

3 May 2015

The Chief Executive Officer  
Western Downs Regional Council  
PO Box 551  
DALBY OLD 4405

Attention: Ms Kate Swepson.

RE: DEVELOPMENT PERMIT FOR MATERIAL CHANGE OF USE EXTRACTIVE INDUSTRY (SAND QUARRY UP TO 100,000 TONNES PER ANNUM) & ENVIRONMENTALLY RELEVANT ACTIVITY - ERA 16(1)(B), 16(2)(A) & ERA 16(3)(A) LOT 5 ON RP135939 ON RAVENS ROAD, WIEAMBILLA  
APPLICATION NO: 030.2014.1165.001

Please find following my submission regarding the above listed Development Application.

General observation is that both the original and subsequent applications (including the response to Request for Information and associated technical reports) still do not adequately address the Development Assessment Table in terms of providing rational argument and technical detail for the DA consideration. This is an Impact Assessable development, and should be subject to full and thorough assessment of the situation and likely impacts with the forwarding of options to reduce impacts, including the 'do-nothing' approach. A full assessment we would suggest would result in the determination that such a use would be better located elsewhere.

This may have been compounded by the misinterpretation of the RFI by the consultants as representing the gaps within the prior submission and the only basis to which their proposal would be assessed.

The interpretation of the matters in the RFI does not exclude the need for the proponent and consultants to adequately address to the fullest extent the development assessment table matters under the Sustainable Planning Act.

Also generally, the assessment should look at the full potential future use of surrounding lands and not just the houses that are currently built in the rural residential area. There is insufficient work done to complete adequate assessment. For instance, at least a reconnaissance level ecological survey of the land and surrounds should have been completed to properly assess the impact of the development.

Simply stating that extractive industries are best accommodated within a rural zone is an absurd statement. Rural zones are not the dumping ground of noisy, dusty, widely impacting activities. And in particular, rural zones are not 'vacant tracts of land'. People live and have businesses in these areas. This point further demonstrates the inadequacy of even considering this application truly in terms of materially changing the use of this land.

In addition, if as suggested in the DA, one of the objectives of the Quarry is to expressly provide council with sand for capital works, further analysis should be forthcoming from the Works Manager (Council) to confirm whether this is the case, specifying the lack of supply from elsewhere i.e. the state of demand and supply, and why the capital works requires the specific type of sands that can only be found in this location.

Please see attached some specific comments on the content of various elements of the application.

Regards,  
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0746654072

**Note:** technical data included in this submission was sought from *Planning 4 Sustainable Development* a company providing professional urban and regional planning as well as environmental planning advice.

### **Traffic Impact Assessment Report**

- Figure 3.4 Tara/Chinchilla road, typical  
*This image is not a typical representation of this particular road, there are indeed parts of this road that are narrow and have steep eroded drop offs, which any further increase in heavy traffic will only impact further.*
- Section 4: purpose of the development is “for the express purpose of supplying sand for Council capital works projects.”  
*This is not the intended use that has been previously identified in another part of the DA as ‘fracking sand’. The fact that the purpose and objective of the activity requiring the MCU is not very clearly articulated raises the question as to the need to progress the application for an activity which includes the destruction of important waterways.*
- Section 7: Conclusion and Recommendation  
*this report does not address:*
  - *the additional matter of traffic noise, not only traffic in and surrounding the site but traffic noise impacting along the road ways*
  - *in addition the matter of dust exposure to residents and other road users from the operator using substandard roads with heavy traffic.*
  - *The exposure of residents near the traffic route to respirable crystalline silica and other dust borne illnesses from the payload and trucks themselves*
  - *The dirt roads servicing the lands are substandard they are a maximum of 5 or 6 meters of not just unsealed roads but dirt road and mostly sandy roads. So they do not meet even minimal rural road standards in terms of gravelled road suitable for heavy traffic.*
  - *Photography available through the reporting already indicates visible damage from heavy vehicle use on the Wieambilla Road intersection with the Chinchilla to Tara intersection.*
  - *In terms of generated traffic the engineers chose to report only on the implications for peak hour traffic based on limited data and assumed levels of peak hour traffic along surrounding roads and the Chinchilla to Tara road. It is recognised that this assessment is limited by the lack of data available from the MTR and or Council, but this should be the excuse on not considering the impacts of ‘other than peak hour traffic’.*
  - *Using their own calculations which seem reasonable from a 100 000 m3 extraction per year, the figures indicate that there will be up to 32 large heavy vehicle movements to and from the site. Additionally there will be on their estimates 12 light vehicles movements per day although I would suggest this need to increase by a factor of 1.5 to accommodate workers leaving at lunchtime to have a break or go to get lunch.*
  - *While the engineer reports indicate what should happen as far as intersection treatment it does not address what should happen to poorly formed rural roads that will be used to access the site from the Chinchilla/Tara road.*

