

Summary of DoP Submissions

The public, special interest groups and companies

Positives of the proposal

- The proposal will continue Illawarra Coal's existing operations and is economically and socially significant.
- The proposal secures the long term supply of coal to Corrimal Coke works, BlueScope Steel for domestic use and Port Kembla terminal for export.
- The proposal provides work security for the workforce of many small businesses in the Illawarra Region.
- Although there will be some impacts from the proposal the economic benefits from the proposal are significant and will provide ongoing employment to the region, for families and businesses.
- The Proponent has shown a strong commitment to the environmental aspects of the proposal.
- The proposal will implement a transport management plan which will observe the Port Kembla Coal Terminal Driver's Code of Conduct for all deliveries.

Issues of concern and objection

- The proposal wants to mine under the upper catchments of the Georges, Cataract, Woronora and Nepean Rivers and there is a high risk of damage to water quality and the biodiversity of these streams and swamps.
- There is a potential for subsidence to destroy or damage creeks, rivers, dams, landscapes and homes and this is inadequately addressed in the proposal.
- Coal mining has no place in drinking water catchment areas and existing mining leases have had a detrimental effect on local creeks and rivers.
- The cracking of bedrock bases in swamps is a permanent and significant impact which cannot be addressed through remediation.
- The proponents plan to remediate the environment post mining is not acceptable as the damage, pollution and loss of flora and fauna is irreplaceable.
- The methods proposed for remediation of swamps have never been tried before in any other swamp damaged by coalmining.
- The proposal commits \$1.7 million to rehabilitation over the life of the project but this is too small an amount.
- Emplacement of coal waste into valleys is unacceptable and all waste should be returned to the ground.
- The proposal must control the staging of the longwall mining so that the first areas mined are those identified as having low environmental sensitivity.
- The proposal has not significantly surveyed vegetation of the upland swamps and the project could threaten species and distributions that haven't been identified.

- The proposal should have zero environmental impact or it should not be approved.
- Mining of coal is a major contributor to CO₂ and global warming and the NSW Government should be winding back coal mining in favour of non-polluting, sustainable energy sources.
- The proposal does not give any extra consideration to mining proposed in the Dharawal State Conservation Area and Nature Reserve and treats the land without recognising its special conservation value.
- There should be a one kilometre exclusion zone around all rivers in the proposed exploration area.
- The extraction of longwall blocks can cause subsidence events that are unpredictable and potentially impact on the Twin Bridges at Douglas Park, Moreton Park Rd north and south bridges and the F5 between Douglas Park and Menangle.
- As the extra coal production will place more large trucks on surrounding roads, the NSW Government should seek Federal assistance to upgrade the Maldon to Dumbarton Rail Link
- The Department of Planning should be specific about what criteria from monitoring results constitute proof of impact and how changes in operations can be enforced.
- There has been a lack of information made available to the public
- The proposal to allow mining for the next 30 years is too long and the maximum approval time for this project should be 10 years.
- The proposal poses unacceptable threats to the Dharawal Indigenous community and the rich Aboriginal heritage in Dharawal State Conservation Area and the Holsworthy National Estate Property
- The drying of swamps as a result of the mining will increase fire risk in the area
- The matter should be referred to a Planning Assessment Commission for consideration and public hearings.
- The proposal indicates that 10.5 million tonnes per annum of coal will be extracted each year over 28 years, is this realistic as production rates have been increasing not staying the same.
- The employment benefits of the proposal should not outweigh the damage that the mine will cause.
- A levy should be applied to each tonne of coal extracted and the money raised should be used to fund research into technologies to reduce the impacts of coal mining.
- No mining should be allowed in the Holsworthy Military reserve, as this is an area of pristine bushland and the risk of unexploded ordinance being affected by subsidence and threatening lives is high.
- The proposal predicts subsidence based on longwall widths of 150-300 metres, however the average longwall is between 300-400 metres so these predictions are under estimated and could cause damage beyond current experience.
- The burning of methane is a concern to residents who fear an accident may occur and start a bushfire.

- Approval should be staged over five year terms only and constant monitoring should occur before further mining is approved.
- A detailed community engagement strategy should be developed for the life of the project and monitoring of the natural system and impacts from the proposal must be publicly reported
- The Southern Coalfield Inquiry and the Director Generals requirements for risk management were not rigorous enough.
- The Memorandum of Understanding signed by BHP and the Director General of the NPWS in 1998 is not addressed in the proposal as there is no protection or respect given to the environment's conservation, water quality or recreation purposes.
- Residents in Wedderburn rely on tank water, dams and bore water and longwall mining will cause damage to the water supply.
- The proposed development may cause serious damage to houses in Wedderburn as they have not been built to mine subsidence standards as it was not considered a mine subsidence area.
- The proposal intends to mine underneath existing privately owned pipelines and there is potential for damage and this should not be allowed.

