NSW GOVERNMENT | Trade & Investment

Office of the Secretary

SECO14/2064

Ms Carolyn McNally
A/Secretary
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms McNally

Comment on the Consequential Environmental Impact Assessment for the Retracted Mine Plan – Drayton South Coal Project

Thank you for the opportunity to provide advice on the Consequential Environmental Impact Assessment for the Retracted Mine Plan for the expansion of the Drayton South mine by Anglo American Metallurgical Coal Ltd (the retracted mine plan).

As you are aware, NSW Trade & Investment has previously had extensive engagement with your Department on the proposed expansion of this mine.

Most recently, on 7 February 2014, I submitted a whole-of-cluster response to the findings of the Planning Assessment Commission (PAC) and Gateway Panel Reviews for the proposal (DGTO14/30).

I am now in a position to provide further whole-of-cluster comment on the retracted mine plan which has been lodged with your Department. Attached are detailed comments which address:

- The reduced output of the mine under the retracted proposal;
- The economic impacts associated with this reduced output;
- Mine scheduling relating to the retracted mine plan;
- Mine plan, rehabilitation and mine closure;
- Recommended conditions of approval with respect to water; and
- Issues relating to the impacts of the project on agricultural resources and enterprises.

While the attached submission notes that the Consequential EA does not assess the cumulative impacts of the project on adjacent agricultural enterprises and Critical Industry Clusters, I also note that in the absence of an agreed methodology/framework and timeframe, 'cumulative impacts' should not be a determining factor as they are unsubstantiated at this time.

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The NSW Office of Water is preparing supplementary advice which explores the mechanisms for the trade of water entitlements necessary for this project. This advice is likely to be available in early May 2014.

Yours sincerely

Mark I Paterson AO
Secretary
2/5/14

Cc Matthew Sprott

Encl.

NSW Trade & Investment

Comment

Consequential Environmental Impact Assessment for the Retracted Mine Plan – Drayton South Coal Project

The following advice on the Consequential Environmental Impact Assessment for the Retracted Mine Plan for the Drayton South Coal Project (Consequential EA) is provided as NSW Trade & Investment whole-of-cluster advice.

Development of the resource

Size and availability of the retracted mine plan

The retracted mine plan will result in reduced output and royalties to the NSW Government compared to the proposal previously considered by the Planning Assessment Commission and Gateway Panel Review.

The retracted mine plan reduces the available coal reserve to 97 Million tonnes (Mt), a loss of 22 Mt of reserves. It also reduces the mine life by 7 years to 20 years.

While the proposed coal production rate from the mine is unchanged, this reduction will result in the loss of approximately $1.7 billion (in nominal terms) in export revenue, over the life of the mine. This estimate is based on an assumption of an average coal price of A$100/tonne.[1]

Royalties to the NSW Government will be reduced by approximately $132 million (nominal terms) over the life of the mine.

Economic Significance of the retracted mine plan

Total export revenue over the life of the project is $7.3 billion (nominal terms).

Total royalties to the NSW Government over the life of the project will be of the order of $580 million (nominal terms).[2]

Using the revised economic assessment of the retracted mine plan, the following benefits are estimated to accrue to the regional economy:

- $588 million in annual direct and indirect regional output or business turnover;
- $264 million in annual direct and indirect regional value added;
- $86 million in annual direct and indirect household income; and
- 785 direct and indirect jobs.

The above annual figures are unchanged from the previously submitted figures relating to these categories however the mine life has been reduced by seven years.

The estimated capital expenditure of the retracted mine plan is $485 million (i.e. no change from the previous mine proposal) and at full production the mine will employ 530 workers directly.

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[1] This assumption is more conservative than that used in the Consequential EA of A$115/tonne, but higher than the current price of A$85/tonne.

[2] The Consequential EA sites total royalties of $333m in net present value terms. NSW Trade & Investment assesses that a 7% discount rate has been applied to nominal royalties. However, this is not explicitly stated in the Consequential EA.

Total *per annum* payroll tax would be around $5 million – based on direct full-time equivalent employment projected.