### **Property Vegetation Management Plan (including Response to Information Request SDA-0115-017891)**

- As of April 2015 Vegetation has been significantly cleared in areas on the property with no development approval and in Category B Vegetation areas, not as described in the report “for fire breaks”.
- there has not been, even at a reconnaissance level, an ecological survey covering both flora and fauna of the lands. This would normally also have included a description of invasive alien species found on the land.
- Sustainable Planning Regulations and the Vegetation Management Act do not give exemption to the clearing of vegetation for this MCU, and Proponents will need to avoid or minimise the clearance of vegetation. They will also need to ensure that their landscapes are stable and that there are no impacts on the wetlands or the water course banks, and that they too are stable. Lastly, they need to demonstrate that there is maintenance of water quality and habitat. None of these matters have been adequately addressed within the original reporting or in the RFI

response. Nor does their stated control seem to be the case in reality upon inspecting the land and seeing what has been done to the site to date.

- Section 2: Status of Exemptions and Approvals Required.
  - *As a matter of clarity (as picked up by Redleaf Environmental Consultants) there has been reference to a part of the Sustainable Planning Regulations about exclusions for this type of development with regards to clearing of vegetation.*
  - *This Section correctly refers to amendments to vegetative clearing requirements for 'mining'. NOTE: Sand extraction is not mining.*
  - *Under that section they refer to modifications that came to the legislative platform on the 8th August, 2014 which brought in a self-assessment mandatory code for vegetation clearing. However, as noted by Redleaf, it does not negate the need to A/ avoid and minimise impacts on regulated vegetation B/ maintain landscapes ability C/ create wetland watercourse stability D/ maintain water quality and habitat.*
  - *The inference in the planning report that the Sustainable Planning Reg. 2009 Schedule 12 exempts the development from Regulated Vegetation under the Vegetation Management Act is incorrect.*
- 1.1. Site Location, Area estimates and Position of Infrastructure and Quarry Pits
  - *"The length of streams affected of order 2 and 3 are 268m and 238.4m respectively."*
  - *The Government provided Vegetation Maps indicate that they are streams of order 1 and 3, not 2 & 3.*
- 1.2. SDAP Module 8 – Native Vegetation Clearing
  - *There is category B Vegetation on the site and there is a need to not only address specific points of the RFI through a response, but undertake adequate and at least surveillance level assessment and reporting of the ecological status of the lands and surrounds. **This has not occurred. No ecological assessment was undertaken nor reported on, even at least a reconnaissance level survey of the ecosystems and habitats of the lands.***
  - *There are order 1 and 3 streams across the land which coincides with the location of the expected excavation area with no adequate description of those water systems, their ecological and water system status and the implications of the impacts from the operations on those streams.*
  - *From observations of the photographs of the waterways even though they are ephemeral, they do seem to have exceptional ecological value. There is no indication in the application or reporting of the staging of the development. There is no indication of current water resource systems or water management regimes, nor an adequate assessment of how these may be effected by the development and how the impacts are going to be addressed. Nothing in the original documentation, including the amendments completed by the proponent in February 2015 and their formal response on the 17 April 2015 concludes water management issues adequately.*
  - *The stock piling is also going to coincide with one of the water ways. There was not adequate addressing of this as picked up by the state agency as to impacts on groundwater and dependant ecosystems.*

#### **Nearest Sensitive Receptors Layout**

- What is the basis for the selection of distance that identifies the sensitive receptors? It would appear to be lacking necessary details regarding what informed their selection of sensitive receptors and what consideration to the impact that noise, dust, vibration will have. Additionally the impact and damage to the waterways will affect multiple people and properties up to 10 km away (the further reaches of those waterways). The lands all about the site are fully subdivided for rural-residential and rural pursuits. There will be houses adjacent to the site in the future and these should have been included as 'sensitive receptors'.
- In addition to this, it is my opinion the map has missed at least one sensitive receptor, again, bringing into question the preparation of the application.

### **Site Based Management Plan**

What is said to be the addressing of impacts through the SBMP (especially Section 4.3; Section 4.6; Section 4.7; Section 5.2; Section 5.3; Section 5.4 and Section 5.7) are at best a compilation of management responses, not assessments.

This is the form of information that is normally incorporated in the monitoring and evaluation component of a Site Based Management Plan. It is not to the standard or the presentation that is normally associated with impact assessment. Notwithstanding this, the draft site based management plans that would normally accompany a development application for this form of ERA and MCU would need to be comprehensive. Information in the material forwarded is often brief, a collection of aspirational 'will do' statements or in some cases just a compilation of publicly available information.