Agencies

NSW Dams Safety Committee

- The Committee will continue to require dam owners to undertake appropriate levels of dam surveillance and ensure that mining operations do not compromise the safety of dams.
- A number of dams overlie the proposed mine and the Dam Safety Committee may increase the size of notification areas around these dams.
- The Dam Safety Committee may take a more conservative approach to further mining near Broughton Pass Weir.

Roads and Traffic Authority

- The proposal has the potential to impact on the functionality of a number of highly significant State Classified Roads, the Hume Highway, Picton Rd and Appin Rd.
- Significant concerns that when the proponent prepares a Built Feature Management Plan the proponent is only required to consult with the RTA.
- The RTA will not accept any subsidence impacts from mining on any roads or bridges.
- Prior to commencement of mining activities the proponent will be required to enter into a Deed of Agreement with the RTA indemnifying the RTA from any consequences of mining and undertaking to pay all costs associated with monitoring, mitigation or remediation.
- Traffic impacts of the proposal need to be clarified particularly the additional vehicles generated by the proposal.

Hurstville City Council

- The proposal will have a large impact on the Georges River, affect Sydney's drinking water catchment, cause irreparable damage to upland swamps, crack many of the feeder streams, expand the Brennens Creek emplacement site and increase the poor quality of water that leaches from the Brennens Creek Dam.

Industry and Investment NSW

- Industry and Investment NSW support the proposal as an appropriate utilisation of the State's coal resources provided that a number of recommendations are adopted.
- The proposal must provide a detailed rehabilitation strategy, alternatives to the Stage 4 coal wash emplacement are not addressed and there are concerns that potential impacts on some streams will affect water quality and flows downstream of the mining locations.
- The proposal also has a number of significant 'high impact subsidence issues' with the potential to cause severe consequences to public health and safety, environmental impacts, consequential losses/ damages and community concerns and the proposal does not make it clear how it will be feasible to manage such impacts.

NSW Office of Water

- The proposal underlies a number of significant water supply catchments and it is important these river flows are protected from further mining impacts to maintain supply to the range of existing water users.
- The water resources of the Woronora, Georges and Cataract and Nepean Rivers are fully allocated and it is important that the potential impacts of the proposal do not further reduce the flows in these fully committed water sources as the ability to maintain sufficient water for ecosystem supply and functions is already affected.
- The proposal will potentially subject a number of rivers to ongoing fracture and this is a critical risk to the acceptability of the proposal. The Office of Water does not accept that this fracturing is proven to result in nil short or long term impacts on river flow within or downstream of the proposal.

Wollondilly Council

- Wollondilly Council makes a number of comments regarding the proposal including, insufficient time for public exhibition and comment, the need for independent experts to assess the proposal, all issues raised in submissions should be independently merit researched and assessed against the objectives of the Act, and Council believes a preferred project report and revised statement of commitments should be prepared by the proponent and placed on public exhibition before a PAC hearing.
- Council is concerned about the impacts to the watercourse and natural environment as a result of potential subsidence, the significance of uplands swamps needs to be acknowledged and assessed, objects to the net detrimental effect to vegetation, threatened species, air quality, biodiversity and water quality, doesn't accept the

reliance of the proposal on remediation, emplacement plans need review, concerned that there will be increased heavy vehicle movements on Picton and Appin Roads and the future of coal as an energy source should be considered if granting consent for 30 years.

Sydney Catchment Authority

- The Sydney Catchment Authority has a major interest in the project due to the Sydney Water Catchment Management Act 1998 and its land holdings in the project area.
- If the proposal is approved the Sydney Catchment Authority requests conditions to prevent or minimise impacts upon the Upper Canal, Cataract Dam, Cataract storage, other infrastructure and associated catchments and key watercourses.
- The SCA has concerns that impacts may result in loss of water quality, reduction in water flows, affect some Upper canals and weirs, shortcomings in the proposals groundwater assessments and impacts to watercourses located in the proposal area.

Campbelltown Council

- Council objects to the proposal for a number of reasons, including the lack of appropriate assessment of the potential impacts particularly in relation to the Wedderburn district and the lack of consultation with Wedderburn residents, the insufficient assessment of potential conflicts with the future urban expansion of the Macarthur area, the risks associated with granting project approval for 30 years and the uncertainty regarding potential environmental impacts such as mine subsidence impacts on 3rd order and below watercourses.
- Council requests approvals under Part 3A be based on individual or appropriate clusters of mining domain areas. Also request establishment of 600m enclosure from longwall mining for watercourses classified as 3rd order or above.

