Executive Director, Resource Assessments and Business Systems
Planning Services
NSW Department of Planning and Environment
Major Project Assessment – Hume Coal Project
GPO Box 39
Sydney NSW 2001
30 June 2017

Attention: Mr Clay Preshaw

Dear Mr Preshaw,

Submission Regarding Environmental Impact Statement by Hume Coal Pty Ltd, SSD 15-7172.

On behalf of Coal Free Southern Highlands Inc.(CFSH) I am pleased to submit this document for your consideration with regard to the assessment of the Hume Coal Environmental Impact Statement (EIS) and the issue of a development consent for the building and operation of an underground coal mine in Sutton Forest, NSW.

1. Introduction

This document is in response to Hume Coal's (Hume) Environmental Impact Statement (EIS) for the development of an underground coal mine in Sutton Forest in the Southern Highlands of NSW. Hume is a wholly owned subsidiary of South Korean steel company POSCO, the fourth largest steel-maker in the world.

2. Coal Free Southern Highlands Inc.

CFSH is a community group established in 2015 to campaign against the Hume Coal Project. CFSH follows in the footsteps of the Southern Highlands Coal Action Group (SHCAG) which was established in 2010 to fight coal mining and coal seam gas development in the Southern Highlands of NSW. SHCAG had over 5000 supporters and over 100 active volunteers, many of whom now follow and support CFSH. SHCAG P/L was put into voluntary liquidation in 2015.

3. Summary:

The Hume Coal project is proposed to be located in one of the most beautiful, historic and valuable areas of rural NSW, only 130 kilometres South of Sydney. It is a tourism mecca with some of Australia's most prised colonial heritage. It contains boutique agricultural and agri-business activities, town and villages and a vibrant arts community. It is a retirement centre.

The Hume Coal project is a relatively small, high-cost, green-fields mine. It is highly unlikely that it can be financially or economically viable as it is currently proposed. It is a high-risk project with many uncertainties. Hume will use an experimental mining method involving techniques that haven't been attempted in combination before, particularly in the geology that exist in this location. A major aquifer resides in a layer of Hawkesbury sandstone directly above the proposed mine workings.

The mine plan could result in the partial or complete dewatering of the aquifer on which many local landowners and businesses depend. The plan involves reinjecting mine waste into the mined-out voids right under the aquifer and could result in large scale, long-term pollution of the groundwater. The mining method could pose serious safety risks for the mining personnel due to water ingress. As such this mine should never be built.

Hume's mining plan will profoundly impact hundreds of rural properties and businesses and the ambience of the district for many decades to come if not in perpetuity. It should not be approved.

4. **Recommendation:**

CFSH submits that the Development Application be refused, that MLAs 527, 528 and 529 be rejected and that Hume's existing water access licence be revoked.

This conclusion has been reached following consideration of the following statement which appears in Hume's Environmental Impact Statement (p ES7 para 4.1.2):

> *"Groundwater inflows to the mine will occur during its operational life and for three years after coal extraction ceases (i.e. for approximately 22 years' duration in total). This will lower the groundwater level - called a "drawdown'- and it is predicted that 93 private landholder bores on 71 properties will experience a drawdown of 2 m or more due to the project. The average duration of drawdown on the 93 affected bores is predicted to be 36 years, with the maximum duration being 65 years. However, most of the recovery will occur in a far shorter time period; on average, a bore will recover by 75% within 23 years after it is first impacted."*

Given this information, the report *'Concerning Regulation of the Hume Coal Project'* submitted by Marylou Potts P/L and settled by Mr Robert White (Barrister) states that:

"In summary, the water impacts of the Project are sufficiently great that development consent should be refused as the evidence shows that the Minister for Planning will be unable to be satisfied:

(i) that the necessary access licence and interference approval under the Water Management Act can be granted, and
(ii) that there will not be a significant adverse impact on water resources which is prohibited under the relevant State and Commonwealth environmental protection legislation."

5. **Critical Issues**

This summary is intended to point the decision-makers to the critical issues or 'Deal Breakers' as identified by the experts. It is not a detailed report in itself. Experts have been commissioned to tease out all the detail.

