

26th August 2022

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Dear Sir/Madam,

Re: Proposed Change to Approval Submission – MC18/63

I refer to the proposed Change to Approval at 5291 Flinders Highway, Reid River (Application Reference: MC18/63) and would formally like to issue the following submission. This submission is on behalf of Woodstock Pastoral Services Pty Ltd.

There are several points of concern in the Change to Approval application documentation that requires addressing and these are outlined in Table 1, enclosed herein. Importantly, the intention of the Change to Approval application is unclear. The application documentation outlines the current temporary cattle holding operation in detail and indicates that the feedlot operation will work concurrently with the temporary holding facility. However, the actual intention of the Change to Approval application is that the whole site can become a feedlot facility if the operator chooses not to have temporary cattle accommodation.

Information regarding the site and operations is miscommunicated throughout the application documentation, for example:

- The stocking rate changes from 16.75m²/SCU to 18.75m²/SCU;
- The dedicated solid waste application areas and effluent application areas vary in size across the report;
- The source of water varies from just groundwater sources to both groundwater and surface water sources;
- The hours of operation vary from 12 hour days at the start of the report and change to 10 hour days later in the report; and
- The report continually refers to no changes in footprint; however:
 - There are more pens that are larger than before (original approval had 64 pens, this application outlines there will be 72 pens);
 - There are now two sediment ponds and a manure stockpile area that didn't exist as part of the original development; and,
 - The holding pond is proposed to increase in size.

From the items listed in Table 1 the Applicant should provide the following:

- A layout plan that indicates the exact sizing of all pens and which pens are to be utilised for hospital pens.
- Clarification on exact proposed stocking densities;
- For infrastructure that does exist on site, i.e. sediment basins and holding pond, as constructed drawings should be supplied to demonstrate that this infrastructure meets the needs of the proposed development and complies with the existing approval requirements. The Applicant clearly indicates no further earthworks are required, as such they should already have as constructed drawings available;
- Clarification on what the exact source(s) of water supply will be. Groundwater sources should have pump tests (72 hour) completed to ensure they have demonstrated adequate supply.

Water supply should have water quality testing results to ensure the quality is adequate for stock use;

- The waste utilisation areas (both solid waste and effluent application areas) should have a soil survey completed to determine what the baseline data is for the existing paddocks prior to use for waste application purposes. This assessment will determine if there is actually an issue with Potassium across the proposed application area. On completion of a soil survey an appropriate irrigation management plan, waste management plan and cropping plan can be established for these areas;
- The Applicant needs to clarify exactly how much area is proposed to be utilised for waste application purposes; the figure varies considerably throughout the report;
- Monitoring wells should be established in appropriate locations on site to ensure that there is no impacts to groundwater from the site operations;
- There is no stormwater management infrastructure proposed in waste utilisation areas; this means the site already breaches their Environmental Authority conditions if their current proposed plans are approved as they are. The development should have appropriately sized tail-water dams/ contaminated agricultural runoff dams to ensure runoff water from these waste utilisation areas is appropriately contained. A comprehensive stormwater management plan should be established for the entire site not just the controlled drainage area.
- The Environmental Protection Act 1994 requires commercial beef graziers, sugarcane growers, banana growers, horticulture and grain growers in the Burdekin region of the Great Barrier Reef (GBR) catchment to comply with commodity-specific minimum practice agricultural standards under the Reef Protection regulations. These rules should be implemented across feedlot operations as well to ensure that the GBR is protected from contaminated agricultural runoff, such as nutrients, sediments and herbicides/pesticides. Appropriate measures are detailed in the *Reef Protection Regulations Farming in Reef Catchments - Sediment and Erosion Control Guide, Version 2*.
- Determination of existing environmental values of receiving waters. The application documentation does not outline if an assessment of existing environmental values of the receiving waterways, i.e. the Reid River and associated tributaries, has been completed. It is important to determine what the baseline values are of this system prior to the feedlot commencing operations;
- A mass burial pit has been proposed in a mass death event; however, the location of this burial pit has not been identified on any of the provided drawings and there is no comprehensive soils analysis to determine whether pit lining would be required. These aspects should be determined prior to such an event occurring as they can take time with appropriate site analysis, which is not suitable acceptable in a mass death situation; and
- The flood study completed for this application is quite basic and not overly suitable for making the determination to provide no protections against flood impacts. Appropriate site management measures should be considered for this site or a comprehensive flood study should be completed to ensure there is definitely no flood risk impact, in which case the Queensland Floodplain Assessment Overlay needs to be readdressed.

