



Department of Primary Industries

OUT13/23684

30 AUG 2013

Stephen O'Donoghue
Mining and Industry Projects
Department of Planning & Infrastructure
GPO Box 39
Sydney NSW 2001

Dear Mr O'Donoghue

Thank you for your correspondence of 14 August concerning the Planning Assessment Commission (PAC) recommendations and revised Preferred Project Report (PPR) for the proposed Cobbora Coal mine.

The Office of Agricultural Sustainability & Food Security (O AS&FS), with technical assistance from Agriculture NSW and the Strategic Policy and Economics Branch, has reviewed the PAC recommendations and the revised PPR. A summary of specific issues raised and suggested responses are included in Attachment 1, and comments regarding the PAC recommendations and revised PPR are included in Attachment 2, enclosed.

In summary, new issues raised in the PAC Review & Recommendations include that:

- The O AS&FS has concerns regarding some of the specialist advice provided to the PAC on rehabilitation. Several recommendations have been made that may result in poor agricultural rehabilitation outcomes. The O AS&FS notes that Cobbora Holding Company (CHC) has accepted all these recommendations, despite PAC advice to the contrary. See Attachment 2 for details.
- The Office supports the PAC recommendation that flexibility be allowed regarding the grazing of offset and rehabilitation areas. Strategic grazing could play an important role in the sustainable management of these areas.

In addition, the revised PPR does not address concerns previously raised by the Office regarding the:

- economic analysis of the projects impacts to agriculture,
- post-mining land uses,
- monitoring of the rehabilitated land for agriculture, and
- rehabilitation of the post-mining areas for agriculture.

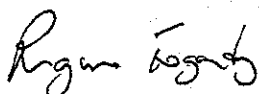
There has been no information provided on the CHC proposed commitment to the class III lands being monitored in a case study for agricultural lands to be returned to a pasture/cropping land use as discussed in October 2012 and commented on in TRIM OUT12/29691.

This advice from the Office of Agricultural Sustainability & Food Security is forwarded direct to the Department of Planning & Infrastructure in accordance with agreed arrangements for mining applications that affect agricultural land.

Additional advice from the other divisions within the Department of Primary Industries may be forwarded by separate letter.

If you wish to discuss the issue further please call Liz Rogers on telephone 02 63913642 or by email liz.rogers@dpi.nsw.gov.au

Yours sincerely



Dr Regina Fogarty
Director Office of Agricultural Sustainability & Food Security

Encl

Cobbora Holding Company (CHC) - Response to PAC Recommendations and Revised PPR for Cobbora Coal Project.

Specific Agricultural Issues

The O AS&FS recommends that the following conditions (see recommended response to each issue) be incorporated into the planning approval, if granted, regarding these specific agricultural issues:

Issue 1: Management and storage of topsoil and subsoil stockpiles.

The revised PPR does not provide for enough subsoil to be removed to enable 500mm of subsoil to be added to the reinstated Class III lands. Subsoil stripping calculations show there is 2,195,000 m³ required yet only 1,010,000 m³ is allocated for stripping. Agriculture NSW notes that there would be sufficient topsoil to cover this deficit but the two layers should be treated and managed separately.

The soil types L1/layer 2 and L3/layer 1 & 2 (both targeted for topsoil storage) have moderate sodicity levels which could be ameliorated and used as subsoil rather than topsoil.

The PAC report has raised the issue of Sifton bush and its use in management of soil stockpiles. Sifton bush is a highly invasive plant especially on disturbed land and has the potential to significantly compromise the rehabilitation success of both agricultural and biodiversity rehabilitated areas if not appropriately managed during the stock pile stage as it will set seed and contaminate and infest any future rehabilitation efforts. The PAC recommendation that the stockpiles be scalped to remove this plant and its seed bank prior to respreading may not fully manage this weed. This in turn may significantly limit the successful rehabilitation across the site. The objective should be to minimise the growth and seed dispersal of Sifton bush throughout the life of the mine.

Recommended consent conditions in response to this issue:

That CHC:

- 1a** - Ensure that topsoil and subsoil piles are treated and managed separately.
- 1b** - Treat and soil types "L1/layer 1" and "L3/layer 1 and 2" with gypsum and allocate these soils for subsoil use rather than topsoil use.
- 1c** - Effectively and continuously control weeds on soil stockpiles with particular focus on Sifton bush.

