds and drains will be designed and located to as to maintain the</p>	<p>e) Please refer to the detailed plans from ACS Engineers (ACS-180003-04A) that shows the diversion drain on the development site.</p> <p>f) The revised proposed development deletes the leachate dams, and removes the irrigation areas for leachate disposal, minimising the risk of any structural impact on the rail corridor.</p>
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		<p>stability of the railway corridor land (including embankment) and not result in wetting up of soils within the railway corridor either by runoff, windblown spray, seepage or ponding.</p> <p><i>Note: No new discharge points for stormwater will be permitted on the railway corridor. Any proposed discharge or change to discharge on the railway corridor will rely on gaining relevant approvals such a licence to discharge from the railway manager (ARTC) under section 225 of the Transport Infrastructure Act 1994.</i></p> <p>(b) <i>Overland flow is suggested to be conveyed through a channel adjacent to the railway corridor in the design case (Drawing ASC-180003-GEN-02), however, there is no demonstration of the effects of this on the railway corridor and any information on the design of the channel. No runoff from the development will be permitted to flow into the railway corridor.</i></p>	
B10	Rail interface barrier	<p>The Internal Turning Movement drawing within the Traffic Impact Assessment, prepared Cambray Consulting, dated 5 March 2019 shows that there will be considerable risk associated with B-Doubles turning in close proximity to the railway corridor boundary. Here, the pad height will be above the existing ground level and the railway corridor.</p>	<p>a) Please refer to the Traffic Movements drawing by ACS Engineers (DWG ACS-180003-06) that indicates the likely turning circles and movements onsite. The revised layout now includes a stormwater diversion drain separating the development from the rail corridor that will also act as a buffer should any vehicles lose control and fail to manoeuvre the corner from the Packaging Shed to the Composting shed.</p>

		<p>The proponent is requested to:</p> <ul style="list-style-type: none"> a) Provide further information to demonstrate how the railway corridor will be adequately protected from unauthorised vehicles access that could result in damage or harm such as when vehicles misjudge the manoeuvre or lose control, and b) Provide a risk assessment, undertaken by a RPEQ, that takes into account the likely risk inherent in using the areas adjacent to the railway corridor for vehicle manoeuvring and circulation. <p><i>Note: A risk assessment framework is provided in Appendix 1 – Development Risk Guide of the Guide to Development in a Transport Environment: Rail available at http://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Guide-to-development-in-a-transportenvironment-rail.aspx).</i></p> <p><i>The risk assessment should consider factors such as gradients (the vehicle pad will be above the existing ground level and the railway corridor), vehicle speeds, type of vehicle (maximum design vehicle: B-Double), distance from rail transport infrastructure, the nature of the manoeuvring surface (concrete hardstand and compacted gravel, noting the proposal plans show the B-double path over both surface types) and whether the railway is at grade, on structure or in a cutting, amongst other relevant considerations.</i></p>	<ul style="list-style-type: none"> b) The revised concept includes a drainage channel along the eastern boundary adjacent the railway corridor, vehicle speeds will be kept low, and the railway is several metres higher than the site, therefore the likely risk inherent in using the areas adjacent the railway corridor is considered to be low and does not warrant a full Risk Assessment.
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		<p>(a) <i>The RPEQ is required to recommend appropriate mitigation measures including specifications as to the location, extent, type and design (including spacing, height and materials) of a suitable rail interface barrier. The rail interface barrier should be designed and constructed to withstand the anticipated impact of the largest design vehicle.</i></p>	
A26	Plans / drawings	<p>(a) The proponent is requested to submit a revised set of plans addressing the additional information or clarifications requested above, including the location of:</p> <ul style="list-style-type: none"> • the proposed wastewater treatment plant • rainwater tanks • waste storage and collection • power pole in relation to access point • perimeter bunds • proposed building layout (internal floor layout, elevations (north, south, east and west), roof plans, manoeuvring and circulation areas (vehicle and pedestrian) <p>(b) Plan referenced ACS-DWG-180003-GEN, revision C (2 of 19) illustrates the 1% AEP level pre and post development. The construction of the proposed development, including the bund walls is likely to influence the 1% AEP post development but it is considered unlikely to alter it in such a manner that is only alters the flow path around</p>	<p>a) Please refer to revised drawings by ACS Engineers.</p> <p>As the proposed development was based on a compensatory cut/fill form of earthworks within the regional flood plain and there is a resulting net gain of the Sandy Creek/Logan River flood plain capacity then the post development 1% AEP reduced level (RL) will be no higher than the pre developed RL of 54.52m (Source of pre developed 1%AEP - SRRC). The post developed 1%AEP flood line is identified as the 54.52m contour following earthworks.</p> <p>The proposed earthworks will impact localised drainage paths across the site however this has been accommodated in the proposed clean water diversion drains.</p>

		the detention basins. The proponent is requested to clarify how the 1% AEP post development level was determined.	
A27	Planning report	The proponent is requested to update the Planning report to include an assessment of the relevant State Development Assessment Provisions (SDAP) Codes.	The Planning Report, Appendix 8.4, addresses the relevant State Development Assessment Provisions (SDAP) Codes.
B11	Staged development	<p>It is understood the development is proposed to be delivered in stages however, it remains unclear how the operations of the development will be managed at each stage. The application material details a composting cycle of eight (8) weeks. After which time it is understood the composted material in the windrow would be moved to the indoor composting area then go through the manufacturing process, based on the description in section 3.2 of the Planning Report. Notwithstanding, the proposed staging of the development suggests that there will be a twelve (12) month period between when the indoor covered composting shed will be completed and when the manufacturing shed will be completed.</p> <p>The proponent is requested to:</p> <p>a) Provide details on how the composting material will be managed during the staging of the development, having regard to the interim periods between Stage 1 and Stage 2</p>	<p>a) The revised development proposal includes 2 building stages. The first stage includes;</p> <ol style="list-style-type: none"> a. Earthworks, b. construction of access roads, c. hardstands, d. drainage, e. detention & bioretention basin, f. wastewater treatment plant, g. Rainwater tank, h. Office, and i. Composting Shed. <p>The Second Stage includes;</p> <ol style="list-style-type: none"> j. Construction of the Packaging Shed, k. Construction of the Storage Shed, <p>b) The Composting Shed is proposed to have a footprint of approximately 2,475 m²;</p> <p>c) Composted material will initially be transported back to the Beaudesert facility for packaging and distribution until Stage 2 is completed.</p>

		<p>and between Stage 2 and Stage 3</p> <ul style="list-style-type: none">b) Provide details on the storage capacity of the indoor composting shed, andc) Advise if product is sold at Stage 1 as loose composted material, or if loose composted material will continue to accrue in the indoor composting shed until the manufacturing shed is delivered.	
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Should you have any further queries or concerns, please don't hesitate to contact me on 0431 299 875.

Kind Regards,



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