Department of Environment, Climate Change and Water

- Key issues identified by DECCW include impacts from longwall mining on surface water, streams and swamps, Aboriginal cultural heritage, Dharawal Sate Conservation Area and proposals for West Cliff Stage 4 Coal Wash emplacement.

Coal Wash Reject Emplacement

- Stage 4 coal wash reject emplacement not supported due to serious impacts on threatened species, their habitat and Aboriginal cultural heritage. The EA does not thoroughly investigate other options and DECCW believes there is sufficient capacity in the current West Cliff Stage 2 and Stage 3 emplacements to undertake such investigations.

Impacts associated with underground coal mining

- Although the risk of impact on Aboriginal cultural heritage is low, DECCW recommends a comprehensive survey, recording monitoring and reactive management to ensure the protection of values of the area.

- DECCW recommends a further field surveys in order to comprehensively identify and record all sites that may be in the study area and any newly identified sites be assessed for the likely impact of mining and associated processes.
- DECCW recommends a comprehensive monitoring program be reported annually and reporting must also take place if impacts above predicted levels occur to these sites. If any impact is identified the Proponent should be required to examine strategies to stabilise and protect and stabilise the sites.
- The integration of the assessment of archaeological and cultural significance in relation Risk Impact Assessment is not immediately evident. DECCW recommends that a ranking of cultural assessment is also included in the Risk Impact Assessment to allow a comprehensive analysis of potential impacts that take cultural and archaeological impacts into account.

Socio-economic Assessment

- The socio economic assessment review shows no assessment of the implications of the coal washery reject levy and remediation costs.
- The assessment does not provide sufficient detail to assess the validity of estimated costs and benefits. The economic benefit of employment in the cost-benefit analysis should be excluded, unless fully and clearly justified.
- The value the community attaches to each year the project provides 1,170 jobs – this approach is theoretically questionable and may lead to double counting.
- It is unclear why certain swamps have been excluded from the Cost Benefit Analysis and the Choice Modelling value placed on swamp damage is from a previous study and it is unclear if this value has been adjusted for inflation.
- The assessment makes reference or data that are missing from the report.
- DECCW raised several issues in relation to regional impact assessment.
- The proponent's willingness to pay and benefits estimates are not entirely consistent with the principles of economic valuation.
- Information was not included to test for variations in environmental impacts.
- The Proponent should clarify why decommissioning and rehabilitation costs have not been included at the end of the Project's life.

Pit Top - Surface Water

- The next stage of investigations into the discharge of water from BHPBilliton's operations should focus more on the impact of flow and water quality on the upper George's River.

Noise

- Request further information justifying that rating background noise levels do not include noise from existing operations.
- The noise modelling for the existing/approved and project worst case scenarios included noise reductions associate with mitigation measures that are not in place and have not been firmly committed to.

- A significant number of residences fall within the moderate noise management zone and noise affectation zone.
- DECCW recommend that the noise reduction program be brought into the project application assessment timeframe.
- Surface goaf gas drainage should be assessed against the NSW Industrial Noise Policy and separately approved through the EMP process.
- The proposal did not identify the location of or predicted noise levels to residential receivers along Douglas Park Drive or Macarthur Roads. The proponent should be requested to commit to a Traffic Noise Management Plan.
- The Proponent should be requested to present a summary of noise impacts based on an assessment against ‘project specific noise levels’.

Air

- DECCW recommended additional SOCs.

Greenhouse Assessment

- DECCW requests that the proponent compare the energy efficiency of the operations with that of other similar NSW underground coal mines.

Mine Schedule

- There is sufficient uncertainty about the predicted impacts of the proposal on the environment and the success of preventative or remediation measures so it would be prudent to schedule mining extraction to delay the high risk activities to the later stages of the proposal. There is no information in the EA regarding the mine schedule.
- SCI and the Metropolitan Coal Report recognise the current limitations in science to inform impact assessment on natural features particularly the environmental consequences associated with non systematic subsidence.
- DECCW recommends any approval for the proposal include explicit staging so that the Eastern domains are mined after the Western domains due to special significant features in the Eastern domains that require more survey and assessment.
- Recommend a ten year review process should be included in the consent to ‘future proof’ the approval process to review the effectiveness of any approvals conditions and take into account improved science, knowledge, standards and community expectations.

Rehabilitation

- Given the nature of the proposal, DECCW believes that a recommendation of expanded security deposits should be considered.

