

VICKERY EXTENSION PROJECT (Application Number SSD 7480)

ENVIRONMENTAL IMPACT STATEMENT SUBMISSION

STEPHEN & ANITA MAUNDER

“UNDOOLYA”

12664 KAMILAROI HIGHWAY

BOGGABRI NSW 2382

EIS PROPERTY ID - 125

Our farming property “Undoolya” is located approximately 3 kms from the proposed Vickery Extension project.

Together with our four young children, we operate an irrigated cropping enterprise on “Undoolya”, growing high yielding and high quality cotton, durum wheat and other crops. We purchased the property in 2009. It is located 9kms from Boggabri and 30kms from Gunnedah. Our children have all attended Sacred Heart School in Boggabri (with one still in attendance). Our eldest son recently completed year 12 and has returned home to work on the family farm with his father. Anita works full time as a Senior Accountant with a firm in Gunnedah.

We hold significant concerns regarding the impact of the Project on groundwater aquifer drawdown, water quality, noise & dust emissions as well as the floodplain impacts of the proposed rail loop. The Vickery Extension Project Landowner Briefing prepared for our property (given to us by Whitehaven Coal on 18/10/18, just one week before submissions are due) suggests there will be no impacts on our property if the Project is approved. We strongly reject these findings and our justifications for this objection are outlined in this submission. We have included a number of matters of concern for which we require the provision of additional information from the Project applicant. We also reserve the right to request additional information from and pose further questions to the applicant in the future.

Long term, we hold very serious concerns about the impact this mining development will have on the value of our property and following that, the value of our farming business. Potential future buyers of our farm will be influenced by concerns for the environmental and social impacts of living near such a large open cut coal mine. We are hoping to expand our business in coming years to accommodate the future careers of our four children however it is possible our ability to borrow against these future expansion plans will be stifled by a drop in the value of our farming asset and therefore a reduction in the equity we currently have in the business. It is not acceptable to us to have such an impact imposed upon our family by such a large, environmentally deceitful Company who has no social or environmental license to operate so close to prime agricultural land and the Namoi River. The experience of those people living and farming near the Maules Creek mine is evidence of this.

The Approved Mine has half the forecast production of the Extension Project, no railway crossing near the Namoi River flood plain, no CHPP, no train load-out facility and no bore field site comprising up to 10 ground water bores. In effect, this extension crosses the line in terms of environmental impact. We have concerns that if approved, it will be the first in a line of other “extensions” the applicant will seek. The cumulative effects with other mines in the area will mean the Gunnedah/Boggabri area will become another Hunter Valley, changing the local landscape and social

structure of our communities forever. The proposed Project by Whitehaven is a tipping point for the future of our local area.

The EIS includes reference to Whitehaven's decision to remove from the Project the Blue Vale open cut area, with foregone coal production of approximately 6 to 7 million tonnes, primarily due to community concerns regarding proximity to the Namoi River. We believe, if the extension Project is approved, Whitehaven will again seek to include this coal reserve in the mining area of the Project. Our concerns were heightened by comments made by Whitehaven employee Brian Cole in response to a question regarding the company's future plans, at a community meeting in Emerald Hill on 19/10/18, when he stated **"Whitehaven has elected not to mine that, at this stage". We would like to see the removal of the Blue Vale Pit from any further mining activity set down as a Condition of Consent if the Project receives approval.**

A1 – GROUNDWATER ASSESSMENT

The bore census conducted by Whitehaven, as noted in the Groundwater Assessment (Hydro Simulations, Appendix A) in March 2012 did not identify 4 bores on our property (3 of which are used for the irrigation of crops) which would be considered in close proximity to the Project (approx. 3kms) while it did include several bores located significantly further from the Project than we are; the results of the Project bore census were used by Hydro Solutions to confirm the number and type of groundwater users near the Project. Given this omission, we understand there may have been other bores/wells on other privately owned land which have also been omitted from the census; we therefore hold concerns for the integrity of the base line data used in the assessment. The final conclusion of the groundwater assessment is that privately-owned bores surrounding the Project will experience a drawdown of at most 0.61m which is considered to be negligible. Indeed, a drawdown of more than 2 metres needs to have occurred and proven to be attributable to the Project before Whitehaven would implement make-good provisions. A drawdown of this magnitude at any of our irrigation bores would result in the water level falling below where the pump turbine is set which in turn would cause cavitation to the pump requiring complete replacement of the shaft, column and turbine and consequently re-drilling of the bore hole to access water at a deeper level. We have detailed logs for water flow and drawdown for all bores on our property. Water is a critical part of our business and represents a significant financial investment within our business. **We object to any drawdown of our groundwater source and expect to be fully compensated by Whitehaven should this occur. We request of the applicant further details regarding how they intend to monitor ground water levels of nearby bores and how they intend to compensate landholders for any losses incurred.**