Issue 2: Reinstatement of class III and class IV agricultural lands

The revised PPR indicates that CHC is committed to final landforms and land uses including:

- 427 hectares of land to be reinstated post-mining to land class III, to be used for cropping purposes, and
- 1278 hectares of land to be reinstated post-mining to land class IV, to be used for grazing purposes.

CCP has provided little evidence to support that this claimed landform and land use is achievable.

Recommended consent conditions in response to this issue:

2a - The proponent shall demonstrate the ability to create land capability class III and IV land through a long-term project which must:

- (i) be established within 10 years of mining activity commencing and must be carried out on land that has previously been an active mining area;
- (ii) be prepared in consultation with Agriculture NSW, in accordance with any relevant DPI guideline and to the satisfaction of the Director-General;
- (iii) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the Class III and IV lands, and trigger points for remedial action (if necessary);
- (iv) include measures of success in reinstating land capability class III and IV lands, which must be developed in conjunction with Agriculture NSW:
 - and include a comprehensive suite of indicators of productivity and environmental sustainability (such as soil settling, soil profile development, other soil characteristics, water transmissivity and soil water availability, agricultural productivity, fertiliser needs, weeds and pests) over a 20 year period; and
 - be replicated, peer reviewed and published.
- (v) prove that land capability class III and IV rehabilitation over a minimum 100ha area (including a minimum of 20 ha of class III and 80 ha of class IV land) can occur before further mining activity on such lands can occur.

2b – the proponent shall identify and use appropriate productive agricultural pasture mix(s) and cropping options on rehabilitated areas designated for agricultural use. These selections should be aligned with the soil physical and chemical properties along with the local climatic conditions.

Issue 3: Monitoring of all agricultural land owned by CHC

CHC currently owns large parcels of land in the area of the proposed mine. The management of this land and the water licences held by CHC should be utilised for agricultural production up until the commencement of mining.

Recommended consent conditions in response to this issue:

3a - Pre-mining agricultural land management.

Detailed farm management records should be kept for all agricultural lands owned by CHC. These records will include details such agricultural enterprises undertaken, farming inputs, production output, and weed and pest management records. These records should be monitored and evaluated regularly to ensure agricultural productivity is maintained and maximised where possible in line with the PAC Recommendation 1a.

3b - During mining operations and post-mining agricultural land management.

Detailed farm management records including, agricultural enterprises undertaken, farming inputs, production output and weed and pest management records should be kept for all:

- non-mined areas owned by CHC,
- agricultural areas designated for mining prior to mining activities commencing, and
- rehabilitated agricultural areas post-mining.

These records should be monitored and evaluated regularly to ensure agricultural productivity is maintained and maximised where possible in line with the PAC Recommendation 1a. Records from all lands owned by CHC (including those

leased to third parties) should be maintained in a consistent format to enable information to be assessed even if lands are managed and operated by different contractors.

Issue 4: Long term monitoring of rehabilitated land for agriculture.

The proponent should be required to demonstrate the successful establishment of the rehabilitated grazing and cropping lands using appropriate botanical (species) and herbage based (quality and quantity) assessment methods. The outcomes of this rehabilitation should be presented and made public on a yearly basis as part of the mines annual environmental review.

To enable the success of rehabilitated areas designated for agriculture to be evaluated, this monitoring program needs to be long term and to be undertaken to provide proof that the claimed reinstatement of agricultural land has been achieved prior to relinquishment.

Recommended consent conditions in response to this issue:

- 4a** - The proponent be required to develop a long term monitoring protocol in order to demonstrate the recreated agricultural landscapes are stable, sustainable, ecologically functional and comparable to local benchmarks.

In order to address the insufficient monitoring proposed by CHC in the rehabilitation strategy, the following monitoring activities should be carried out as a minimum:

- (i) Assessment of 100m transects every 20 - 40ha across all land rehabilitated to both crop and pasture. Twenty 1m x 1m quadrats should be assessed along each transect for pasture species, weed species and groundcover percentage seasonally;
- (ii) Every five years, bulk soil samples across each transect should be taken at 0-10 and 10-20 cm and assessed for major nutrients, cations, pH, EC and organic carbon;
- (iii) Both crop and pasture rehabilitated land should be assessed as complete when crop and pasture yields are consistent with average district yields of comparable land in that class identified using reference sites and local information. Soil chemistry must also return to a comparable state to that of soils in the surrounding locality of that particular class;
- (iv) Soil structure monitoring must also take place; and
- (v) That reference sites should be sourced in collaboration with a local landholder reference group containing farmers and graziers from the region.