Statement of Commitments

- DECCW recommended several additional SOCs in relation to Aboriginal Cultural Heritage, Air, Mine Discharge on the George’s River and Noise.

Mine Plan

- Given the project timeframe it is likely that longwall layouts will change.
- Information to inform impact assessment is limited.
- Elements of the proposal are not fully described and cannot be assessed, these will be provided via the EMP approval process.
- Any approval should contain clear performance measures.
- Because of the uncertainties of subsidence effects and environmental consequences it is important that adaptive management systems are in place.

Streams of Significance

- DECCW recommended indicators which can be used in the identification of streams of special significance.
- DECCW Recommend that a 'negligible environmental impact' performance measure should be applied to all streams of 'special significance'.
- Mining extraction should be scheduled to delay the highest risk activities to the later stages of the proposal.

Swamps of special significance

- The EA does not identify swamps of special significance.
- DECCW has developed a framework to assess the conservation significance of swamps.
- DECCW is developing draft *Upland Swamp Environmental Assessment Guidelines 2009* to assist in providing further guidance to the mining industry on subsidence impacts on upland swamps.

Dharawal State Conservation Area

- Provided information on the regulatory process regarding Dharawal Plan of Management and the concurrence provisions for the Minister for the Environment.

	Name(s)	Position	Issue
1	Caroline Graham on behalf of Rivers SOS	Objection	<ul style="list-style-type: none"> • Major alterations to the ‘indicative plan’ are unlikely to happen if it is approved. • Impact on Metropolitan, Woronora and O’Hares Creek Special Areas. • Lack of appeal rights. • No mining in Special Areas or in Dharawal SCA. • Objection to Part 3A. • Operation of the PAC. • Thirty Years? • Environmental Assessment. • Lack of Research invalidates the EA. • Water Loss. • Threat to Rivers. • The ESD Principle.
2	Keith Muir on behalf of Colong Foundation for Wilderness Inc.	Objection	<p>ToR (a) Review impacts in relation to SCI recommendations</p> <ul style="list-style-type: none"> • The size of the project and impact on ecological integrity and heritage values. • Poor and inadequate knowledge of hydrological impacts. • Heritage values. • Management of impacts on the Metropolitan Special area and the Dharawal Special Area. • ESD and the Precautionary principle. • Limited future consents. • Purpose of gazettal of the Dharawal Special Conservation Area. • Natural heritage and pristine hydrological values. • Woronora and Metropolitan Special Areas. • The problem of surface cracking. • BHP Claim that swamps are low yielding is misleading. • Hanging swamps are impacts by longwall mining. <p>ToR (b) significance and acceptability of potential impacts</p> <ul style="list-style-type: none"> • Risk Management. • Correct valuation of water supply catchments and reserves. • Resource and Security Issues. • Specifying Risk Management.

	Name(s)	Position	Issue
3	Wollondilly Shire Council	Concerns	<p>Part 1</p> <ul style="list-style-type: none"> • Council is an Exceptional Stakeholder and requests further participation. • The Contributions of BHPIC. • The EA in its current form. • A 10 year Limit to Development Consent. • EA makes a case for perception of conflict of interest. • Request for Strategy on distribution of funds in the public interest. <p>Part 2</p> <ul style="list-style-type: none"> • Inconsistency with the NSW State Plan. • Insufficient Time for Public Exhibition and Comment. • Need for Independent Experts to advise the Department of Planning. • Department of Planning to incorporate comments from other Government Agencies. • Preferred Project Report to be Re-exhibited. • Independent Merit Assessment Process. • Part 3A Assessment process. • Feedback from DoP prior to PAC. • PAC requires further expert input in the assessment. • Learning from the outcomes of the SCI and the Metropolitan Colliery Part 3A. • Council is an exceptional and requests further participation. • Surface Water Assessment. • Ground water (tables, aquifers). • Swamps. • Flora, fauna, terrestrial and aquatic habitats. • Cliff lines. • Monitoring and rehabilitation of the impacts of subsidence on the natural environment. • Conclusions and impacts on the natural environment. • Subsidence impacts and items and places of Aboriginal significance. • Subsidence impacts and built structures assets. • Goaf gas drainage. • Greenhouse gas emissions. • Coal wash emplacement.