The 'Deal breakers' are issues that CFSH submits Hume cannot resolve or which breach legislative requirements such that the Minister cannot grant a Development approval, or both.

CFSH sees the major 'Deal Breakers" as Legal and Regulatory, Groundwater and Surface-water impacts, Mine Safety, Economics and Social Impacts.

There are many other issues of importance that should not be dismissed; Heritage; Dust and External Effects; Transportation; Climate Impacts and so on. These should also be considered in a holistic assessment of the project.

6. **Specialist Reports:**

CFSH has commissioned a team of specialists to analyse and critique the EIS. These reports have been primarily funded by **Sustainable Southern Highlands Inc.** an independent group which funds independent research of activities impacting on the sustainability of the Southern Highlands.

The reports which have been commissioned are listed below:

1. Pells and Pan (2017), "Groundwater Modelling of the Hume Coal Project", Pells Consulting Technical Report #S025.R1, 17 May 2017.

2. UNSW Water Research Laboratory-Hume Coal Project SSD 15_7172: "Peer Review of Conceptual and Numerical Modelling that Predicted Likely Groundwater Impacts", 23 June 2017

3. C.M. Jewell & Associates Pty Ltd: “Potential Groundwater Contamination issues associated with Placement of Washery Fines Material into Mine Voids”-Review of Appendix K: Hydro-geochemical Assessment”, May 2017

4. The Australia Institute: “For Hume the Bell Tolls-Local Economic Impacts of the Hume Coal Project”, May 2017

5. The Australia Institute: “Hume Coal Project-Submission on Environmental Impact Statement”, June 2017

6. Marylou Potts Pty Ltd and Robert White,12 Wentworth Chambers: “Water regulations and the Hume Coal Project”, June 2017

7. John Lee, Geoscientist, Hydroilex Pty Ltd, June 2017

8. Colleen Morris, Landscape Heritage consultant, and Christine Hay: “Cultural Landscape Assessment-Berrima, Sutton Forest and Exeter”, May 2017*

9. Colleen Morris, Landscape Heritage consultant, and Christine Hay: “Statement of Heritage Impact for Berrima, Sutton Forest and Exeter Cultural Landscape of Hume Coal Proposal for an underground coal mine and Berrima Rail line extension.”, June 2017*

10. Macquarie University, Dept. of Environmental Sciences, Faculty of Science & Engineering: ‘Predicted Off-Site Impacts of Hume Coal Operations”, June 2017

11. Dr Ian Wright (Western Sydney University): Surface Water Report (*due July 31,* 2017)

*Jointly funded by SSHI and B4B

12. **Community Submissions:**

There is also a selection of submissions from local landowners and community members listed in the Appendices. Some are technical in nature from noted authorities in their respective fields, many of whom reside in the Southern Highlands.

Other submissions cover social and community impacts which are important considerations for decision-makers.

Please note that this is not a comprehensive list. We are aware of many other substantial submissions from local business owners, business groups, landowners and community members that should be carefully considered.

13. **Hume’s ‘Low Impact’ Mine Plan**

CFSH believes that Hume is proposing a controversial and some would say ‘experimental’, mine plan in order to manage the serious water ingress issues they face.

Hume plan to mine relatively close to the surface (80 metres to 180 metres underground) right under an approximately 100-metre thick, highly productive and badly fractured Hawkesbury sandstone layer which holds massive volumes of water (the aquifer). Field data and Hume’s EIS indicates that there are little or no inter-burden layers between the sandstone and the coal.

Hume have put together what they claim is a ‘low impact’ solution, a collection of techniques that, individually, may have been undertaken before in some locations around the world but have never been attempted together before, certainly not in the difficult circumstances Hume faces.

- **'Pine Feather'** is adapted from High-wall mining techniques for open cut mining and first workings aspects of Bord and Pillar mining. Hume projects with very low recovery rates (35%) to keep surface subsidence low and cracking (goafing) of the roof of the mine controllable and thus manage water ingress;
- **Concrete bulkheads to seal mined-out areas** at 80 metres to 180 meters underground to allow backfilling with a mine waste and water 'slurry' extracted during the mining process;
- **Slurry reinjection process** to also avoid the regular release of excess mine water into surface water systems;
- **Remotely operated equipment** to notionally reduce the danger to the underground miners from water ingress or 'goafing' (failure) of the mine roofing.