- 1.2 Objectives
  - *This section specifies the landowner; however, this activity will be carried out by an operator separate from the landowner.*
- 2.2 Ownership
  - *Owner of the ERA is not the owner of the land.*
- 2.7 Land Zoning and surrounding land uses
  - This section is wholly inadequate to describe the reality of the area. Council are well aware of the fact that this block is zoned Rural C and a priority land use as a large house site, and is inside a heavily populated rural lifestyle designed estate making the second sentence completely untrue. This also makes the third paragraph untrue due to the impact a Sand Quarry will have on the people and homes immediately surrounding it both in terms of liveability and resale value.
  - Sand quarry activities involve noise, dust, vibration, light, and serious health impacts associated with crystalline silica and associated environmental illnesses. This is not discussed, nor are basic baseline tests and intentions regarding the management of such significant impacts.
  - There are not rural activities on nearby land, they are blocks specifically designed for peaceful, nature filled lifestyle blocks, the direct opposite of a sand quarry.
  - the last paragraph on vegetation is categorically already discounted due to the methodical grid pattern of clearing that has already been done with no consideration to the creek, or to any specific ecosystems
  - This MCU will add no value to the community it is seeking to operate within and will do damage to an already industrially stressed community (from external development pressures associated with the Resources sector).
- 4.3 Air Quality (Gaseous Waste / Dust Management Plan)
  - This entry in the plan is wholly inadequate in addressing the real and significant issues associated with a Sand Quarry. Even a cursory "google" search could identify issues.
  - This significant lack of attention to a serious public health or indeed Occupational Health and Safety issues demonstrates the lack of experience / expertise or perhaps just lack of due diligence the proponent has for this project and the MCU process itself.
  - On its own, this should be grounds to dismiss the application.
- 4.6 Stormwater Management Plan
  - There is still no simple modelling or calculations of the water systems and the characteristics for the potential erosion and sedimentation that may occur from the disturbance to the lands.
  - There is simply no modelling, there is no description of the site details, there are no contours so that the characterisation of the land could occur.
  - **Conceptual Storm Water Plan**
    - Given the recent weather event over the weekend 1 May 2015, valuable information would have been gathered to indicate the important work the order 1 and 3 creeks

do in the area, and the effect that the recent clearing and felling into the creek had on this site and those down-stream.

- The information supplied by the plan form and also backed up by text in the original planning report and the original site based management plan, and its updated plan is again too brief. There is limited detail on plans, there are no contours or assumptions on water moving across site / how it aggregates or congregates through the various waterways. There is no reporting on the stream order and the implications in terms of State levels of sensitivity. From this lack of site based data, there is no indication of water flow directions across the site as extant flows. How the development will physically impact on this and how those changes will be addressed is not adequately covered.
- There are no schematics on how erosion sediment control measures will be provided on site, and on what basis or modelling – measures are to be proposed. Albeit the revised documentation through the response to the RFI incorporates tables, these at best would describe monitoring and evaluation measures, not indications of the circumstances of the case, expected changes and how impacts should be addressed.
- In terms of only erosion and sediment control there are State, National and NSW guidelines that are commonly used even with small scale developments (this is large scale) which indicates the rudimentary minimum information that needs to be provided to understand and address storm water management and erosion and sediment control.
- There are often flippant nominations of responses to requirements, for example: ‘that water will be supplied by ponds’ or ‘from diversion of water flows to ponds’ from the natural waterways. Good reasonable work, at even the reconnaissance level, would have taken climate change data and site & surround information (especially the levels of the land) to determine the likely water harvesting that could occur to supply the water needs on the site and use.
- It is not adequate to suggest that needed water would be taken from ponds or from diverted channels. Simply, the area does suffer from dry periods and it is guaranteed that there will not be sufficient water for processing, managing the site and for human uses for up to 4-5 months of the year.
- A simple water balance assessment for the lands should have been produced for the Development Application. The same information that is needed for these simple table based assessments could have been used for the most elementary erosion and sediment control calculations.
- 5.2 Land Management Plan – Pest and Weeds
  - This section refers to an Annexe of posters of weeds as the preferred means of management. The work on site and in reports should have covered a reconnaissance level review of the ecosystems and land cover - and at least reported on the existence, or not, currently, of invasive alien species and how this would be managed, especially those that would be introduced to the lands from the proposed development.
- 5.3 Noise Management Plan
  - This is again wholly inadequate and somewhat arbitrary motherhood statements that bear no validity on the actual experience on the ground.
  - Noise from heavy machinery has been known to travel up to 5km and still be at a detectable and nuisance level.
  - What modelling or scientific basis are the assertions made in this section.
  - There are only indications of activity on site being from 6am – 6pm which are outside the requirements of works in rural areas – commencing at 7am.
  - There is no assessment of the noise that would be coming from 32 heavy vehicle movements per day through the rural residential areas.
- 5.4 Vehicle Movement

- In various documents referring to vehicle movements there is a clever description of the willingness to upgrade 'access ways' for the movements of vehicles.
- It would seem this is cleverly worded to address what they wish to do on-site only. This should not be taken as an undertaking of the proponent to upgrade the road network through to the Chinchilla to Tara Road – which should occur if the development was to proceed.
- This is mentioned, as with the likely 32 heavy vehicle movements per day, this is of significance in terms of number and types of vehicle use that would normally trigger a requirement for the upgrading to at least a bituminous road by the proponent.
  
