12 February 2019

NSW Independent Planning Commission
Level 3
201 Elizabeth Street
Sydney NSW 2000

Electronically: online submission form

Vickery Coal Mine – Vickery Extension Project

Dear Commissioners

Background

Cotton Australia is the key representative body for Australia’s cotton growing industry, supporting about 1,200 cotton farming families in NSW, Queensland and now into Victoria. Our members represent 152 Australian regional communities who in 2017-18 used 500,000 hectares of their land holdings to grow cotton, producing around 4.6 million bales. The value of the 2017-18 Australian cotton crop was $2.92 billion\(^1\) and the north-west region of NSW where the Namoi Valley is located, is a significant contributor to this.

As reported by the Cotton and Research Development Corporation’s 2018 grower survey, the average north west region farm size in 2017-18 was 6,570 ha with a mix of dryland (rain grown 44% of farm area) and irrigated cotton (full 33% and partial 3%). There were also areas used for grazing and native vegetation (20%)\(^2\). This employed an average of 9.7 staff per north-west farm with the majority (6.2 people) being fulltime\(^3\). 40% of these respondents indicated they are planning to hire more staff in the next 12 months.

Cotton Australia has also worked closely with members and other landholders affected by the Vickery Extension Project; we understand they will be making submissions that seek its refusal. Cotton Australia recognises and supports these landholders’ position. In addition to the information provided at The Commission’s Gunnedah session (5/2/19) we take this opportunity to highlight additional issues that we see as concerns.

\(^1\) ABARES Ag Commodities Report, June 2018
\(^2\) compared to the national average of 5,674ha, 41% fully irrigated, 3% partially, 32% raingrown, 17% used for grazing, 4% for native vegetation, 3% other not listed above. CRDC 2018 Cotton Grower Survey available at: http://www.crdc.com.au/sites/default/files/pdf/CRDC%20Grower%20Survey%20Report%202018.pdf
\(^3\) Ibid. The national average was 4.3 staff on small-size farms, 7.9 on medium and 26.6 on large; averaging 6.7 total number of staff per 1,000 ha. 31% of 54 growers reported looking to recruit more staff in the next 12 months. The total average was an additional 4.9, made up of 3.4 entry level, 1.1 experience, 0.4 senior experienced and 0.1 managerial.
Executive Summary

The issues facing cotton growers are:

- Key elements of The Vickery Extension Project (The Project) represents significant development creep.
- There is a concerning lack of detail about the rail spur and its construction, as well as the accumulated impact this structure will have by traversing the floodplain.
- The Social Impact Survey does not consider the noise, light and sound impacts caused by the coal handling and preparation Plant (CHPP) operating for 24 hours.
- Sufficient regard has not been given to minimising the risks of a large scale rain event upstream from the Vickery Mine and extension, in terms of the health and productivity of the agricultural land, restrictions on the community’s recreation, to say nothing of the physical health and safety implications for the community.
- Regarding the mine’s rehabilitation, sufficient length needs to be given to the amount of time in which regulatory compliance is in play as plant and hence ecological establishment is not instantaneous.

Cotton Australia recommends:

- The Social Impact Survey must be expanded in order for The Commission’s assessment to include changes in night time light levels plus the resulting noise of the facility operating and being serviced, whether by road or rail.
- The Commission needs to consider the impacts of dust on the general amenity, the community and the agricultural enterprises adjacent to The Project and also downstream. This was the basis of the 5/2/19 presentation to The Commission.
- The flood modelling and subsequent assessment must address:
  - the accumulative impacts of the rail spur and associated structures being added to the flood plain, and also
  - the risks posed by a large scale rain event upstream from the Vickery Mine and extension.
- If the project proceeds, despite community objection, the community is given the opportunity to have input into the final form and use of the rehabilitated landscape, for both the approved Mine and also all features of the Vickery Extension Project. The use of a void as the final landform is not acceptable.
- If The Project is to proceed, sufficient length needs to be given to the amount of time in which regulatory compliance is in play as plant and hence ecological establishment is not instantaneous. (E.g. time to investigate, repair and confirm works are sufficient to have restored the broader landscape.)
Introduction

Cotton Australia does not typically get involved in locally based issues as we take a position that we only represent the broad concerns of growers. However we believe that the Vickery Extension Project (The Project) has much broader implications for our growers due to the proximity of the development to prime agricultural lands and high quality water resources. Also that key elements of The Project represent significant development creep:

- Regardless of the Blue Vale Pit being struck from the project, the overall excavation activity is still located adjacent to the Namoi River and its flood plain.
- The area of land from which coal is to be excavated has expanded, a portion of which brings it closer to the Namoi River.
- The coal processing activities to be conducted on site by the CHPP would increase because material from all other Whitehaven mines is to be directed to the Vickery site. As indicated by the EIS documentation this will occur for an estimated 12 of the 25 years of the mine’s life.
- The coal stockpiled for washing or transport will be even closer to the Namoi River and floodplain than the mine area.
- The rail spur is being created to transport the coal instead of roads being used, and it will transverse both the river and floodplain.

General observations:

Cotton Australia considers that the protection and sustainability of land and water resources and enhancement and maintenance of landholder land access rights is of utmost importance.

While we recognise that the mining industry offers potential economic benefits to Australia, without proper regulation and enforcement the mining industry also poses significant risks to the Australian cotton industry. Specific to mining our long-held policy principles include:

- Protecting the productive capacity of agricultural land from mining extraction activities.
- Opposing any mining development unless and until it can be definitively proven, that the development will have no impact on the productive capacity of the land.

It is in light of these Cotton Australia policy principles that our concerns lie, some examples are as follows:

Rail spur and truck/cart movements:

- Flooding

There is a concerning lack of detail about the rail spur and its construction. Statements simply indicate that it will be built to engineering standards and in a manner to enable flood water passage underneath such as: “appropriately sized culverts”.

However there is no consideration about this being an additional structure on the floodplain despite the map on p11 of Appendix C clearly indicating that southern portion of mine infrastructure and the rail spur are located in the ‘Flood Storage and Secondary Flood Discharge – Upper Liverpool Plains’ zone of the Upper Namoi Valley Floodplain.
As the spur crossing would be the third transport corridor to traverse the floodplain from a mine, Maules Creek road and rail bridges being the others downstream, surely the accumulated (knock-on) impacts that will have on flood waters across the landscape should have been considered by the EIS. So too the impacts on existing structures like the road and rail line crossings downstream.

**Cotton Australia recommends** the flood modelling be revised to include the accumulative impacts of the rail spur and associated structures being added to the flood plain.

- Noise and light pollution

The approved mine’s consent has windows of time permitting the transport of coal but no road or rail spur:

> “The Applicant shall only transport coal from the site or receive coal reject from the Whitehaven CHPP between the hours of: (a) 6 am to 9.15 pm Monday to Friday; (b) 7 am to 5.15 pm Saturday; and (c) at no time on Sundays or Public Holidays.” [Development Consent 2014 - Schedule 2 Administrative Conditions: Coal Transport point 9, page 6]4

Regardless of a supposed cap of 16 train movements a day, The Project’s current configuration is based on the CCHP operating for 24hrs. The CCHP will require sufficient lighting to ensure safe operation in an area currently dark at night, in turn introducing a level of noise, light and sounds not currently present in the landscape.

In Cotton Australia’s view the changes in night time light levels plus the resulting noise of the facility operating and being serviced, whether by road or rail, would be of sufficient note to be canvassed by the Social Impact Survey. However they were not.

**Cotton Australia recommends** the Social Impact Survey be amended in order for The Commission’s assessment to include changes in night time light levels plus the resulting noise of the facility operating and being serviced, whether by road or rail.

**Flood preparedness**

The construction of the rail spur results in seven of the 17 existing dwellings being on the west side (downstream) of the rail spur. According to the modelling used in Appendix C the predicted flood level change (Figure 6.10 ) indicates that two locations will see greatest changes to flooding, effectively sandwiching these seven dwellings. To reiterate the location of the two areas subject to the greatest flood level change, according to the modelling used, are the weakest points at time of flood.

Cotton Australia would draw the Commission’s attention to the disastrous flooding event that occurred at the Ensham Mine in Queensland during 2008. The mine’s six pits were filled to 15 metres with more than 100,000 megalitres of water when the levee banks on the Nogoa River failed. This submerged the dragline and took four months to decant the water which was pumped into the river. During that time health warnings were issued to downstream communities due to pollution concerns5.

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With the changing climate reliable modelling such as the *NSW and ACT Regional Climate Modelling (NARClim)* Project indicates the frequency and veracity of storm effects will change, not just temperature and dry spells. Consequently these projections suggest the volume of what is currently considered a large rain event, such as the magnitude of a 1 in 50 year or a 1 in 100 year, will occur more frequently and possibly in a shorter period of time.