	Name(s)	Position	Issue
			<ul style="list-style-type: none"> • Road Transport Assessment. • Visual character. • Production statistics. • Criticism of socio-economic impact assessment (appendix L). • Criticisms of choice modelling. • Employment and economic impacts. • Bonds/bank guarantees. • Replacing SMPs with Extraction Plans. • Developer contribution. • Community partnerships program. • Limiting project life and using audit results. • Relationship to the operation of the Port Kembla • Coal Terminal. • Coal as a long term resource. • Project justification. • The EA makes a case for perception of pecuniary Interest. • Request for strategy on distribution of funds in the public interest. <p>Supplementary Submission</p> <ul style="list-style-type: none"> • The assessment process. • Air quality. • Water. • Recreational and cultural value of watercourses. • Potential Socio-Economic Impacts of a Project of reduced scale or refusal. • What are the most important issues of concern to the community associated with underground coal mining?
4	Allan Carriage, Keith Simms and Daniela Reverberi on behalf of Northern Illawarra Aboriginal Collective	Objection	<ul style="list-style-type: none"> • Inadequate treatment of Aboriginal heritage issues. • Damage to Aboriginal Heritage, waterways and landscapes. • Inadequate Aboriginal Cultural Heritage Assessment. • Local fauna no longer frequent areas that have been longwalled. • Damage to Twin Bridges at Douglas Park, Moreton Park Road north and south bridges and the F5 between Douglas Park and Menangle. • Damage to the Nepean River. • No credible future damage repair costings.

	Name(s)	Position	Issue
			<ul style="list-style-type: none"> • On-ground survey failed to identify numerous sites and artefacts which were later indentified by NIAC team. • 1km setback from major watercourses and dams. • Full surveys of Project area with traditional bloodline owners.
5	Campbelltown City Council	Concerns	<ul style="list-style-type: none"> • Significance of O'Hares Catchment to water quality and health of Georges River. • Significant role of Dharawal swamps to water quality, quantity and ecological diversity within O'Hares Catchment. • Lack of evidence to support "no net loss" to water supplies. • Inadequate assessment of roads and properties in Wedderburn. • No management strategies in place for key public infrastructure. • Too much assessment deferred in EA; ability to comment on the "significance and acceptability" of impacts highly constrained. • Inadequate consideration of Menangle Park Urban Release Area and Macarthur South growth region in mine-planning. • Cumulative air quality impacts not fully assessed. • Lack of certainty surrounding impact on Aboriginal artefacts/sites. • Robust independent monitoring and compliance auditing over life of project with full public access to monitoring results. • Staged approval to account for technological advances, changing community values and environmental knowledge. • 600m setback from 3rd order and above watercourses.
6	Patricia Durman on behalf of NPA (Macarthur Branch)	Objection	<ul style="list-style-type: none"> • Dharawal SCA and NR. • Subsidence projections made on panels between 150 and 300m wide, wider panels are the norm. • Mining layouts submitted are only indicative. • There is no discussion in the EA of how previous of existing mining will affect subsidence predictions of new workings. • Mining on both sides of the river or creek

	Name(s)	Position	Issue
			<p>increases risk of damage.</p> <ul style="list-style-type: none"> • Previous damage to the Cataract, Nepean and George's River, damage continues. • Fauna within upland swamps. • High number of native fauna species in swamplands. • Damage to the second swamp will endanger the Giant Burrowing Frog. • Tadpoles in and around Kangaroo Rock will be damaged if seepage or the rock is damaged. • Significance of swamplands. • Official start of the George's River damaged by existing mining. • The emplacement area. • Repercussions if the GHDLongmac Report is instigated. • Do the figures quoted for reject coal include the quality of the coal being mined? • Placement of reject coal underground or at West Cliff from Appin and West Cliff Collieries. • Mining of the Upper Punchbowl Creek within the Holsworthy Military Reserve. • Damage to drinking water catchments. • A 30 year term for the project is too long. • Value of the Dharawal SCA or George's River as a leisure attraction. • Quality and quantity of water in local swimming holes. • Continuing damage to rivers from IC previous undermining. • Unacceptable impacts of the proposal. • Significance of some areas that aren't highly visible to the community. • RAMSAR Convention on Wetlands. • No mining within 1km of rivers and creeks and zero impacts on significant environmental areas. • Any approval must not exceed 10 years.
7	Barry Durman	Objection	<ul style="list-style-type: none"> • Size of the EA. • S.M.P Guidelines. • Figures relating to the amount of raw coal that will be produced are only a guideline. • Placement of reject coal. • Percentage of return. • Subsidence predictions and longwall width.

