



# Nature Conservation Council

The voice for nature in NSW

Major Projects  
Department of Planning and Environment  
GPO Box 39  
Sydney NSW 2001

5 September 2016

## **Submission of Objection: Wallarah 2 Coal Project Amendment, DA SSD-4974**

Dear Sir/Madam,

The Nature Conservation Council of NSW (**NCC**) is the peak environment organisation for New South Wales, representing 150 member societies across the state. Together we are committed to protecting and conserving the wildlife, landscapes and natural resources of NSW.

**NCC objects to the proposed Wallarah 2 Project due to its significant environmental impacts.**

Our **attached** submission outlines our specific concerns in relation to:

- Climate change Impacts
- Water resource impacts
- Water quality impacts
- Cumulative impacts
- Social impacts
- Threatened species
- Economics

We recommend that the proposed mine expansion be rejected. If you seek any further information on the issues raised in this submission please do not hesitate to contact me on (02) 9516 1488 or [ncc@nature.org.au](mailto:ncc@nature.org.au)

Yours sincerely,

Daisy Barham  
Campaigns Director

## **NCC SUBMISSION – WALLARAH 2 COAL PROJECT AMENDMENT, DA SSD-4974**

The Nature Conservation Council of NSW (NCC) **objects** to the Wallarah 2 Coal Project, SSD-4974 for the reasons outlined below.

NCC wishes to draw attention to the uncertainty and intent of the major partner of the Wyong Areas Coal Joint Venture (WACVJ). The project letter (dated 16<sup>th</sup> June 2016) to the NSW Department of Planning and Environment (DPE) in the front of the EIS notes that the major partner of WACVJ is KORES Australia, listed as owning 82.5% of the project. KORES (Korea Resources Corp) is owned by the South Korean government. In June 2016, an announcement was made in the Korea Times<sup>1</sup> that:

*“KORES will withdraw from overseas resources development”*

The report in the Korea Times also notes that the KORES corporation is carrying a ‘staggering’ debt ratio.

NCC believes that, given the environmental and other project problems discussed below, KORES is an unsuitable proponent for a NSW coal project on political and economic grounds. NSW DPE should reject the proposal on these grounds and not spend any more public resources assessing such an uncertain coal project proposal from a majority foreign owned corporation with an uncertain future and a significant debt problem.

It should be noted that the amendment EIS clearly links back comprehensively to the 2013 EIS. Volume 1 of the Amendment EIS notes on at least 10 occasions that particular sections should be read in conjunction with specified sections of the 2013 EIS. Most of the major areas of concern to NCC relate to the 2013 development proposal rather than the amended proposal, so NCC will restate its concerns in these areas in the light of environmental and community developments over the last 3 years.

There were over 600 public submissions opposing the development in 2013, which indicates a high degree of public opposition. The then Liberal Party Opposition Leader promised the community before the 2011 NSW election that the Wallarah 2 project would not go ahead under a Liberal State Government. The fact that this project is still being considered 5 years later following the election of the Liberal Government represents a betrayal of the people of NSW, particularly in the Wyong and Central Coast areas.

### **CLIMATE CHANGE IMPACTS**

The purpose of the Wallarah 2 project is to supply up to 5 million tonnes of thermal coal per annum for 28 years, under long-term contracts, to South Korea. When burned this coal will contribute significantly to climate change.

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<sup>1</sup> [http://www.koreatimes.co.kr/www/news/biz/2016/06/488\\_206976.html](http://www.koreatimes.co.kr/www/news/biz/2016/06/488_206976.html)

Increased CO<sup>2</sup> levels are causing warming of the atmosphere and oceans, the breakup of ice sheets, glacial retreat, sea level rise, and ocean acidification. At present Australia is seeing the impacts of climate change with more severe and frequent events such as droughts, bushfires, heat waves, floods and cyclones. The Wallarah 2 coal project will generate new greenhouse gas emissions directly conflicting with state and federal policies to reduce climate change emissions.

We are concerned that the significant greenhouse gas and climate impacts of the project are downplayed, with the key focus being on Scope 1 and Scope 2 emissions.

It is the scope 3 emissions from the overseas burning of the coal that are the most concerning from a climate change perspective. The total scope 3 emissions for the life of the project are listed in Table 9.1<sup>2</sup> as 256.03 million tonnes of CO<sub>2</sub> equivalent emissions – dwarfing the figure of 5.7 million tonnes from Scope 1 and Scope 2 sources.