- 5.6 Community Relations
  - This section is again an inadequate means of dismissing the very serious issue of community impact. The methodology apparently proposed by the proponent is not to actively research and prevent these issues, nor undertake overt proactive measuring and forwarding of acceptable management tactics. Instead they acknowledge their inevitable occurrence and promote the use of problem documentation as a means of amelioration?. This is not rational assessment. if problems are raised they will attempt to deal with them in a vague number of days, with an inordinate focus placed on complaints likely to be 'frivolous and vexatious'. This is addressing crucial issues after the event without any satisfactory mechanism to alleviate the problem, consistent with principle of addressing issues at the source – which in this case is not to enable the use of the lands!!
  
- 5.7 Rehabilitation Management
  - The proponent indicates that rehabilitation will occur as 'agreed with the landowner'. This is not a sound addressing of the need to rehabilitate any development site. Conceptual rehabilitation measures need to be represented in plan form and be themselves subject to rational assessment and design.
  - Plans even at the reconnaissance (sketch plan level) should indicate the rehabilitation parameters and what will be occurring on the site during the staged development, near and post closure.
  
- Appendix E by Groundworks
  - It is noted again that Groundworks have specifically addressed technical points raised in the RFI and referral process. Therefore their reporting cannot be seen as a fuller impact assessment of land resources and ground resources or other related parameters, that should have been part of the original planning report addressing the current status of the systems, and identifying the impact of the development. The appendix therefore still does not provide adequate information for an 'Impact assessable' MCU application.
  - The proponent indicates that the dredging will occur through dry mining, through the use of an excavator. It notes that over the land flow paths, or the waterways coincide with, or conflict with the intended development area and is simply described as needing the diversion of overland flows or waterways around the work areas.
  - There are state guidelines for the diversion of waterways, even if they are minor, and even within erosion and sediment control manuals ie 'the purple book' or the 'blue book' from NSW there are minimum requirements for the diversion of waterways. Plans and reports at least at the reconnaissance sketch plan level should detail how this was going to occur and should be based on science based methods of calculations.
  - While there is noting that the waterways over most of the site are small ephemeral and only to a depth of 300mm, there is no indication of the role and function of these waterways during wet events and the likely flood levels even by reconnaissance noting of the physical representation on the lands.

- Infact, upon inspection of the actual site, there are parts of the waterways on the site that have a bank higher than 2m, another inaccuracy in the reporting.
- Photographs available show that even though they are ephemeral to 300mm, they could accommodate significant flows of water during wet periods or extreme events, and the vegetation certainly shows an ecological regime that has adapted to riparian systems.
- In terms of the location and depth of the aquifer, Groundworks note that the site works would only drill down or scrape down to the maximum of 4m, noting that the groundwater system i.e. the water level was some 300m plus deep in the ground. Interestingly enough, they suggest that the usual 45-100m depth to groundwater has been significantly impacted by the coal seam gas extraction industry of late. Their technical work on the ground and site testing seems to have been designed to particularly address the noted points in the RFI and the referral notice. The outcome was to report that the aquifer was far deeper than the expected works level. However there was minimal consideration of the interaction between the waterways and wet areas and the groundwater systems / subsurface levels, between the surface and the aquifer. This would usually be addressed in an adequate impact assessment report.
- Their own reporting and photographs show mottling of the sub soils especially in some photos at a depth of about 1.5m. This is an indicator of significant wet soil areas. Of concern too they indicate that Kaolinite clays exist close to the surface. From those experienced with sand production, there will be significant processing requirements involving large volumes of water to remove Kaolinite clays from the sand base. There are four particular issues with this:
  - A/ Significant volumes of water are required to process Kaolinite clays from sands
  - B/ The Kaolinite clays/sands themselves have significant issues in terms of disposal, whether this is on site or off site. They are not easily rehabilitated and are not easily retained within sediment ponds.
  - C/ The ponds on the land and what is said to be diversion of ephemeral streams (which they then note are for water supply) would not be sufficient for this processing.
  - D/ The water quality control ponds, both primary, secondary and tertiary will be required to ensure the adequate finishing or cleaning of the waters draining from development/activity areas.