Page 53 of the Groundwater Assessment prepared by Hydro Simulations notes the following:

The Project would result in a localized change in hydrological or hydrogeological connections over the mine footprint and a permanent reversal in groundwater flow direction in the immediate vicinity of the Project (from a westerly direction, pre-mining, to an easterly direction, post mining)....These changes would have a negligible effect on the Upper Namoi Alluvium.

We are concerned with this finding and the lack of supporting evidence behind the conclusion that there would be no impact on the groundwater source. Any permanent change to the natural environment on such a large scale should not be allowed to occur.

The bore field site noted in the EIS is to be located within zone 4 of the Upper Namoi Groundwater Alluvium System, with 10 new bores to be drilled northwest of the project. No detail is provided in the EIS regarding the distance between these bores and their exact distance from the nearest bores on privately owned land. Indeed the report prepared by Hydro Simulations recommends further field investigations to assess the thickness and hydraulic conductivity of the alluvium to determine whether the proposed location of the bore field will be suitable with respect to yields required for water supply. This would suggest the location of the bore field as presented in the EIS is subject to change and may indeed be placed closer to privately owned existing bores and the Namoi River. **As one of the landholders closest to this bore field proposal, we object to the scale of the proposal. If only 200ML to 390ML per year are required, as stated in the EIS, why are 10 bores proposed?**

We doubt even the 200 ML to 390 ML forecast, given that Table 8.9 of Appendix B (Site Water Balance over 26 year Project Life) shows just 1641 ML in total coming from the bore field. This equates to only 63 ML per year on average. Why is such an elaborate bore and piping scheme being built to supply such a small amount of water? The figures as presented in the EIS are incomplete and misleading as to the potential environmental impact of the Project. We request further details of the exact site of the bore field, which alluvium system it will be located within along with more detailed analysis of ground water requirements for the Project.

We also note that due to its State Significant status, the Project does not need to comply with three sections of the Water Management Act (2000), being Section 89 Water Use Approvals; Section 90 Water Management Work Approvals and Section 91 Activity Approvals, all of which we, as irrigated farming operators located within close proximity to the Project, must comply with.

89 Water use approvals

- (1) A water use approval confers a right on its holder to use water for a particular purpose at a particular location.
- (2) A water use approval may authorise the use within New South Wales of water taken from a water source outside New South Wales.

Section 90: Water management work approvals

- (1) There are three kinds of water management work approvals, namely, water supply work approvals, drainage work approvals and flood work approvals.
- (2) A water supply work approval authorises its holder to construct and use a specified water supply work at a specified location.
- (3) A drainage work approval confers a right on its holder to construct and use a specified drainage work at a specified location.
- (4) A **flood work approval** confers a right on its holder to construct and use a specified flood work at a specified location.

flood work means a work (such as a barrage, causeway, cutting or embankment):

- (a) that is situated:
 - (i) in or in the vicinity of a river, estuary or lake, or
 - (ii) **within a floodplain**, and

(b) that is of such a size or configuration that, regardless of the purpose for which it is constructed or used, it is likely to have an effect on:

- (i) the flow of water to or from a river, estuary or lake, or
- (ii) the distribution or flow of floodwater in times of flood,

and includes all associated pipes, valves, metering equipment and other equipment, but does not include any work declared by the regulations not to be a flood work.

Section 91: Activity approvals

- (1) There are two kinds of activity approvals, namely, controlled activity approvals and aquifer interference approvals.
- (2) A **controlled activity** approval confers a right on its holder to carry out a specified controlled activity at a specified location in, on or under **waterfront land**.
- (3) An aquifer interference approval confers a right on its holder to carry out one or more specified aquifer interference activities at a specified location, or in a specified area, in the course of carrying out specified activities.