A comparison against the Scope 3 GHG emissions of other recent Hunter Valley coal mining proposals shows that the scope 3 GHG emissions of the Wallarah 2 Project are substantially greater than other recent proposals in the wider area.

#### Scope 3 GHG emissions over project life (million tonnes of CO<sub>2</sub> equivalent emissions)

Walarah 2 Coal Project	Bylong Project (currently under consideration)	Mt Owen extension (considered by PAC on 14 December 2015)
<b>256.03</b>	202.5	131.76

The Wallarah 2 Coal Project Amendment is being considered in the shadow of the historic agreement at the UN Conference of the Parties (the Paris Agreement) on 12 December 2015. The Paris Agreement was unanimously signed by 195 countries. The agreement commits all nations, including Australia, to keeping global average temperatures to below 2 degrees Celsius.

The Climate Council of Australia has stated what this target means for Australian coal mining:

*“For Australia to play its role in preventing a 2 degree C rise in temperature requires over 90% of Australia’s coal reserves to be left in the ground, unburned”.<sup>3</sup>*

International researchers from the University College of London, following extensive modelling, have come to a similar conclusion<sup>4</sup>. They suggest that to have at least a 50% chance of keeping global warming below 2 degrees C throughout the twenty-first century, globally a third of oil reserves, half of gas reserves and over 80% of current coal reserves should remain unused. Even if carbon capture and storage was technologically and economically available (there is no credible scientific evidence to date that it will be), the report indicates that **over 90% of Australasian coal reserves would have to remain unburnt before 2050 to meet the 2 degrees C warming ceiling.**

<sup>2</sup> Wallarah 2 Coal Project Amendment EIS, Appendix D, page 49

<sup>3</sup> Climate Council of Australia (2015): *“Unburnable Carbon: Why We Need to Leave Fossil Fuels in the Ground”*, pp iii – iv, [www.climatecouncil.org.au](http://www.climatecouncil.org.au)

<sup>4</sup> C. McGlade & P Ekins: *The geographical distribution of fossil fuels unused when limiting global warming to 2degrees C*, Nature, V. 157, 8<sup>th</sup> January 2015, pp 187-190

The Australian government has committed to reducing greenhouse gas emissions by 26 to 28 per cent by 2030. In spite of this commitment, it appears that Australia's annual emissions are increasing while other developed economies are cutting their carbon pollution<sup>5</sup>.

Australia is the second highest exporter of coal in the world, and Australia therefore punches well above its weight in terms of population in contributing to planetary climate change. The earth's atmosphere is not concerned with national boundaries – it responds to carbon dioxide emissions from coal burning wherever the coal is burnt.

NCC maintains that it is fundamentally irresponsible for the NSW Government to continue to approve new or expanded coal mine projects at a time when thermal coal prices are at record lows (meaning low royalty returns to the State) and Australia's GHG emission trajectory is moving in the opposite direction to that required for Australia to meet its international GHG emission reduction commitments.

In light of the unequivocal evidence that the burning of coal contributes to climate change and the international agreement to keep global average temperatures to below 2 degrees Celsius, we do not consider that the approval of the Amended Wallarah 2 Coal Project is in the public interest.

## **WATER RESOURCE IMPACTS**

The Wallarah 2 longwall coal mine would undermine drinking water catchments northwest of Wyong. The project will undermine several waterways causing subsidence, which could cause serious and permanent damage to local aquifers, surface water environments and water supplies.

In its 2013 submission on this project the Office of Environment and Heritage (OEH) states that the mine layout poses significant environmental risk resulting from subsidence to the Jilliby State Conservation Area and this area warrants protection. Mining these sensitive areas has the potential to permanently damage ground water aquifers, surface water systems, threatened ecological communities and habitat for threatened species.

Little Jilliby Creek is a particularly significant stream with high conservation value. Subsidence from coal extraction under this creek will lead to loss of water flow and cause significant impact to the fauna of the area including threatened frog species: *Litoria aurea* (Green and Golden Bell Frog), *Mixophyes balbus* (Stuttering Frog) and *Mixophyes iteratus* (Giant Barred Frog). Furthermore, subsidence is predicted to cause this creek to fracture and drain.