14. Berrima Colliery Experience:

Berrima Colliery near Medway is approximately 5 kilometres from the proposed Hume Coal mine. It was a tiny mine producing approximately 220,000 tonnes of high-ash coal, primarily as a feedstock for the Berrima cement works. It was put on 'care and maintenance' by Boral in 2013 following a court case run by SHCAG in the LEC. It's now in the process of being permanently closed. The case was regarding groundwater issues and pollution of the Wingecarribee River.

The Berrima Colliery could be regarded a proxy for the Hume project. It was discharging, water at an average of one Gigalitre/year from a tiny mine producing approximately 10% of the annual production of the proposed Hume mine.

It was determined in a case run by SHCAG in the LEC, that the groundwater in the vicinity of the mine had been drawn-down to the mine workings and the impact extended over an area of approximately 20 square kilometres. The water being discharged into the Wingecarribee River was (and is) polluting the water course with Zinc, Nickel, Manganese and salts beyond acceptable limits.

Recent testing (to be submitted in an additional report by Dr Ian Wright) is showing that the pollution from this mine is far worse than previously reported based on a more rigorous testing regime over the past 12 months.

Experts say that the geology is similar to that in Sutton Forest with the Wongawilli coal seam lying relatively close to the surface (approximately 120 metres), right under the Hawkesbury sandstone aquifer.

CFSH is aware that Boral, the EPA and the Department of Resources and Energy are discussing mine closure methods. This is proving to be problematic.

The Berrima Colliery experience supports the experts' conclusion (see Pells 2013 and 2017) that despite Hume's claims, it is not the mining method that causes the water ingress issues. It's the unique geology in the area that makes any form of mining very difficult without having a serious and detrimental effect on the groundwater. The disposal of excess water into the river system and the resulting pollution is also instructive.

15. Groundwater is the Threshold Issue

It has been very clear to local residents from the emergence of Hume in 2010, that the groundwater (aquifer) issues will be one of the key determining factors in the approval or rejection of this project.

Locals know how productive the aquifer is, pumping at rates of 5, 10 to over 50 Litres/second on some properties from bores pumping from low in the sandstone strata. Multiple down hole extended pump tests undertaken over the last 25 years by experienced hydro-geologists Hydroilex confirm that fact.

16. **Managing the Groundwater 'Take' is Vital for Hume:**

Given these circumstances, Hume has attempted to show that the water issues are manageable and indeed the water 'take' and impacts on landowners are both relatively limited. In our view, Hume is attempting to demonstrate that:

- It **can minimise the area of the district notionally affected** by the drawdown, and the extent of the drawdown, which in turn will minimise (but not negate completely) the number of land-owners water bores affected and the extent to which they are drawn-down;
- The **amount of excess water 'take' can be managed**, reducing the amount of water required to be Licenced prior to the commencement of mining;
- **All the excess mine water and mine waste can be pumped into the mined-out** voids after each area is mined and plugged;
- **If there is little or no excess water to be discharged** into Oldbury Creek, Hume can claim it will meet the 'Neutral and Beneficial' test under the Sydney Water Catchment SEPP;
- A low water 'take' allows Hume to argue that it **doesn't require an expensive Water Treatment Plant** up-front, thus significantly reducing the capital expenditure for the project and hence enhancing the claimed projected financial returns.

17. **Is Hume's Analysis Credible?**

We have requested our groundwater experts to focus on Hume's Groundwater model, the assumptions used in the modelling and the veracity of the conclusions.

Interestingly, the Independent Experts Scientific Panel under the 'Water Trigger" provisions of the EPBC Act (A Federal statute) have evaluated Hume's water modelling and have also identified many of the same issues as our experts.