Note.

Examples of where an aquifer interference approval may be needed include mining operations, road construction and any other large scale activity that involves excavation.

Waterfront land means:

- (a) the bed of any **river**, together with any land lying between the bed of the river and a line drawn parallel to, and the prescribed distance inland of, the highest bank of the river, or
- (a1) the bed of any lake, together with any land lying between the bed of the lake and a line drawn parallel to, and the prescribed distance inland of, the shore of the lake, or
- (a2) the bed of any estuary, together with any land lying between the bed of the estuary and a line drawn parallel to, and the prescribed distance inland of, the mean high water mark of the estuary, or
- (b) if the regulations so provide, the bed of the coastal waters of the State, and any land lying between the shoreline of the coastal waters and a line drawn parallel to, and the prescribed distance inland of, the mean high water mark of the coastal waters,

where the prescribed distance is **40 metres** or (if the regulations prescribe a lesser distance, either generally or in relation to a particular location or class of locations) that lesser distance. Land that falls into 2 or more of the categories referred to in paragraphs (a), (a1) and (a2) may be waterfront land by virtue of any of the paragraphs relevant to that land.

controlled activity means:

- (a) the erection of a building or the carrying out of a work (within the meaning of the *Environmental Planning and Assessment Act 1979*), or
- (b) the removal of material (whether or not extractive material) or vegetation from land, whether by way of excavation or otherwise, or
- (c) the deposition of material (whether or not extractive material) on land, whether by way of landfill operations or otherwise, or
- (d) the carrying out of any other activity that affects the quantity or flow of water in a water source.

Therefore, the applicant will not require approval to carry out a controlled activity within 40 metres of the Namoi River nor will it require approval to undertake flood works within a flood

plain. We are concerned that the full impact of the Project's non-compliance with these sections of the Water Act have not been sufficiently reviewed and explained as part of the EIS and request a more thorough explanation before approval is given.

A2 – SURFACE WATER ASSESSMENT

The EIS states that the sediment dams and mine water dams proposed for the Project will not need to be licensed under Water Management Act (2000). This means there will be NO REGULATION over landforms that, under the right climatic conditions, have the ability to release water into the environment and essentially the Namoi River catchment. **As a landholder downstream of the Project, we have concerns about this and request additional details regarding the Project's on-site water management plan before approval is given.**

The EIS states that there will be no uncontrolled releases of water from the Project site, except in the event of rainfall of 38.4mm over 5 days and when insufficient capacity in mine water dams. This is not a very high level of rainfall; this area can frequently receive upwards of 40mm in one rain event during the spring/summer storm period. So there is a very real risk of contaminants in water released from the Project impacting downstream waters, even though the EIS states that this risk is low. It is still an additional risk to river health and future viability that does not exist at the moment and should not be allowed to occur in the future.

This potential for pollution of the River is also a potential pollutant source for our ground water supplies as studies have noted the Namoi River is the major source of recharge for the ground water alluvium in the area.

We doubt the figures presented by Whitehaven in the Water Balance Accounting assessment (Section 8.4 of Appendix B). Section 7.5.1 of Appendix B states that 120 litres of water per tonne (L/t) of ROM processed is forecast to be used in the CHPP of the Project. Based on the Schedule of Coal Production presented in Table 7.2 of Appendix B, (212.2 Mtpa in total), we estimate total water usage of the CHPP to be **25,440 ML** over the life of the mine. This differs to the figure presented in Table 8.8 of Appendix B (Project Water Supply and Demand) which shows forecast water demand for coal processing is **12,271ML (approximately half of our calculated figure)**. **We request further analysis and explanation of these water supply and demand calculations.**