The mine will be directly beneath the Central Coast's major water catchment area. It puts approximately 300,000 people within the Wyong and Gosford area and 53% of the water catchment area supplying these residents at risk.

The key issues facing groundwater and surface waters from this development are drawdown and aquifer depressurisation, downstream river flow losses, water quality impacts and salinity. These impacts will have an effect on catchment water resources threatening water quality and availability in the region, which poses an inherent risk to the land, biota and community of the Central Coast.

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<sup>5</sup> *Carbon emissions on rise despite Direct Action*, Australian Financial Review, 1 February 2016, [www.afr.com/news/politics/carbon-emissions-on-rise-despite-direct-action-20160131-gmif6a](http://www.afr.com/news/politics/carbon-emissions-on-rise-despite-direct-action-20160131-gmif6a)

In 2011 OEH raised concerns that longwall mining could damage creeks in the Sugarloaf Conservation Area and urged Xstrata, to avoid mining this area. This advice was disregarded and on 2 October 2012 extensive mine subsidence occurred resulting in landslides, damaging creeks and creating large voids. To mitigate this damage, inadequate remediation work was carried out in an attempt to grout extensive cracks in the landscape and 75 cubic meters of grout was spilt into a stream within the conservation area.

There have also been significant environmental impacts at the Metropolitan Colliery in Sydney's drinking water catchment and West Wallsend Colliery in Sugarloaf Conservation Area where subsidence exceeded expectations. These experiences should not be repeated at Wallarah 2.

## **WATER QUALITY IMPACTS**

The 2013 OEH report on the Wallarah 2 Coal Project<sup>6</sup> noted that:

*"The water resources being put at risk from mining at Wallarah 2 form part of the Gosford-Wyong Drinking Water Supply".*

The risk referred to relates to the proposed regular discharge of treated mine water to Wallarah Creek, part of the Gosford-Wyong water supply. Wallarah Creek was described in 2013 as being in good condition<sup>7</sup>.

OEH expressed significant concerns about the proposed discharges from the Wallarah 2 Coal Project into Wallarah Creek:

*"OEH has concerns that the actual volume of water produced (and required to be disposed of) at Wallarah 2 may be underestimated in the EIS (particularly during wet weather events). It also noted that flows that exceed the dam design capacities will overflow to Wallarah Creek. At these times highly saline and potentially contaminated water will likely flow to Wallarah Creek."*<sup>8</sup>

The risk of severe consequences from a contaminated discharge into a drinking water catchment compels the triggering of the Precautionary Principle component of ESD (EPA Act, Section 5 – Objects).

The appropriate criterion for consent should be the same as that required under Reg. 10(1) of the State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011:

*"A consent authority must not grant consent to the carrying out of development under Part 4 of the Act on land in the Sydney drinking water catchment unless it is satisfied that the carrying out of the proposed development would have a neutral or beneficial effect on water quality"*

If this standard is required for the Sydney Drinking Water Catchment<sup>9</sup>, it should be required for the Gosford-Wyong Drinking Water Catchment. The 2013 submission from the NSW Government's own Office of Environment and Heritage (still applicable to the 2016 Wallarah 2 Coal Project Amendment) indicates that the proposed development will be unable to meet the neutral or beneficial effect on water quality target.

These are legitimate and logical grounds for rejecting the proposal.

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<sup>6</sup> OEH Submission for the Wallarah 2 Coal Project, 26/6/2013, p 6

<sup>7</sup> Ibid, p 13

<sup>8</sup> OEH Submission for the Wallarah 2 Coal Project, 26/6/2013, p13

<sup>9</sup> The issue of water quality associated with underground coal mining in a drinking water catchment is the subject of a case currently awaiting judgement in the NSW Land and Environmental Court - <http://www.smh.com.au/environment/water-issues/springvale-coal-mine-approval-faces-challenge-over-impacts-to-sydneys-water-20160109-gm2f8u.html>

## **CUMULATIVE IMPACTS**

The project will contribute to the ongoing expansion of coal mining in the greater Hunter region, which is already having a devastating effect on the climate and local communities, and causing significant environmental damage and irreplaceable biodiversity loss.