A list of the relevant concerns is as follows:

- There **isn't enough evidence** in Hume's EIS to support its groundwater claims;
- Some of the parameters and assumptions used in the modelling **are not supported by field evidence** or even data in Hume's own EIS;
- In some cases, **Hume has refused to supply information** required to assess the veracity of its conclusions;
- **Scenario analysis is almost entirely missing** so only one water 'take' case is presented with no other (potentially worse) cases analysed;
- Claims that the mine waste will be and will remain 'inert' **are not supported by rigorous analysis and appropriate testing** over extended time frames.
- Assumptions that the slurry reinjected into the mined-out voids under the Hawkesbury sandstone aquifer **will only migrate in one direction (downwards) are questionable**;
- The outcomes in terms of water 'take', extent and number of water bores bores affected **could be very different** from what Hume is suggesting;
- The suggestion that the sandstone is and will remain contiguous and not crack or 'goaf' **in** places during the mining process potentially leading to significant water ingress **is not supported by the evidence** or practical experience of some experts;
- The impact on groundwater dependent ecosystems is not adequately assessed**.** The **impact and could be much greater than Hume is suggesting**; and
- Given the water volumes required, **'Make good' of landowners' water bores which are significantly affected will be impossible in practice**, even if Hume's assumptions of bores affected are accepted.

18. **Projected Groundwater Impacts**

Hume states in the EIS that the maximum water 'take' over the life of the mine in any one year will be 2.2 Giga-litres, 15 years after commencement and 1 Giga-litre will be the norm. Hume has also stated in the EIS that:

"Groundwater inflows to the mine will occur during its operational life and for three years after coal extraction ceases (i.e. for approximately 22 years' duration in total). This will lower the groundwater level - called a "drawdown'- and it is predicted that 93 private landholder bores on 71 properties will experience a drawdown of 2 m or more due to the project. The average duration of drawdown on the 93 affected bores is predicted to be 36 years, with the maximum duration being 65 years. However, most of the recovery will occur in a far shorter time period; on average, a bore will recover by 75% within 23 years after it is first impacted."

Other experts (Pells and Pan 2017) have concluded based on extensive modelling that the water 'take' could be up to ten times what Hume is suggesting. Pell's states that the 10-metre drawdown contour could extend six or seven kilometres from the mine. UNSW Water Research Laboratory regards Pells' assessment as more credible than Humes'.

The number of water bores with drawdown in excess of 10 metres in that case would be in the hundreds, with potentially catastrophic drawdown of up to 120 metres of all the bores in the mined-out area and surrounds.

19. Legal and Regulatory Position:

In a legal and regulatory submission by Marylou Potts Pty Ltd and Robert White it is concluded that:

"In summary, the water impacts of the Project are sufficiently great that development consent should be refused as the evidence shows that the Minister for Planning will be unable to be satisfied:
(i) that the necessary access licence and interference approval under the Water Management Act can be granted, and
(ii) that there will not be a significant adverse impact on water resources which is prohibited under the relevant State and Commonwealth environmental protection legislation."

"Consideration of the Project's impact on water resources is central to an assessment of this Project. Hume must be able to satisfy the Minister for Planning that the Project meets the requirements set out in the Water Management Act. Otherwise development consent should not be granted.

The evidence demonstrates that a number of the requirements of the Water Management Act cannot be met by Hume and on this basis alone, development consent should be refused.
The grounds of objection include, but are not limited to, the following:

(i) **an access licence is required by Hume to undertake the project.** The Minister for Water will not be able to be satisfied that Hume can meet the "no more than minimal harm" requirements necessary for the grant of the required access licence. The Minister for Planning should refuse to grant development consent on the basis that the probable failure to be able to obtain the necessary access licence is a bar to approval of the project.
(EIS p ES.7 para 4.1.2)

(ii) **an aquifer interference approval is required by Hume to undertake the project**. The Minister for Water will not be able to be satisfied that Hume can meet the "no more than minimal harm" requirements necessary for the grant of an aquifer interference approval. The Minister for Planning should refuse development consent as the failure to obtain the necessary aquifer interference approval is a bar to obtaining approval for the project.