According to Section 3.1.1.1 of Appendix B (Harvestable Rights) the MHRDC of the Project is 175 ML. Table 8.9 of Appendix B, which shows total water available by source, includes Runoff of 46,583 ML over the life of the mine or **1791 ML per year** on average. Table 5.3 of Appendix B shows estimated runoff from the catchments in the vicinity of the Project and within the disturbance area after applying the rainfall and evaporation data from Section 4.1. Average Runoff from both of the two major sources is 100ML per year, a long way short of the 1791ML per year required to make the site water balance in Table 8.9 add up. **We believe these figures are incomplete and inconsistent, requiring further investigation before a correct assessment of the environmental impacts can be determined. If run off water is not available to the extent shown in the water balance, the additional water required will need to come from somewhere and our concern is that it will come from groundwater sources (bore field site) which will add to groundwater drawdown pressure on neighbouring bores like ours.**

A3 – NOISE & BLASTING ASSESSMENT

Our property “Undoolya” is identified as Property ID 125 in the noise impact study conducted by Wilkinson Murray for the EIS (Appendix D). Section 3 of their report states that “To the north, south, east and west of the Project there are a range of mine-owned and private rural receivers, all of which have been considered in this assessment”. These receivers are listed in Table 3.1 Appendix D.

We have never been in contact with the authors of this report, Wilkinson Murray, so we are skeptical as to the validity of this data, which forms the core data for the study’s findings in relation to noise impacts on neighbouring properties. A receiver may have been used on our property to obtain this property specific noise data however it would have been done with unauthorized access to our property. We don’t believe this noise monitoring was ever undertaken by Wilkinson Murray and if it was, it was done without our knowledge and consent. **We request further information from the applicant as to where and when the noise monitoring for our property was completed for this assessment.**

An example of where we believe the noise assessment data in the EIS is incomplete lies in Table 5.11 Appendix D. Our property ID 125 is shown to have no reading for the neighbouring coal mine activities (Tarrawonga, Boggabri Coal) in year 4 and year 16. We can confirm that we **currently** have and have had for several years, low level noise on most days and nights from these activities at our residence, depending on wind speed and direction and possibly other meteorological factors. We have also experienced blast noise and vibration on occasion from these mining activities. Without this baseline data, the cumulative noise impacts of the existing mines and proposed extension Project on our property are not accurate and the findings by the consultant that we have negligible noise impact is misleading.

No details are provided in the EIS regarding the real-time monitoring and forecasting systems to be used by Whitehaven. This would be provided in a Noise Management Plan which we assume would be prepared AFTER the Project receives approval to proceed. No details of the Noise Management Plan are provided in the EIS. We also understand compliance with noise limits would be confirmed by attended noise monitoring (that is, handheld monitoring by a person with acoustic training) at residences. The Noise Management Plan developed by Whitehaven needs to include **INDEPENDENT attended and unattended noise monitoring at all residences within 5km of the Project as well as in the town of Boggabri**. Anything less than this will not give local landholders and Boggabri town residents any faith in the management plan, given the lack of transparency and engagement with the local community at the Maules Creek mine over recent years.

The EIS states that “Real-time noise monitors would be installed at relevant reference locations to assist with noise management and to facilitate the implementation of real-time noise controls”. **We would like to see further details presented by Whitehaven PRIOR TO EIS APPROVAL regarding the location and staff attendance plan at these monitors over the life of the Project as well as the noise level triggers that would result in operational noise controls being undertaken.**

A4 – SOCIAL IMPACT ASSESSMENT

In our opinion, the Social Impact Assessment (SIA) is not a thorough review of the current social environment, in particular that of Boggabri. There are several factual data errors in the report and it appears outdated data has been used in a number of sections as well. For example, there are two schools in Boggabri. Sacred Heart School (the Catholic Primary School in Boggabri) has been omitted from the SIA including involvement in stakeholder mitigation and enhancement discussions which included Boggabri Public School only. Additionally, the SIA states that Gunnedah has one High School when clearly it has two. Therefore we would assume that St Mary's College (a school of approximately 400 students) was also omitted from the consultation process undertaken for the SIA.

We were not interviewed by the consultants Elliott Whiteing as part of the SIA despite being neighbours to the closest private landowner to the Project and being located within 3kms of the Project ourselves. According to the EIS, an invitation was extended "*all land owners with property immediately adjacent to the Project (and the immediate surrounds) to participate in this SIA.*" We feel, despite having had no formal meetings with Whitehaven staff regarding the Project, our details should have been given to the consultants preparing the SIA for potential input purposes.