In the case of Ensham, the modelling used to calculate the required bunding didn’t foresee such events. Post-flooding the mine’s owner installed levee banks to withstand a one-in-1,000 year flood. Cotton Australia is therefore concerned that sufficient regard has not been given to minimising the risks of a large scale rain event upstream from the Vickery Mine and extension. Should such an event occur it would have disastrous consequences at those two weakest points on the rail spur. As well as the CCHP, the stockpiled coal and the infrastructure located in an areas already identified as being affected by South Creek flooding.


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7 Source: ABC Capricornia 2 May 2008 [http://www.abc.net.au/local/stories/2008/05/02/2233953.htm](http://www.abc.net.au/local/stories/2008/05/02/2233953.htm)
These risks and their mitigation are not reflected in the EIS. This is concerning because the impacts would be felt not only by the seven dwellings immediately located nearby the spur. The health and productivity of the agricultural land would be deleteriously impacted, as well as restrict the community’s recreation, to say nothing of the physical health and safety implications for the community.

**Cotton Australia recommends** the flood modelling and subsequent assessment be revised to include the risks posed by a large scale rain event upstream from the Vickery Mine and extension.

**End of life of the mine:**
- Final voids

In Cotton Australia’s view:
- Final voids are not the default option for a project and are only are permissible when the ecological sustainable development benefits can be demonstrated.
- When it has been agricultural land that the mine has disturbed, the land should be fully restored to its former agricultural quality. This is in terms of quality of soil, landform and catchment hydrology, including surface and ground waters.

Tools currently exist that can be used to assess groundwater ecosystem health before, during and after a mine project. For example the Groundwater Health Index developed by Dr Kathryn Korbel of Macquarie University’s Department of Biological Sciences and Cotton Research and Development Corporation.

- Scheduling of rehabilitation activities

Unfortunately not until the Mining Operations Plan (MOP) is drafted, will it be clear whether the area will be restored to the standard of its former agricultural quality. This is particularly concerning as the modelling indicates there will be continued in flow of water, gradually increasing in salinity and as soon as two years post mining operations.

Clearly the use of a void as the final landform for The Project is totally unacceptable.

Rather, in Cotton Australia’s view:
- Any existing or approved mines must be rehabilitated to their pre-development productive capacity, within five-years of ceasing production.
- A mining development approval must include a comprehensive rehabilitation plan, with clear and enforceable timeframes.

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8 2017 CRDC cotton growing practices survey, the NW region (Lower - Upper Naomi, Gwydir and Bourke areas) was responsible for or 40% of the area planted (6505 hectares) in NSW.

9 More details about this tool is available from
Cotton Australia recommends if the Project is to proceed, sufficient length needs to be given to the amount of time in which regulatory compliance is in play as plant and hence ecological establishment is not instantaneous. (E.g. time to investigate, repair and confirm works are sufficient to have restored the broader landscape.)

- **Decommissioning the rail and road corridors**

The EIS leaves open what will happen to the rail spur and its surrounding corridor post mine use. At best, in referring to the ‘Mine Infrastructure Area and Southern Part of Secondary Infrastructure Area’ there are statements made suggesting the amount of infrastructure removed from this precinct could be up for negotiation. For example:

> Infrastructure would be removed at the end of the Project life, unless otherwise agreed with the relevant government agencies and landholders (e.g. concrete hardstands, site access roads, sheds, buildings and sediment dams may provide for alternate post-mining uses).\(^{10}\)

We note that it was raised at the public hearing this has been purposely left open not so much for decommissioning but repurposing by Whitehaven as a future and ongoing rail transport corridor.

Cotton Australia recommends if the project proceeds, despite community objection the community is given the opportunity to have input into the final form and use of the rehabilitated landscape, for both the approved Mine and also all features of the Extension Project.

**Conclusion**

We would welcome the opportunity to discuss our concerns with The Commission. For more information, submission please do not hesitate to contact Jennifer Brown, Policy Officer, on 02 9669 5222 or jenniferb@cotton.org.au.

Yours sincerely,

Michael Murray,
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Cotton Australia

\(^{10}\) (Section 5 Rehabilitation Strategy, Domain 3B Mine Infrastructure Area p5-18)