	Name(s)	Position	Issue
			<ul style="list-style-type: none"> • Damage to rivers and creeks.
8	Julie Sheppard	Objection	<ul style="list-style-type: none"> • Water in Upper Georges River from Brennans Creek Dam black following heavy rainfall. • Significance of swamps to catchment yield and health downplayed or misunderstood. • Consideration of impacts constrained to individual features and does not include any cumulative assessment. • 23 streams predicted to exceed the 200mm closure threshold. • Strong empirical evidence from Dendrobium Swamp 1 that swamps are at significant risk of permanent damage. • Remediation of swamps unproven. • Inadequate setbacks proposed for streams; recent evidence of impacts at Georges River supports concern. • Lack of incentives for proponent to seriously investigate alternatives to Stage 4 Emplacement. • Stage 4 Emplacement would significantly impact threatened flora and fauna and lock in ongoing salinity impacts for Georges River. • 30 year approval irresponsible given rate of change in world opinion. • Consultation inadequate in both duration and scope. • Independence of PAC members questionable. • Refuse mining in Northcliff or Areas 2 and 3 while granting conditioned approval to areas west of the Nepean River.
9	Dr Ann Young	Objection	<ul style="list-style-type: none"> • Subsidence assessment based on fundamental misunderstandings of subsidence. • Predictions for the distribution and magnitude of tilts and strains therefore likely to be inaccurate and underestimated. • Spikes or strongly localised expressions of subsidence make generalisations about the level of impact meaningless. • Predicted incidence of cliff-falls does not accord with recent evidence at Dendrobium. • Diversion of surface waters due to surface cracking. • Baseline data lacking. • Rock bars only a small part of stream

	Name(s)	Position	Issue
			<p>functionality and health.</p> <ul style="list-style-type: none"> • Swamp remediation not plausible. • Baseflow contribution from swamps underestimated. • Poor justification to support categorisation of swamps as ‘not specially significant’. • Choice modelling exercise undervalues swamps. • Impact assessment does not consider interdependencies between swamps. • Reasons for singling out 8 swamps for higher standard of protection are flimsy. <p>Supplementary Submission</p> <ul style="list-style-type: none"> • Piezometer Data for Swamp 1 at Dendrobium suggests it has failed to retain water since being undermined.
10	Dr Ian Wright	Objection	<ul style="list-style-type: none"> • Discharged into Brennans Creek from the Emplacement Area. • Salinity levels at discharge point currently toxic to aquatic plants and invertebrates. • Continued contamination via Stage 4 Emplacement Area would have long-term implications for water quality in Georges river. • Parallels can be drawn from well documented impacts on water quality and aquatic fauna in the Grose River. • Monitor and/or set thresholds for a much wider range of ionic compounds e.g. magnesium, zinc, copper, aluminium, nickel, lead.
11	Robert Michie on behalf of Georges River Environmental Alliance	Objection	<ul style="list-style-type: none"> • Emphasis on unproven remediation rather than avoidance. • Categorisation of natural features in EA reflects proponent’s bias, leading to conclusion that nothing is ‘significant’. • Base plan longwall widths double those associated with impacts on Waratah Rivulet. • Science underpinning technical assessment is contested. • Extent of peer-review sparse, often omitting critical aspects. • Some Dharawal streams predicted to receive over 5 times the closure ‘threshold’. • Valuation of environmental capital and consideration of alternatives in socio-economic

	Name(s)	Position	Issue
			<p>assessment was inadequate.</p> <ul style="list-style-type: none"> • Longwall mining not identified as a “Key Threatening Process” as listed under the NSW TSC Act. • Proposal inconsistent with certain provisions in the MoU for Dharawal SCA, NPW Act 1974 and the Mining SEPP. • Consultation not commensurate with scale of the proposal and falls well short of capturing all current and potential future stakeholders. • Conditions of any approval should include no damage to swamps, streams and Aboriginal sites. • Setbacks increased in line with those suggested by Rivers SOS.
12	Elizabeth Michie	Objection	<ul style="list-style-type: none"> • EA lacks relevant data and serious analysis. • Richness and diversity of flora, fauna and ecological communities within Dharawal wetland areas. • Swamp remediation has not worked at Dendrobium.
13	Marilyn Dollemore	Objection	<ul style="list-style-type: none"> • Monitor-and-remediate approach dominates over avoidance. • Proposed setbacks. • Costs of remediation. • Recent damage at Georges River occurred below ‘acceptable’ 200mm closure threshold and despite advanced monitoring. • Underground emplacement of reject not seriously considered. • 3 cent/tonne levy should be imposed to fund research into mitigating likely impacts on water quality in catchment areas.
14	Sharyn Cullis – both as an individual and on behalf of Jewfish Point Action Group	Objection	<ul style="list-style-type: none"> • Swamp and stream categorisation • Swamps cumulatively. • Approval of the scale sought. • Future recreational potential for Dharawal. • Choice modelling (CM). • Swamp remediation. • Recent cracking at Georges River with similar mining practices as proposed. • Externalities under-valued in CM. • Emplacement (Stage 4) in CM.