The above mentioned issues are incredibly important and should be considered by Charters Towers Regional Council when making a decision on this development application. The sites proximity to a major waterway that discharges to the very sensitive GBR catchment, means that comprehensive assessments need to be completed prior to the site being approved for operations. The existing operations would produce a low to medium strength waste; however, a feedlot produces high strength wastes, therefore greater consideration needs to be made on where the wastes are applied and how runoff from these areas is managed.

Should you wish to discuss any of the abovementioned matters further please do not hesitate to contact myself or Lauren Buchanan on (07) 4638 2228.

Yours sincerely,



Dr Simon Lott
B.E. (Hons). PhD. CPEng. RPEQ. CPH. ARLF
Specialist Engineer
EnviroAg Australia Pty Limited

Table 1 Reid River Feedlot Application - Submission Issues

Item	Stated in Application	Issue
Stocking Rates	<p>Section 5.3 - 3,075SCU feedlot proposed with 16.75m²/SCU stocking density</p> <p>Section 5.3.1 (page 93 of 451) – the proposed development shall be able to accommodate up to 3,075 SCU at an average stocking density of 18.75m²/SCU</p>	<p>A stocking rate of 16.75m²/SCU would require a total pen area of 51,506.25m²; a stocking rate of 18.75m²/SCU would require a total pen area of 57,656.25m²</p> <p>Table 8 (page 68 of 451) and Section 5.3.1 indicates that there is a total of 51,400m² pen space available on site including all holding pens and hospital pens.</p> <p>The original approval for the temporary holding facility only had 64 pens, now there are 72 pens and the pens are bigger?</p> <p>Original approval had a total pen area of 49,800m².</p>
Construction	<p>Section 5.2 – There are no construction activities per se. All bulk earthworks, feed bunks, water troughs, aprons, fences and gates have been completed.</p>	<p>The proposed total surface area is greater than the original approved plans; therefore, there will be construction works.</p> <p>The manure stockpile area and the sediment basins did not exist as part of the original development, and size of the holding pond is larger than the originally approved design.</p> <p>This statement that there is no construction work required is false.</p>
Water Source	<p>Section 7.5.3.2.2 – Groundwater shall be used as the source of water for the proposed development</p>	<p>No pump tests have been provided to ensure the water supply is adequate and reliable.</p> <p>No water quality data has been provided to ensure the water is suitable quality for use.</p>
Effluent Management Calculations	<p>Section 5.3.4 - Liquid waste generation for proposed development is approximately 100.9ML/year</p>	<p>The DAF spreadsheet utilised (Appendix B) doesn't have correct input parameters.</p> <p>There are 72 pens proposed not 64.</p> <p>The DAF effluent irrigation spreadsheet (Appendix B) indicates that the proposed effluent irrigation is not suitably sized for levels of potassium.</p>
Effluent Application	<p>Section 5.3.8.1.2.1 – Potassium levels are too high to achieve appropriate effluent application over the designated 85ha</p>	<p>This section and Appendix B both reflect that an effluent irrigation area of over 200ha is required for the appropriate application of effluent water (i.e. high potassium levels).</p> <p>Elevated potassium levels (>10%) which may cause magnesium deficiency in plants and decrease the hydraulic conductivity of the receiving soils and also damage soil structure.</p> <p>Where is the chemical analysis of existing soils in the proposed effluent irrigation area to determine they are adequate for waste application?</p> <p>Where is the effluent management plan that details:</p> <p>Effluent waters are to be diluted prior to application to land;</p> <p>Regular soils monitoring to occur to demonstrate nutrient accumulation isn't an issue;</p> <p>Groundwater monitoring wells required on site and regular monitoring to ensure groundwater contamination is not occurring.</p> <p>The DAF Environmental Authority does not include monitoring for Potassium in soils, and</p>