It is further estimated that the construction phase of the retracted mine plan would contribute the following benefits to the regional economy for a period of around 2 – 2.5 years:

- $68M in annual direct and indirect output;
- $27M in annual direct and indirect regional value added;
- $21M in annual direct and indirect household income; and
- 234 direct and indirect jobs.

Mine Scheduling Relating to the Retracted Mine Plan

The retracted mine plan has eliminated the Houston Pit and the south east corner of the Whynot Pit which may have implications for dragline scheduling. The dragline is now heavily dependent on deployment in the Redbank Pit and the Whynot Pit has a reduction in strike length.

The dragline proposed to be used at Drayton South is the same dragline currently being utilised in the existing Drayton open cut mine. Given the high capital expenditure for this piece of equipment, the economics of the project depend heavily on maximising its use.

Mine Plan, Rehabilitation and Mine Closure

Within the retracted mine plan detail on mine plan scheduling, rehabilitation and mine closure is limited to a series of conceptual objectives without demonstrating how they have been incorporated in the design of the project.

NSW Trade & Investment is unable to administer its regulatory functions in accordance with any future grant of a Mining Lease with such a conceptual mine design.

Prior to any Project Approval for the Drayton South Project, NSW Trade & Investment therefore recommends the Proponent provide the following information which will allow it to assess the potential impacts of the retracted mine plan:

- The extent of the rehabilitation and restoration works to be undertaken;
- Rehabilitation objectives and domains;
- Strategic rehabilitation completion criteria for each of the five phases of rehabilitation;
- Staged mine plans which show:
  - the dimension of the final void;
  - location and profile of the overburden emplacement areas;
  - the profile / cross sections of the final landform; and
- Demonstration that the proposed final landform has been designed to integrate into and with the surrounding landscape and vegetation linkages.

NSW Trade & Investment staff are available to meet with the Proponent to assist in developing the above documents for their project.

For further assistance and coordination contact Julie Moloney, Principal Adviser Minerals and Petroleum, on 4931 6549 or julie.moloney@trade.nsw.gov.au

Water

The NSW Office of Water (within NSW Trade & Investment) provides the following detailed comments as well as recommended conditions of approval.

Supplementary advice is being prepared on the mechanisms for the trade of water entitlements necessary for this project.

Groundwater Assessment

The qualitative assessment referred to in the Consequential EA indicates a reduction in the inflows to Whynot Pit of 25-50% and at Redbank Pit of 10-25% compared to that presented earlier. The inflow reduction at Houston Pit is predicted to be minor as it was in an elevated area. Total groundwater inflow reductions are referred to in Appendix E (Surface Water Assessment Advice) as between 7% and 10% or 100ML/yr prior to Yr10 and up to 600ML/yr after Yr10. A breakdown of inflows by water sources has not been provided.

The reduced mining period and reduced mining footprint is predicted in the Consequential EA to reduce the zone of groundwater depressurisation. The water take from the Hunter River alluvium is expected to be negligible and undetectable, and no private landholders are within the zone of depressurisation.

Section 2.3 of Appendix D of the Consequential EA indicates the final void will be a groundwater sink for 140years and then it will become a flow through system when salt will leave the system. The salinity of the void is predicted to increase to an equilibrium of 5000mg/L, 400 to 500 years post mining. This is higher than the PPR which predicted an equilibrium of between 750 and 1300mg/L, 700 years post mining. Uncertainty exists as to the basis for the significant increase in equilibrium salinity levels and the resulting impacts on the groundwater and surface water systems. The NSW Office of Water recommends a condition of approval require development of a Void Management Strategy including further assessment of salinity impacts and consideration of adequate mitigating measures.

A quantitative assessment is requested prior to project commencement to confirm the revised water take from the alluvial and porous rock water sources both during and post mining. This will confirm the licence entitlements necessary for the project.