The cumulative impacts of mining operations in the greater Hunter region are likely to cause serious environmental and social problems now and into the future. Whilst the mines are in operation dust, noise impacts and traffic impacts will be immediate. Other impacts such as water contamination, loss of surface water, surface disturbance and loss of biodiversity will be cause serious and potentially irreversible impacts in both the immediate and long-term.

The cumulative impacts of all mining activities in the region must be considered when determining these applications.

## **SOCIAL IMPACTS**

This proposed mine will be placed amid new growing suburbs, putting the health of these residents at risk. The development of the mine and extraction and transport of the coal will cause the release of particulate matter (PM 10 and PM 2.5). Short-term exposure to particulate matter pollution can lead to diminished lung function, damage and inflammation of lung tissue, increased mortality rates in children and young adults, aggravation of asthma symptoms, heightened risk of cardiac arrhythmias, heart attacks and other cardiovascular issues.

This project should be refused based on the health risks associated with air pollution from mining, stockpiling and transporting coal so close to residential development.

## **THREATENED SPECIES**

The proposed mine could have a significant adverse impact on native plants and animals in the region. Thirty-seven recorded threatened and migratory fauna species and six vulnerable or endangered flora species are within the project site, including:

*Lathamus discolor* (Swift Parrot), *Xanthomyza phrygia*, *Tyto tenebricosa* (Sooty Owl), *Xenus cinereus* (Terek Sandpiper), *Pandion haliaetus* (Osprey), *Limosa limosa* (Black-tailed Godwit), *Ixobrychus flavicollis* (Black Bittern), *Haematopus longirostris* (Pied Oystercatcher) and *Haematopus fuliginosus* (Sooty Oystercatcher). These species are protected under state and federal legislation.

Furthermore, 19 species of avian migratory waders in the area are also protected under the Federal EPBC Act with binding agreements with China (CAMBA), Japan (JAMBA) and South Korea (ROKAMBA). There are also flora species listed as threatened under the Act and local fauna species listed as endangered under the Act with the proposed mining area.

The key threats to these species include land clearing, change in habitat due to subsidence and alteration of water flow, wetlands and floodplains and contamination of land and water.

All of these threats are possible effects of this project. The cumulative loss of threatened species habitat in NSW means that many native flora and fauna species are facing an extremely high risk of extinction in NSW into the future.

The Jilliby State Conservation Area was created on 1 July 2003 and protects important areas of remnant forest ecosystems at the head of major water catchments. Historically the area was used for logging however it contains important habitat and intact natural landscapes and is a significant ecological corridor stretching along the coastal ranges.

The Jilliby State Conservation Area offers the community a diverse range of ecologically sustainable recreational opportunities, whilst ensuring that environmental values are protected. This area should not be undermined.

## **ECONOMICS**

In Section 6.9 of the EIS<sup>10</sup>, it is noted that this section on economics supersedes the 2013 EIS.

NCC notes with concern that the updated economics impact assessment in the 2016 EIS has been undertaken by Gillespie Economics (Gillespie). This is the same organisation that prepared the economic analyses supporting the Warkworth mine expansion which were discredited by the Chief Judge of the NSW Land and Environment Court (LEC)<sup>11</sup> (drawing on independent economic analyses by agencies having no connections with the NSW coal industry). All the findings in this case were subsequently confirmed on appeal by the proponent and the Minister to the NSW Supreme Court.

The most relevant comments from the assessment of the economic issues by Gillespie Economics in the Bulga case<sup>12</sup> are quoted below:

*447: Warkworth relied on the two economic assessments of the Project ... prepared by Gillespie Economics.*

*450: For the reasons which follow, I am not satisfied that the economic analyses provided on behalf of Warkworth support the conclusion urged by both Warkworth and the Minister, namely that the economic benefits of the project outweigh the environmental, social and other costs.*

*451: ...The deficiencies in the data and assumptions used affect the reliability of the conclusions as to the net economic benefits of approval.*

NCC requests that, based on the findings on economic analyses of a NSW coal project by Gillespie Economics in the Bulga case, NSW DPE should require the economic content of the EIS to be confirmed by a genuinely independent economic analysis produced by an independent and credible agency.

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<sup>10</sup> Wallarah 2 Coal Project Amendment EIS, page 83

<sup>11</sup> Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited [2013] NSWLEC 48 (15 April 2013) ['Bulga case']

<sup>12</sup> Bulga case, Part 6: Economic Issues, 446 to 496