The SIA talks about the **potential** for reduced community cohesion and increased conflict within local communities. This is already happening in Boggabri and Emerald Hill in particular due to the rail spur proposal. This issue is placing enormous strain on bonds and friendships that go back generations. There has been a complete disintegration of the community around the other mining project areas in the Boggabri district, with the loss of more than 100 farming families from the area. This impacts the town's businesses, schools and the general social buoyancy of the town as it loses its identity and sense of place. The mental health effects for local property owners are far reaching; anxiety regarding health impacts of these Projects, including noise and dust; diminished value of the farming business assets which in some cases have been built up over a number of generations; the loss of freedom to choose a lifestyle and place of residence which could be taken away if the environmental impacts of the living near the Project are too great. Anxiety regarding the requirement to "prove" in the future that impacts are occurring, despite what the assessments and modelling results say. This is a proven result of the Maules Creek Mine with many landholders experiencing this burden on a daily basis.

We are very concerned about the employment drain away from agricultural, construction and other local industry sectors in the region, particularly where young people are concerned. Even in times of severe drought, there is always a demand for both skilled and unskilled workers in the agricultural sector particularly from the larger employers who often operate large mixed farming activities across a number of geographically diverse properties. The Project will provide short term employment opportunities to those in the local communities looking for work but it is the open "poaching" and coercing of local farm workers by these big companies using high wages as the attractant which leaves a very sour taste with many local agricultural, construction and manufacturing businesses, particularly where they have invested heavily in training and up-skilling of those employees.

The use of non-local suppliers and contractors by Whitehaven is another issue many local small businesses have experienced despite the company's assertions to the contrary. There are many examples of local business owners feeling they are simply "the local quote provider" for Whitehaven, knowing that they never receive any of their business which goes to larger, non-local businesses who can afford to reduce their price.

A8 – VISUAL ASSESSMENT

Night lighting – the landowner briefing for our property states that direct views of the Project lighting sources will be visible from our property. The headlights of trains using the Project rail spur will also be visible. We will be impacted by sky glow as well. We already have night lighting impact on our property from the Tarrawonga coal mine which is some 10 kms from our property. **This has not been taken into account in the EIS. The cumulative impact of the extension Project will mean we are affected by night lighting more than what the EIS is predicting. We request additional details regarding the cumulative night lighting impacts of the Project on our property.**

Based on height predictions for the western embankment, our view of the Kelvin Hills will be completely blocked once the mine is de-commissioned. This will forever alter the views we have from our property which will only further negatively impact our future property value.

A9 – AIR QUALITY ASSESSMENT

Our property “Undoolya” is identified as Property ID 125 in the air quality assessment study conducted by Ramboll for the EIS (refer Figure 4.2 Appendix E). Section 4 of their report states “The local area contains a number of rural-residential properties situated at varying distances from the Project. The locations of the privately and mine-owned receptor locations assessed in this report are shown in Figure 4.2.” These receptors are also listed in Appendix 2.

We have never been in contact with the authors of this report, Ramboll, so we are skeptical as to the validity of this data, which forms the core data for the study’s findings in relation to dust and blasting impacts on neighbouring properties. A receptor may have been used on our property to obtain this dust and blast data however it would have been done with unauthorized access to our property. We don’t believe this dust monitoring was undertaken by Ramboll and if it was, it was done without our knowledge and consent. **We request further information from the applicant as to where and when the air quality monitoring for our property was completed for this assessment**

The air quality monitoring data included in the assessment is presented on several maps contained in Appendix 7 Contour Plots. Several of the maps show shading over or nearby to our property. Although the report concludes that our property is within the required/regulated criteria for dust, we remain very concerned that dust from the Project will impact upon the quality of cotton grown on our property which will result in quality downgrading and discounts imposed on the final price we receive for our product. We note in Figure A3-1 Seasonal Wind Roses 2013 that the prevailing wind direction during autumn (the period when the cotton bolls are open and maturing ready to be picked) is East/South East. Our property is located to the west of the Project area which would mean an increased risk of contamination from coal dust at this crucial time in the crop’s lifecycle.