(iii) **the project is situated within the Sydney drinking water catchment**. The Minister for Planning may not grant consent to the carrying out of a project unless he can be satisfied that the requirements of SEPP (Sydney Drinking Water Catchment) 2011 are met. That is, the carrying out of the Project must have a "neutral or beneficial" effect on water quality. The evidence indicates that the Minister cannot be satisfied that Hume can meet this standard.

(iv) **the Precautionary Principle is triggered** requiring Hume to prove that the threat does not exist or is negligible. Hume's admission of harm set out above means the precautionary principle has not been satisfied. Development consent should be refused on this basis.

CFSH submits that the development application be refused, that MLAs 527, 528 and 529 be rejected and that Hume's existing water access licence be revoked

20. Mine Safety

There are serious issues of concern regarding the viability of the proposed mine plan and, in particular, how it is going to be practically implemented. In its EIS Hume is very sparse with regard to the operational details of its mine plan. Many questions remain unanswered. The safety of the mining personnel underground is a serious issue that is given scant attention by Hume.

Some of the key operational and mine safety questions that Hume must address are as follows:

- If water 'take' is as our experts predict, how will Hume manage the very large volumes of groundwater that could flow into the mine during mining activities? What provisions has the company made to cope with that possibility?

- How is Hume going to effectively manage the water ingress risks associated with mining in the close vicinity to a highly productive groundwater system, literally right under the Hawkesbury Sandstone layer? This would appear to breach mine safety Codes of Practice.

- How will Hume install concrete bulkheads to seal the mined-out voids and how can it guarantee the effectiveness of those seals to prevent water ingress at 80 metres to 180 metres underground under hydraulic head which could be of the order of 10 to 15 atmospheres of pressure?

- How will Hume pump slurry and mine waste water back into the mined-out voids in close vicinity to, and up-stream of, the active mining activity? What guarantees can Hume provide that the seals will not fail during this work and threaten the mine workers downstream of this activity?

- How will Hume manage the possible catastrophic water ingress from intersected faults and discontinuities in the Hawkesbury sandstone which could be cracked and potentially displaced by the activities of the continuous mining machines. This is particularly the case if intense surface drilling is not undertaken to identify faults and obstacles ahead of the mining activity?

Without answers to these questions and appropriate 'fail-safe' measures in place, CFSH would expect that mine safety issues alone would prevent a mining approval being given.

21. Land Access Issues

A fundamental issue for Hume is access to the land for exploration and detailed mine planning. Hume has not been able to explore on approximately 20% to 25% of the area they are proposing to mine essentially along Golden Vale Road in Sutton Forest regarded as the coal 'sweet spot'.

- Hume had attempted to access particular properties in this area for intense exploration drilling, at one time 90 exploration holes in an area of approximately 500 hectares. The fight over land access continued for over five years with multiple submissions from Hume, at 5 arbitrations and a series of court cases.

- The reason landowners have resisted Hume is because of the intrusive and fundamentally illegal drilling programme Hume has proposed.

- Five Sutton Forest landowners ran a successful appeal in front of Chief Justice Preston in the Land and Environment Court in 2016 (Martin and Ors. versus Hume Coal) under s31 of the Mining Act related to 'Significant Improvements'. The result was a comprehensive win for the landowners on all 8 points of appeal.

- Bret Walker SC, the landowners legal counsel advised that the precedent set by this judgement will make it extremely difficult for Hume to access these properties for exploration or development drilling in the future.

- Subsequently, Hume withdrew its s142 Notices to the five properties and withdrew Land Access Agreements previously determined by arbitrators on four of the five properties in question. The fifth property did not have an access arrangement in place. These Agreements had been subject to a s155 court challenge.

- Hume now claim that they can submit a DA without access to the drilling information they were so desperately seeking for over five years.

- Mining experts' views are that they cannot mine without a detailed knowledge of the geology particularly given the highly fractured nature of the Hawkesbury sandstone, igneous intrusions and faults that are difficult to identify without detailed drilling ahead of mining (see mine safety).

- In a paper submitted to a mining conference at Wollongong University in February 2017, authored by Rod Doyle and Ben Fitzsimons it was stated that:

  "Difficulties in obtaining land access has directly resulted in not being able to further improve the level of confidence in the Resource Assessment from Inferred to Indicated or to a Measured status."