	Name(s)	Position	Issue
			<ul style="list-style-type: none"> • Individual and cumulative values of Dharawal and Holsworthy. • Avoidance measures. • Inadequate baseline data collection and ecological survey work. • Peer review. • Consultation inadequate. • Coal in North Cliff (Dharawal) area could potentially be extracted with less environmentally damaging technologies in the future. • No mining in Areas 2 and 3 and SCA catchment lands. • No mining in North Cliff domain and declaration of Dharawal SCA as a major extension to the Nature Reserve. • Any approval to be staged and based on defined mining domains.
15	Robyn Craig	Objection	<ul style="list-style-type: none"> • Consequences for safety from impacts on Twin Bridges, Expressway, Moreton Park Road and infrastructure not designed to withstand closure. • Previous rockfalls on cliff-lines in Douglas Park area.
16	Pat and Allan Harding	Objection	<ul style="list-style-type: none"> • Wedderburn homes not built to tolerate subsidence. • Absence of reticulated water supply underlines vulnerability of Wedderburn to bushfires; risks to dams, bores and tankwater supplies due to subsidence accentuate the risk. • Commitment to repair property and infrastructure can not compensate personal and psychological stresses and anxiety. • Property devaluations from this subsidence risk. • Attractions of Wedderburn include significant ecological and cultural richness. • Concerned about future application to mine in ELA 3474.
17	Sarah Kennedy on behalf of Wedderburn Against Mining	Objection	<ul style="list-style-type: none"> • Subsidence impact on Wedderburn. • Subsidence impacts on tank, dam and borewater. • Insufficient setbacks for streams. • Increased dust from Stage 4 Emplacement could contaminate water. • Consultation.

	Name(s)	Position	Issue
			<ul style="list-style-type: none"> • BHPBIC newsletters to Wedderburn residents. • Transparency and communication for current and future plans. • Psychological impacts of mining-related disruption, stress and temporary/permanent relocation. • 30 year approval too long. • Concerns and views of community.
18	Tony Desantis on behalf of Delta Mining	Support	<ul style="list-style-type: none"> • Employment. • Economic activity.
19	Dave Burgess on behalf of Total Environment Centre	Objection	<ul style="list-style-type: none"> • Lack of information. • Monitoring regime. • Choice modelling exercise biased. • Lack of avoidance measures. • Unproven and conceptual remediation. • Level of assessment not fine enough. • Proposed Longwall widths. • No swamps afforded 'special significance'. • Risk Assessment based on insufficient data, is poorly linked to actions and lacks detail on triggers for 'protection zones'. • Absence of set values and mandatory environmental protection standards. • Risk Management Zone concept subjective. • Rehabilitation costs substantially undervalued. • Unique ecological, cultural heritage and community values of Dharawal SCA not acknowledged, rather they are aggregated and treated same as 'any other area'. • Limited baseline data obtained. • Failure to conduct minimum required level of assessment. • Risks of impacts and consequences and overall cost-benefit considerations for individual swamps. • 200mm threshold for valley closure. • Prospect of offsets for damaged swamps. • Staged Approval beginning in Western Domain. • Monitoring program. • No mining under Dharawal SCA. • Longwall mining application should include upfront risk assessment tied to specific actions, with detailed information on all natural features

	Name(s)	Position	Issue
			<p>potentially at risk.</p> <ul style="list-style-type: none"> Physical, chemical and hydrological considerations to be fully canvassed in any potential swamp rehabilitation strategy. Further investigation of alternatives to emplacement.
20	Brian Shaw on behalf of Botany Bay and Catchment Alliance Inc	Objection	<ul style="list-style-type: none"> Evidence of damage of longwall mining. Waratah Rivulet and Woronora Catchment of rockfalls, loss of water and iron-staining. Alternatives to fossil fuels mean 30-year approval unnecessary. Dharawal SCA set aside since 1880's. Aboriginal rock art and artefacts at risk from subsidence. Staged approval, beginning furthest from areas of high cultural, ecological and/or water resource value. No undermining of Dharawal SCA. \$10 million trust fund contribution annually to cover any damage to aboriginal sites, watercourses or swamps. Monitoring and auditing by independent body, not Proponent.
21	Cita Murphy	Objection	<ul style="list-style-type: none"> Ecological diversity in Dharawal on par with that of Amazon. Increased fire risks due to drying out of cracked swamps; consequent risks to residents and properties.
22	Gary Schoer on behalf of NPA (Southern Sydney Branch)	Objection	<ul style="list-style-type: none"> Focus on minimising, mitigating, offsetting and remediating impacts rather than avoiding them altogether. Longwalls 140-160m wide have caused significant impacts at Metrop. Proposed setbacks inadequate. No cost estimates for repairing significant natural features. Streams, areas of high ecological and cultural heritage value. Possibility of remediating and/or providing appropriate offset for damaging swamps. Alternatives. Proposed adaptive management measures. Watercourse remediation research fund.