Surface Water Assessment

Appendix E of the Consequential EA indicates a significant reduction in impacts to the Saltwater Creek catchment with the removal of the Houston mining area and the diversion around Houston Dam. The remaining impacts to Saltwater Creek catchment are via the 40ha catchment of Houston Dam. The proposed ROM dam will reduce the catchment draining to Plashett Dam by 28.9ha.

The changes in mining areas are predicted in Appendix E to result in a reduction in surface inflows to the mine water management system by 200ML in Yr 3 to 440ML in Yr 20. Overall the net inflows from both groundwater and surface water could reduce by 300ML in Yr 3 to 1000ML/yr at end of mine life. This reduction in inflows increases the likelihood that offsite water supplies will be required during extended dry periods towards the end of the project. These demands may exceed the entitlements held by the proponent on the regulated Hunter River. It is recommended this be acknowledged by the proponent and options provided on additional water sources and their security to meet these demands.

The NSW Office of Water is aware the retracted mine plan will require a complex water distribution network to capture and convey clean and dirty water around and through the site. It is requested further assessment be carried out of the proposed dam locations, sizes, operation and function to confirm the entitlement requirements in accordance with water legislation. This will require consideration of the harvestable rights applicable to the property in addition to relevant exclusions and licence requirements. Key elements for preparing this include the following:

- The size of dams on first and second order streams that capture clean surface runoff may be considered within the Maximum Harvestable Rights Dam Capacity (MHRDC) for the

property. Dams in excess of the MHRDC will require licence entitlement within the Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources.

- Dams on first and second order streams that have diversions to maintain upstream runoff downstream do not need to be considered within MHRDC or licence entitlements.
- Dams on first or second order streams that satisfy one of the exclusions in Schedule 1 of the Water Management (General) Regulation 2011 do not need to be considered within the MHRDC or licence entitlements.
- Dams on third order streams must obtain necessary licence entitlement within the Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources.

As referred to in the Office of Water's response to the PPR, significant channel modification is required downstream of the areas to be diverted into Saddlers Ck. Uncertainty exists at this stage as to what these works will entail and hence the impacts to the existing and downstream watercourses. It is expected an extensive understanding of geomorphological and hydrological processes will be required to ensure long term stability and rehabilitation is achieved. Consultation with the NSW Office of Water is requested to ensure consistency with relevant guidelines, policy and legislative requirements.

A qualitative assessment is requested prior to project commencement to confirm the revised water take from the surface water sources both during and post mining. This will confirm the licence entitlements necessary for the project.

Recommended conditions of approval

NSW Trade & Investment (Office of Water) requests the following conditions be included in any determination issued for the Drayton South Coal Project:

- The proponent should be required to have secured adequate water supply to all stages of the mining development, and if necessary, reduce the scale of its activity to match its available water supply.
- The proponent is required to obtain the necessary water licenses for the project under the *Water Act 1912* and *Water Management Act 2000* prior to commencement of activities.
- The proponent is required to prepare a management plan for the proposed channel modification works. This Plan must be developed in consultation with the Office of Water and address the design, impact assessment, construction, maintenance and rehabilitation of the works.
- The Proponent shouldl prepare and implement a Water Management Plan for the project. This Plan must be developed in consultation with the Office of Water and include:
    - details of water use, measurement of water use including metering and water management on site,
    - details of water licence requirements,
    - Surface Water Management Plan, and
    - Groundwater Management Plan.
- The Surface Water Management Plan must include:
    - a program to monitor:
        - surface water flows, quantity and quality,
        - surface water storage and use, and
        - sediment basin operation,
    - sediment and erosion control plans,
    - surface water impact assessment criteria, including trigger levels for investigating any potentially adverse surface water impacts,

- a protocol for the investigation and mitigation of identified exceedences of the surface water impact assessment criteria, and
- release criteria.

- The Groundwater Management Plan must include:
  - baseline data on groundwater levels and quality,
  - trigger action response plan,
  - a program to monitor groundwater levels and quality,
  - a program to report water take via metering and/or modelling,
  - groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts,
  - a protocol for the investigation and mitigation of identified exceedences of the groundwater impact assessment criteria.
  - a protocol for periodic review of groundwater model calibration and verification of groundwater take predictions and groundwater impacts, and
  - a release criteria.