- In a table in the EIS Vol 1 p11 it states that:

  "Preproduction Drilling and other geological investigations: Coal resources will be more accurately defined in A349 by drilling within the proposed mine layout, and geotechnical and engineering investigation will be ongoing."

- Hume's has made intense efforts to access land on particular properties along Golden Vale Road for exploration drilling over the past 5 years and spent a great deal of money and time doing so. The EIS indicates and Hume's comments indicates the paucity of geological data from drilling and other activities in this area of the mine plan.

CFSH interprets these comments and circumstances to indicate that Hume will need to drill to confirm the resource and finalise a detailed mine plan. Our coal mining experts and mining geologists agree.

CFSH submits that Hume will be unable to access affected properties for further drilling or any other activity under the provisions of Schedule 1 of the Mining Act, 1992.

In addition, CFSH understands that landowners may have an effective veto over the issue of Mining Lease 527 under Schedule 1.

22. Economic Impacts

Both the Institute of Energy Economics and Financial Analysis (IEEFA) and The Australia Institute (TAI) have undertaken assessments of this project**.** IEEFA's analysis is from a purely financial perspective whilst TAI has looked at the impacts on the local community and the State as well. A brief summary of the findings is below:

- The project economics produced by Hume in the EIS is lacking in detail and supporting analysis. The capital expenditure assumptions are very conservative and may not reflect the true costs of undertaking the project. The actual contribution of new jobs and hence salaries and payroll tax, appears exaggerated. Negative externalities such as local job losses or business and community impacts appear to have been ignored.

- Both IEEFA and TAI have concluded that the project is fundamentally uneconomic and will make a negative return to POSCO over its lifetime. IEEFA's analysis attributes a negative Net Present Value in excess of $340 million over the projects 21-year life. TAI comes up with a similar number without including the negative external impacts on affected businesses, communities and the environment.

- Both analyses conclude that the project is unlikely to pay any federal tax due to carry-forward tax losses which will accrue.

- Given the relatively limited production, the coal mix of 46% of low value thermal coal and 54% of soft coking coal, the royalty stream to the NSW government will be small, in the order of $120 million to $140 million over the life of the project. TAI concludes that this contribution will be far outweighed by the local impacts on businesses, landowners and the environment.

- Both IEEFA and TAI concluded that it is difficult to accept Hume's projections of the projects' economic contribution to the region and the State in these circumstances.

- Both IEEFA and TAI conclude that POSCO may never proceed with the project, particularly with the uncertainty hanging over the global coal and steel industries. In fact, both suggest that POSCO's strategy might be to seek to gain approval and sit on the approval for 5 years to see what eventuates. Another option for POSCO would be to attempt to sell an approved mine to another party.

- Both of the above options would be very negative for the Southern Highlands given the uncertainty that they would create.

- IEEFA suggested that POSCO would be better served by buying an existing coking coal mine with depreciated assets and an existing work-force which could be available on a much more attractive basis.

- TAI undertook a series of case studies in the local district to assess the impacts of the project on the local businesses. The results were uniformly negative in terms of projects deferred until certainty is established and concerns about future business impacts, particularly those relating to groundwater.

In summary, this project makes no economic sense for the State of NSW or the local economy.

23. Social Impacts

The social impacts of this project have already been profound. This is an area of great concern to CFSH. The submissions listed will provide the decision makers with a comprehensive understanding of how the prospect of an underground coal mine has affected local landowners and community members over the past six and a half years. They also give a snap-shot of how a mining approval will affect them in the future if the mine plans are not terminated permanently.

The impacts to date have been devastating in many instances.

- The proponent, Hume Coal, has run a concerted campaign to divide the community. In the media and on its website or Facebook page, the company continually denigrates all genuine opponents of the project as 'anti-coal activists' or trouble–makers of one description or the other.

- Hume has attempted to win 'hearts and minds' of the local community through donations totalling $1.44 million to local sporting associations, charities, schools and business groups which many in the community view with very cynical eyes. In itself this programme has divided the community.