Item	Stated in Application	Issue
Solid Waste Management	Section 5.1.4.3 and Section 7.5.3.2.1 – An area of 100ha of cropping land is suitable for application of Solid Wastes. Appendix Q : SBEMP - refers to 115ha for effluent and solid waste utilisation.	there is no requirement for groundwater monitoring at all. The SBEMP only mentions monitoring in accordance with the Environmental Authority. Section 5.3.7.2.1 and Section 7.5.3.1.1 indicates that only 30ha is available for solid waste utilisation.
	The minimum area required for nutrient uptake is no less than 557 ha (more for other nutrients).	If the site does not have suitable space for appropriate application of solid waste, where is the waste management plan for ensuring that appropriate monitoring occurs to ensure that leaching into the groundwater table does not occur? Where is the chemical analysis of existing soils in the proposed waste utilisation area to determine they are adequate for waste application?
Stormwater Management & Erosion Control	5.3.9.1 – The stormwater runoff from areas outside of the controlled drainage areas is unlikely to be contaminated.	Runoff from effluent and solid waste application areas has a high potential to contain Contaminated Agricultural Runoff (CAR) water. There are no proposed drains or dams to capture runoff waters from these areas that drain directly to the Reid River. The site is directly inside a flood prone area and there are no levees proposed, the site may become inundated during extreme weather events in result in contamination of downstream waters (i.e. Great Barrier Reef catchment). The application documentation has not adequately addressed stormwater runoff from the area outside of the controlled drainage area and the controlled drainage area is not protected from flood impacts. Where is the crop management plan to ensure that paddocks are not left fallow after harvest?
	Section 6.5.5 – the proposed design, construction, and operation of the proposed development shall ensure that the EV's and WQO's for the Haughton drainage basin are maintained or enhanced.	Has preliminary water quality testing been completed to determine background values of receiving waters?
	Condition WT3 of the Environmental Authority states “the stormwater runoff from disturbed areas must be managed to minimise the release of the contaminants offsite”	At present the design of the proposed development does not achieve this. There are no stormwater controls on any of the waste utilisation areas.
Bushfire Management	Section 5.3.15 – The water supply storages (tanks) shall be used as fire fighting water.	Is using emergency supply water for cattle appropriate for fire fighting use? This would breach the Animal Welfare Code of not having an appropriate emergency supply water for cattle on site. An alternate water source should be provided for fire fight use?

Item	Stated in Application	Issue
Mass Burial Pit	Section 5.1.4.1.3 of Planning Report AND Section 3.6.12 of Appendix Q: SBEMP – details that a mass burial pit site has been designated on site plans,	The mass burial pit does not appear to be on any site plans provided. The site is in a mapped flood prone area and groundwaters are relatively shallow, this may present an issue if the site is not chosen appropriately.
Flood Assessment	Appendix H: Flood Study. ‘this assessment considered riverine flooding only and not inundation from short-duration events overflowing minor tributaries or localised overland flow.’	The flood study provided was quite basic and given the entire site is well within the mapped flood prone area the results of this study should not be the only justification for not requiring flood levee protection at this site. Given the site is changing from a temporary holding facility use to an intensive feedlot use – the potential for high nutrient contamination of flood waters is substantial.
Hospital Pens / Sick Pens	Sections 4.2.1, 4.3.1, 5.1.3, 5.2.2, 5.3.7, and 7.5.2 – mentions that hospital pens/sick pens will be provided on site.	No plans indicate which pens are designated for this purpose.
Sediment Basins and Holding Ponds	Sections 5.1.3.1 and 5.1.3.2 – indicate that the sediment ponds are existing.	No sediment basins are shown on the approved drawings under MCU18/63: <ul style="list-style-type: none"> o PREMISE – A001 – Proposed Layout, Sheet A001 (Rev0) o PREMISE – A002 – Proposed Export Depot Layout, Sheet A002 (Rev0) o PREMISE – A004 – Controlled Drainage Area Plan, Sheet A004 (Rev0) o PREMISE – A005 – Effluent Management System Design, Sheet A005 (Rev0) No ‘as constructed’ drawings have been provided as part of this development application indicating that the sediment basins and holding pond are adequately constructed to meet the sizes modelled to be appropriate for the proposed use. Approved drawings under MCU18/63 indicated only 95ML holding pond. Section 5.1.3.2.1.2 indicates that a holding pond of at least 123.5ML is required for the total CDA. Then states the existing holding pond is 176ML.