For further assistance and coordination contact Mitchell Isaacs, Manager Strategic Stakeholder Liaison, on 8838 7529 or mitchell.isaacs@water.nsw.gov.au

Agricultural impacts

The retracted mine plan provides modifications to address many of the concerns Agriculture raised previously with regard to impacts of the proposal on the equine and viticulture industry in the locality by restricting the extraction area of the mine. The Consequential EA notes the following:

- No visibility of the mine workings from the primary areas of operation of the horse studs i.e. the areas where horses are kept rather than the areas on the property used for cattle grazing.
- The mine is hidden by existing topography.
- Setback from Coolmore Stud's primary areas to mine is 1.4 km.(Figure 2).
- The buffer from Darley Woodlands Horse Stud primary areas to the mine is greater than 2km.(Figure 2);
- General noise levels during the day and night at specific receivers (not specified) complies with relevant noise criteria.
- Blasting noise levels would remain the same for nearest residences.
- Reduced requirements for saline water discharges into the Hunter River.
- Reduced inflow of groundwater into the mining area (between 25 and 50%).
- Reduced zone off depressurisation resulting in negligible take from the Hunter River alluvium.
- A possible reduced biodiversity off-set which the proponent notes requires further reassessment.

The retracted mine plan has satisfactorily addressed concerns raised in the socio-economic assessment of the Response to Submissions (RTS) and Preferred Project Report (PPR) regarding impacts on visual amenity. The retracted mine plan will "include the complete removal of the Houston mining area and its associated visual bund along with a significant portion of the Whynot mining area and a substantial area in the southernmost part of the Redbank mining area (pulling operations back a further 400m from the south)"; and "these retractions to the mine plan would remove all remaining direct visual impacts from the horse

studs 'primary areas of operations' as mining is now restricted to remain entirely behind natural ridgelines" (Section 2.2.1, p.2).

The proponent states that through the retracted mine plan "there is now a buffer of more than 1.4 km from Coolmore's areas of primary operations and 2 km from Darley's areas of primary operations" (Section 2.4, p.9); and that the retracted mine plan "protects the visual catchments and views of Coolmore Stud, Jerry's Plains and the Golden Highway" (Section 3.1, p.10).

The socio-economic assessment of the Consequential EA for the retracted mine plan has not, however, completely addressed the socio-economic concerns previously raised by NSW Trade & Investment with regard to the cumulative impacts of the proposal on agriculture.

In the socio-economic assessments of the RTS, PPR, the Planning Assessment Commission and Gateway Panel reports, the main concern raised regarded the cumulative impacts of the Project on agricultural resources and enterprises. These concerns have not been resolved. In the socio-economic assessment of the RTS and PPR, it was noted that the proponent had not prepared an assessment of "the cumulative impacts of agricultural land resources and enterprises foregone in the region" on the basis of the "uncertainty of the assessment methodology and the impracticality of obtaining all relevant information by a single proponent" (RTS Main Report, Part 3, Section 4.16.1, p.196). Without such an assessment, it is not possible to evaluate the cumulative impacts of the Project, particularly on the adjacent Critical Industry Clusters.

In the socio-economic assessment of the RTS and PPR, it was noted that the proponent had stated in the revised Statement of Commitments that, should the project proceed, the proponent "will support the continuation of working groups with Coolmore Australia and Darley Australia with regard to the construction and operation of the project" (PPR Part 4, Table 7, Ref. 44, p.62). As a result, it was recommended that as a condition of consent, the terms of reference of the equine working groups should be formalised and include mechanisms for dispute resolution. The retracted mine plan does not mention the proponent's commitment to continue these working groups or formalise arrangements. The development and operation of equine working groups should be formalised and include mechanisms for dispute resolution.

For further assistance and coordination contact Liz Rogers, Manager Regional Services – Agriculture NSW, on 02 6391 3642 or liz.rogers@dpi.nsw.gov.au