	Name(s)	Position	Issue
			<ul style="list-style-type: none"> • Discretionary/subjective is too vague. <p>Swamps</p> <ul style="list-style-type: none"> • Remediation. • Closure threshold. • Basis for selection of swamps for higher level of protection. • Status of upland swamps pending. <p>Dharawal SCA</p> <ul style="list-style-type: none"> • NPW Act 1974 and 2006 Plan of Management. • 1998 MoU. <p>Limitations of Subsidence Assessment</p> <ul style="list-style-type: none"> • References cited. • No modelling or comparison using smaller longwalls or “miniwalls”. • Peer-review. • Scientific focus. • Direct and indirect impacts of subsidence on threatened fauna. • Estimated extent of cliff falls. • On-ground flora and fauna assessment. • Different categories of swamps. • Impact predictions for flora and ecological communities. • Subsidence-related mechanisms for impacting flora & fauna. <ul style="list-style-type: none"> • Effectiveness and appropriateness of remediation or offset measures. • Avoidance. • Full costing and commitment for all at risk environmental features. • Amend mine plans to align with requirements and ‘spirit’ of 2006 PoM for Dharawal SCA. • Mandate “no damage” as the only acceptable standard to allow mining in Dharawal SCA and seek its reclassification as a National Park or Nature Reserve. • Apply precautionary principle in instances where impact predictions lack scientific rigour – put onus back on proponent to provide greater proof. • Comprehensive ecological survey work for project area, particularly swamps.

	Name(s)	Position	Issue
			<ul style="list-style-type: none"> • Require all ecological and ecosystem values and attributes to be (demonstrably) protected, conserved and maintained. • Enact strong cross-agency regulation to protect the quality and quantity of drinking water supplies today and into the long-term. • Proposed Biodiversity Management Plan for Stage 4 Emplacement Area finalised before any Part 3A approval. • Minimum of 2 years of baseline monitoring and full ecological surveys of all swamps.
23	Kathe Robinson on behalf of Georges River Environmental Action Team	Objection	<ul style="list-style-type: none"> • Framework for mining assessments and approvals. • Associated language and concepts. • Terms of Reference for review. • Historical mining impacts. • Proposal is presented as isolated from the wider environmental, geographical and geopolitical context. • Commitments and recommendations in EA. • Historical monitoring and remediation of longwall mining impacts by BHP. • Part 3A process. • NSW government's twin aims of optimising the development of the states mineral resources and improving the standard of environmental management.
24	Philip Sansom on behalf of Sydney Metropolitan Catchment Management Authority (SMCMA)	Objection	<ul style="list-style-type: none"> • Catchment Action Plan targets. • Cracking of stream beds leading to water supply loss and impacts on aquatic ecology. • Impacts on significant Aboriginal landscapes and sites due to subsidence, cliff-falls and emplacement. • Regulate for substantially increased setbacks.
25	Alf Rapisarda and Anthony Callinan on behalf of Jemena	Concerns	<ul style="list-style-type: none"> • Gas pipelines. • Deviation from EA Base Plan requiring re-assessment of potential impacts to gas infrastructure. • Establish a technical committee to manage risks to gas infrastructure and assign responsibilities for relocations/repairs and compensation.

	Name(s)	Position	Issue
26	Carol O'Donnell	Concerns	<ul style="list-style-type: none"> • Assess proposal within State and National contexts. • State and Regional policy documents. • Need clear and consistent principles for risk assessment and management.
27	Murray and Joy Scott	Objection	<ul style="list-style-type: none"> • Measures to minimise or remediate but not prevent impacts. • Environmental, economic and social costs. • Greenhouse gas assessment. • 30 year approval dissuades alternative technologies.
28	David Mouat	Objection	<ul style="list-style-type: none"> • Subsidence-related impacts on stream, flora and fauna. • Subsidence impacts on homes. • Property devaluation of Wedderburn properties.
29	Macarthur Bushwalkers and Bicycle Users Club	Objection	<ul style="list-style-type: none"> • BHP's International history. • Current water levels in watercourses of the Georges River catchment. • Impacts of longwall mining on communities and the environment. • Loss of surface flows to mineworkings. • Evidence within Illawarra Coalfields of surface flows "re-emerging" downstream. • "Backstowing" of reject.