We request further details around the measures Whitehaven is going to take in relation to protecting our water supply from being contaminated by coal dust and other air borne contaminants. The roofs of our sheds and house are the only source of water we have to fill tanks for drinking water and other domestic uses.

The EIS talks about The Air Quality Management Plan to be developed by Whitehaven however there are no details of this plan contained in the EIS. Whitehaven needs to include **INDEPENDENT attended and unattended dust monitoring at all residences within 5km of the Project as well as in the town of Boggabri.** Anything less than this will not give local landholders and Boggabri town residents any faith in the management plan, given the lack of transparency and engagement with the local community at the Maules Creek mine over recent years.

A10 - FLOOD ASSESSMENT

The EIS Flood Assessment does not adequately address the implications of changes to flood heights and the resulting impact on local residences. The assessment talks about flood levels not increasing by more than 20 centimetres and that this is an acceptable impact level for properties downstream of the Project. **This is NOT acceptable to us. The development should be designed so that it has no impact on flood levels at local residences.**

Rail loop – there is a complete lack of detail provided in the EIS regarding design of the rail loop to the CHPP. How can the impact of flood be thoroughly assessed when no details are provided in the EIS? IPAC should not approve this project without seeking final design and plan details. It should not be approved on just the applicant's "concept" and some vague comments in the EIS about using pylons, culverts and earth embankments.

There are distinct flaws in the flood assessment modelling around tributary flows not occurring at the same time as high flows in the Namoi River. In recent history, this has never been the case. All the tributaries of the Namoi River have a cumulative effect on flood levels across the flood plain. All floods are different. There is no way of modelling this; to make major decisions regarding the building of a railway line across this floodway using this data is very misleading. The rail spur across the flood plain should not be given approval when it poses such a risk to those nearby and downstream residences.

A11 - PLANNING FRAMEWORK AND PROJECT JUSTIFICATION

Section 6.1.2 states "No proceedings under a Commonwealth, State or Territory Law for the protection of the environment or the conservation and sustainable use of natural resources have been taken against Vickery Coal Pty Ltd". It is noted that the Project applicant is **Vickery Coal Pty Ltd**.

According to ASIC records, this company was registered on **17 May 2018**. Accordingly, it has no operational history. It is very misleading for Whitehaven to seek justification for this Project on this basis. **IPAC need to look at the environmental record of the parent company, Whitehaven Coal Ltd** to properly consider the company's claims of environmental justification for the Project.

Documents obtained under Freedom of Information laws by Environmental Justice Australia in 2017 show a litany of breaches. Whitehaven provided authorities with minimal explanation for its non-compliance with licence conditions and often went on to breach the same conditions year after year. The company caused excessive particle pollution from blasting, drill rigs and wheel dust, exposing neighbours to noise pollution levels exceeding licence limits.

Given the ongoing environmental breaches occurring at other Whitehaven mines, as evidenced by locals living nearby, our fear is that negative environmental impacts of the Vickery Extension Project will occur on all levels regardless of modelling outcomes and mitigation strategies presented in the EIS.

We request a full list of environmental and other breaches as reported against Whitehaven Coal Ltd during the last 10 years.

A12 - CONCLUSION

The exhibition and public submission period for the Project's EIS has been 42 days. This has not been enough time for affected landholders and other concerned citizens to read such a large document (which has been prepared over an 18 month period by the applicant) in its entirety to make a well informed and adequate submission. Indeed we feel it shows a total lack of respect for everyone who will be affected by this Project, in particular those of us who work in agriculture on family owned farms, battling the worst drought in living memory. As mentioned in our introduction, **we reserve the right to request additional information from and pose further questions to the applicant in the future.**

The EIS mentions a number **Management Plans** to be put in place for the Project if it receives approval. The EIS contains no details for these plans including, but not limited to:

- Air Quality
- Noise
- Ground and Surface water quality
- Flooding
- Blasting
- Heritage sites
- Traffic
- Koala Plan of Management

We request to see the details of these and any other management plans attaching to the EIS before any approval for the Project is given.

As a Condition of Approval, we also request that a negotiated agreement be put in place between ourselves and Whitehaven regarding mitigation of any impacts on our property and our family, whether the applicant believes we are impacted or not, under the current and any revised EIS.