Issue 5: Social impacts on the agricultural community

The agricultural community has raised concerns at PAC public hearings regarding the social impacts of the project (Response to Submissions, Chapter 20 – Social). The Strategic Policy and Economics Branch has previously recommended that a social impact management plan be developed in order to provide a coordinated and integrated mechanism to address social impacts. In the Response to Submissions (Chapter 20 – Social), the proponent states that “Although the preparation of a social impact management plan was not specifically mentioned in the EA’s statement of commitments, an appropriate mechanism will be prepared in consultation with councils and service providers. The plan will document existing community infrastructure and services and monitor the Project’s impacts on these throughout the life of the mine” (Section 20.2.21, page 308).

Recommended consent conditions in response to this issue:

5a - The proponent should be required to prepare a Social Impact Management Plan, incorporating both monitoring and evaluation activities.

Issues raised by the Office of Agricultural Sustainability & Food Security and responses from CCP, associated PAC comments/ recommendations.

Issues below are in relation to the DGR's Key Issue - Land Resources

1) PAC Review & Recommendations

Advice on rehabilitation

Dr. Burns (specialist advisor to the PAC) has made several recommendations that are of concern to Agriculture NSW. These include:

- The recommendation that sodic subsoils be reapplied to proposed class III agricultural land (designated for cropping). This soil will require amelioration with gypsum before application in this manner or a more suitable soil should be sourced. Sodic soils are not generally considered as being productive class III agricultural land.
- The recommendation that stock should be excluded from all offset and rehabilitated areas. The PAC has not adopted this recommendation and allowed for some flexibility for adaptive management for these areas. Agriculture NSW supports the PAC decision to allow possible grazing of these areas.
- The recommendation that Sifton bush management for topsoil stockpiles only involve the scalping of weeds from the piles before resspreading for rehabilitation. Agriculture NSW strongly suggests that this method of weed control should not be adopted. Sifton bush like many other weeds requires continual management and stockpiles contaminated with this weed will most likely have a significant soil seed banks which could very well compromise the rehabilitated land. All soil stockpiles should require ongoing weed management to deplete the seed reserves.
- The alternative soil organic enhancement strategy. Agriculture NSW suggests that this strategy should be reconsidered especially regarding the sowing rates of the stage 1, green manure crops chosen (not cover crops) and the possible deep ripping of the rehabilitated areas during stage 2 which may have potential soil erosion consequences.

Land Management

Agriculture NSW supports the PAC recommendation regarding the urgent need to develop an integrated land management plan for all land owned by CHC.

Agriculture NSW would request that the issues discussed above regarding rehabilitation be considered when developing this plan.

2) Revised PPR:

CHC has committed to the leasing of non-mining or buffer land for agricultural use. Agriculture NSW recommends that a condition of lease be included that detailed farm management records be required to be kept covering details such agricultural enterprises undertaken, farming inputs, production output, and weed and pest management records must be kept for all non-active mining areas. These records should be monitored and evaluated regularly to ensure agricultural productivity is maintained and maximised where possible on line with the PAC recommendation 1a.

Agriculture NSW has also recommended that this record keeping also be required for all agricultural lands owned by CHC from this immediate time and across areas up until active mining commences.

Agricultural Land Pasture Sowing

Agriculture NSW has raised concern in previous correspondence with CHC regarding the pasture species seed mix provided in the Mine Rehabilitation Strategy (February 2013). This issue has not been addressed in the revised PPR.

As stated previously, this pasture mix is unlikely to be successful and contains species such as Rhodes Grass which are no longer regarded as favourable pasture species. Pasture mixes should be aligned with the soil physical and chemical properties along with the local climatic conditions.

Issues below are in relation to the DGR's Key Issue - Social and Economic

1) PAC Recommendations:

The proponent's response to the PAC's recommendation (Table 2.1, Recommendation 1) indicates that an integrated land management plan "will be prioritised and parts will be implemented prior to finalisation of the plan to the satisfaction of the Director General, eg land improvements" (page 8). In Section 2.2.1, the proponent also states that the plan will include objectives to minimise both "the total area of land taken out of productive agricultural and pastoral activities" and "the impact on the local community and economy". The proponent should include monitoring and evaluation activities in the plan in order to ensure that these objectives are achieved.

2) Revised PPR:

The revised PPR does not address the socio-economic concerns previously raised regarding the information provided in the original PPR. The proponent should address these concerns and provide the information requested in order for a balanced assessment of the socio-economic impacts of the project to be made.