- Hume has issued many statements and published advertisements that are misleading and deceptive. The company misrepresents the facts in an attempt to convince locals of the merits of its position. Whether it is related to groundwater issues, project economics, jobs, mining methods or social impacts, the company issues a continuous stream of what can only be termed propaganda to support its case. Substantive evidence is never provided for claims that it makes. When probed, the company will not discuss the real issues with opponents despite its claims of transparency.

- The Wingecarribee Shire Council has been a battleground for and against the coal mine. Over nearly seven years the Council has taken a consistent stance against any new coal mining in the shire with half a dozen votes on this issue alone. But this has not been without a cost. Debates have been intense and in some case personal. Threats of legal action have been issued. This issue has enraged some locals who are very concerned about 'jobs' in the district. The battlelines have been drawn over this issue more than once.

- As discussed above, the battle over land access to properties in Sutton Forest has spilled over into the courts. Local landowners have felt assaulted by the company with aggressive attempts to access land against their wishes. Multiple land access arbitrations have been mounted by Hume, denying legal representation to landowners. The company will not take 'No' for an answer and refused to accept the provisions of the Mining Act as any constraint on its behaviour. The pressure has been unrelenting and the physical, emotional and financial impacts have been substantial.

- The arbitration process and resulting court action has enraged locals and mobilised a determination to block the company's access to key properties in perpetuity. The company is still pursuing key directors of SHCAG in court over prior cost orders dating back to 2015. The actions are viewed as vexatious and without merit but were commenced just as the EIS was issued.

- POSCO has an appalling international track record for environmental destruction, bribery and corruption and human rights abuses. It is on the public record. Locals are well aware of the company's record overseas and sees parallels in the behaviours of Hume Coal in the local area. Locals see a culture driven by relentless pursuit of POSCO's ambition to bring this mine to fruition with absolutely no concern for the community opinion, legal and regulatory constraints or the environmental and social destruction that such a project will bring.

24. Conclusion:

CFSH submits that the Minister should refuse the development application MLAs 527, 528 and 529. Hume's existing water access licence should also be revoked.

Both CFSH and the community we represent are determined to see that this destructive project never sees the light of day.

Peter Martin, B Eng. (Monash), MBA (Harvard '83)
President,
Coal Free Southern Highlands Inc.

Appendices:

Community or Government Submissions:

1. IESC 2017-083: Hume Coal Project (EPBC 2015/7526) – New Development
2. Wingecarribee Shire Council
3. Berrima Residents Association Inc.
4. Battle for Berrima Inc.
5. National Trust
6. Southern Highlands Greens

Technical Submissions:

1. Bruce Robertson, BSc(Hons.) Coal Project, MBA
2. Bill Ryall Bill Ryall BSc (Hons) PhD FAusIMM CP (Environment)
   Independent consulting environmental scientist and geochemist
3. Professor T. M. Romberg FIEAust CPEng(Ret)
4. Raymond A Binns, BSc (Syd), PhD (Cantab), FAusIMM(CP) FGSA FTSE
5. Alan Lindsay, B.E. (Hons.) MIChE
6. John Conolly, Consulting Geologist, BSc MSc (UNSW) PhD (UNSW)
   Fulbright Scholar Columbia University NY

Economics and Financial Submissions:

IEEFA "Hume Coal Project-Submission on Environmental Impact Statement", June 2017

Social Impact Submissions:

1. Sam Bailey
2. Ron and Anna Shead
3. Ann Anderson
4. Kym and Matthew Burrows
5. Kim Martin
6. Kathy Roche
7. Phillip Pollicina
8. Luke Fox
9. Raymond (Tim) Frost
10. Vonnie Littlemore
11. Michael Luscombe
12. David Newby
13. Peter Martin
14. Daria Ball
15. Doug Graham
16. Ross Parker
17. Margaret & Ross Alexander
18. Peta Bailey
19. Virginia Ellsmore
20. Alain Brousse
21. Val Turnbull
22. Jane and Jimmy Barnes AO
23. Fred Nasser via John Lee/Hydroilex
24. Ben Cottle