

Mr Paul Freeman
Senior Planner
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Mr Freeman

**Stratford Extension Project (SSD-4966)
Environmental Impact Statement Review**

I refer to your email of 1 November 2012 regarding Stratford Coal Pty Ltd proposal for the extension of open cut mining operations at the existing Stratford Mine near Gloucester.

NSW Trade & Investment, Regional Infrastructure & Services, Division of Resources & Energy (DRE) has reviewed the *Stratford Extension Project Environmental Impact Statement* (EIS) and provides the following comments which are directed at specific areas of DRE responsibility for this proposal.

MINING TITLES

As coal is a prescribed mineral under the *Mining Act 1992*, the proponent is required to hold appropriate mining titles from DRE in order to mine this mineral.

DRE requires that all mining activities are contained within mining leases held by the Proponent for this project.

The proposed Stratford Extension Project footprint is within Mining Leases 1360, 1409, 1447, 1521, 1528, 1538, 1577 and Authorisation 315 held by the Proponent. DRE understands that as identified in figure 2-13 of the EIS the Proponent will lodge a Mining Lease Application/s (MLA) for 3 areas within Authorisation 315.

Under the *Mining Act 1992*, rehabilitation is regulated by conditions included in mining leases, including requirements for the submission of a Mining Operations Plan (MOP) prior to the commencement of operations, and subsequent Annual Environmental Management Reports (AEMR).

The Proponent should be aware that a mining lease cannot be granted until planning approval has been received for the project.

DRE is aware that on 22 February 2011 the Planning Assessment Commission approved AGL's Gloucester Gas Project (MP 08_0154) for the construction and operation of a coal seam gas extraction, processing and transportation system.

DRE has recently received an application from AGL for a Petroleum Production Licence which covers large parts of the Stratford Extension Project including part of the areas identified in the EIS as MLA's 1, 2 and 3.

The Stratford Extension Project EIS does not provide any detail on how the two projects will interact to extract both the coal and the gas resources. It is recommended that the Proponent be required to provide a detailed plan of management and cooperation on how the two projects will interact as part of this assessment process. DRE also recommends that this plan of management and cooperation be a condition of any future Planning Approval for the Stratford Extension Project.

DRE believes the two projects can successfully co-exist if the proponents work closely together to manage the interactions and timing of both operations.

REHABILITATION

Western Co-Disposal Area

It was DRE's prior expectation that the Western Co-Disposal Area would be a priority for rehabilitation as part of the Stratford Extension Project. The EIS does not identify any activities within the Western Co-Disposal Area for mining purposes during the 11 year life of the proposed Stratford Extension Project. The area is not included in the progressive rehabilitation within that time frame and is left as an "Active Co-Disposal Area" until the last year of the project (Figure 2.12).

DRE considers that the EIS has not adequately addressed the rehabilitation and closure of the Western Co-Disposal domain area. DRE requires that the area is progressively rehabilitated throughout the life of the project.

DRE recommends that the following condition be incorporated into the planning approval, if granted:

Commencing by year 2 of the approved Stratford mine rehabilitation sequences, the Proponent will progressively rehabilitate the Western Co-Disposal Area. The rehabilitation is to include the capping of the area with a layer of benign overburden material, landscaping for drainage and topsoiling for revegetation.

Rehabilitation Domains

The rehabilitation domains presented in the EIS are describing areas based on location which DRE considers make it difficult to predict a final rehabilitation landuse or assess general reinstatement of pre-mining land capability.

DRE recommends that the proponent review the rehabilitation domains to represent geophysical characteristics and provide rehabilitation objectives for

each domain. A domain is a land management unit with similar geophysical characteristics.

The proponent should also provide an indicative plan showing final land use capability for agricultural or woodland capability and biodiversity offsets.

Clearing of Vegetation and Re-disturbance of Rehabilitated Area

The EIS states that "the disturbance areas associated with the Project would be progressively rehabilitated and revegetated with species characteristic of native woodland open forest (350ha) and pasture with scattered trees (330ha)" (page 4.86).

The additional surface development associated with the project would involve the clearance of approximately 105 ha of native vegetation types and approximately 195 ha of cleared land with a small portion containing planted trees (approximately 1.3 ha). The Project would also involve the re-disturbance of areas within the existing Stratford Mining Complex which have been previously disturbed and rehabilitated to a combination of pasture and native vegetation (page 4-83). For instance, the mining of the Roseville West pit extension would require the excavation of the previously mined and backfilled Roseville Pit (page 5-12).

The EIS proposes additional surface development areas and the associated biodiversity offset areas (figure ES-7) but does not discuss the effectiveness of the proposed revegetation species for their intended function as habitat corridors and/or the timeframe in establishing this transition.

Final landform

The EIS Objective for rehabilitation is "to plan mining and overburden handling operations to minimise rehandling, reshaping and contouring." This is a limited and inadequate objective for rehabilitation. The EIS contains limited contour detail on Figure 2-12: Indicative General Arrangement Year 10. This figure shows predicted maximum heights and a few contour lines in the final voids. Five metre contour intervals would be more appropriate for a plan like this. It is difficult from this plan to determine the likely final surface features of the topographic design of the backfilled final voids.

DRE recommends the proponent provide an integrated Stratford Project Final Landuse and Rehabilitation Design which depicts the site at mine closure (for all areas subject to this project application) with adequate landform for detailed assessment.

Water Management Strategy

The direction of groundwater flow in the vicinity of the Stratford Mining Complex is from the South East to the North West, and the main discharge zones are Avondale and Dog Trap Creeks and the Avon River. More than half of the total inflow (recharge) to the groundwater system results from the leakage from the rivers and creeks. The proposed diversion of Avondale and Dog Trap creeks would affect the water flow and natural hydraulic gradient of the catchments area. The EIS identifies a "small reduction in the average flow for licensed surface users". No control measures are suggested to respond to this "small

reduction", nor how it could be mitigated in case it deviates from predicted models.

To reduce peak flow rates reporting to the downstream tributary of Avondale Creek, some of the upper-catchments runoff reporting from it would be routed through the Stratford East Dam. In this scenario, consideration should be given to the possibility of a designated over-flow discharge point.

DRE notes that salinity of the 3 final void water bodies is predicted to slowly increase over time. It is also planned that the Bowens Road North Open Cut final void, once backfilled, will overflow to Avondale creek.

The Proponent should be aware that DRE will require detailed water balances be reported in the AEMR as well as flow monitoring for Avon River, Dog Trap Creek and Avondale Creek. Quality control of diverted creeks (samples analysis) should also be provided. A final water management strategy should be provided to DRE within the MOP prior to the commencement of operations.

DRE recommend that the following conditions be incorporated into the planning approval, if granted:

The Proponent must prepare and implement a Rehabilitation Plan to the satisfaction of the Director General NSW Trade & Investment. The Plan must:

- a. be prepared in accordance with NSW Trade & Investment guidelines and in consultation with relevant agencies and stakeholders;**
- b. be submitted and approved by the Director General NSW Trade & Investment prior to the commencement of construction;**
- c. address all aspects of rehabilitation and mine closure, including final landuse assessment, rehabilitation objectives, domain objectives, completion criteria and rehabilitation monitoring.**

DRE would be pleased to meet with the Proponent to assist in developing the above documents for their operation.

Should you have any enquires regarding this matter please contact Julie Moloney, Principal Adviser, Industry Coordination on (02) 4931 6549.

Yours sincerely



William Hughes
Acting Executive Director
Mineral Resources

24/1/13