



Ms Mary-Anne Crawford
Group Environmental Manager
Centennial Coal Company Limited
PO Box 1000
TORONTO NSW 2283

Mary-Anne
Dear Ms Crawford

**Angus Place Mine Extension Project (SSD-5602)
Supplement to the Director-General's Requirements**

I refer to the Director-General's requirements issued for the Angus Place Mine Extension Project, dated 6 November 2012.

As you are aware, this project has been declared a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999*. The Commonwealth Department of Sustainability, Environment, Water, Population and Communities has accredited NSW's State Significant Development assessment process for the project.

To ensure that sufficient information is provided to enable an appropriate level of assessment of relevant matters of National Environmental Significance, the Director-General has issued supplementary requirements for the Environmental Impact Statement (EIS) under section 78A(8A) of the *Environmental Planning and Assessment Act 1979*. A copy of the supplementary requirements is attached.

You must ensure that the EIS adequately addresses the Director-General's requirements issued on 6 November 2012, as well as the attached supplementary requirements.

To speed up the assessment process, it is recommended that the EIS for the project include separate appendices dealing with State and Commonwealth biodiversity matters. However, the main report should deal with these matters in an integrated manner.

If you have any enquiries about these requirements, please contact Colin Phillips on the details above.

Yours sincerely

Howard Reed
30.8.13

Howard Reed
A/Director, Mining and Industry Projects
As the Director-General's nominee

Supplementary Director-General's Requirements

Section 78A (8A) of the NSW *Environmental Planning and Assessment Act 1979*

A delegate for the Commonwealth Minister for the Environment, Heritage and Water has determined the Angus Place Longwall Mine Extension Project (EPBC 2013/6889), involving the expansion of the existing Angus Place Mine, located approximately 15 km north west of Lithgow, New South Wales, to be a controlled action under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The action is likely to have a significant impact on the following matters of National Environmental Significance:

- World Heritage properties (s12 & 15A)
- National Heritage places (s15B & 15C)
- Listed threatened species and communities (s18 & 18A)
- Listed migratory species (s20 & s20A)
- A water resource, in relation to coal seam gas development and large coal mining development (s24D & 24E)

In particular, the proposed action is likely to cause subsidence related impacts, which may in turn, cause changes to the quantity and quality of water resources, the ecological integrity and function of ecological communities, and habitat(s) for threatened and migratory species. Subsidence is also considered likely to impact on the values of the nearby Greater Blue Mountains World Heritage property (and National Heritage Place).

Significant impacts are considered likely or possible for a number of species and communities protected by the EPBC Act including, but not limited to, those listed in Appendix A.

In accordance with the one-off accredited assessment process for this project, the environmental assessment of the impacts of the controlled action must be assessed under the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The assessment should include enough information about the action and its relevant impacts to allow the Minister for the Environment, Heritage and Water to make an informed decision on whether or not to approve the action under the EPBC Act.

The following assessment requirements concerning matters in the EPBC Act and schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000* should be integrated into the assessment requirements of the EP&A Act.

General information

1. The background of the action, including:
 - a. the title of the action;
 - b. the full name and postal address of the designated proponent;
 - c. a clear outline of the objective of the action;
 - d. the location of the action;
 - e. the background to the development of the action;

- f. how the action relates to any other actions (of which the proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action;
- g. the current status of the action; and
- h. the consequences of not proceeding with the action.

Description of the controlled action

2. A description of the action, including:
 - a. all the components of the action;
 - b. the precise location (including coordinates) of any works to be undertaken, structures to be built or elements of the action that may have relevant impacts;
 - c. how the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts;
 - d. the timing and duration of the works to be undertaken; and
 - e. to the extent reasonably practicable, a description of any feasible alternatives to the controlled action that have been identified through the assessment, and their likely impact, including:
 - i. if relevant, the alternative of taking no action;
 - ii. a comparative description of the impacts of each alternative on the matters protected by the controlling provisions for the action;
 - iii. sufficient detail to clarify why any alternative is preferred to another.

Short, medium and long-term advantages and disadvantages of the options should be discussed.

Description of the existing environment

3. A description of the existing environment of the proposal location and the surrounding areas that may be affected by the action, including but not limited to:
 - a. surveys using accepted methodology for targeting listed threatened species, ecological communities and their respective habitat, including but not limited to OEH's *Survey and assessment guidelines* (2009), available at: www.environment.nsw.gov.au/threatenedspecies/surveymethodsfauna.htm and the Department of Sustainability, Environment, Water, Populations and Communities (DSEWPaC) species-specific survey guidelines for nationally threatened species, available at: www.environment.gov.au/cgi-bin/sprat/public/sprat.pl;
 - b. a description of the distribution and abundance of threatened species and ecological communities, as well as suitable habitat (including breeding, foraging, roosting habitat, habitat critical to the survival of threatened species) within the site and in surrounding areas that may be impacted by the proposal. Specifically, this must include but not be limited to the species at Attachment A;
 - c. the regional distribution and abundance of suitable and potential habitat for threatened species and ecological communities surrounding the site.
 - d. a description of the important water resources within the site and in surrounding areas, including detailed information addressing the department's Water Resources Terms of Reference, currently in preparation.
 - e. a description of water related assets that are dependent on any important water resources, including an estimation of the water requirements of those assets (i.e. regional water use).

Description of the relevant impacts of the controlled action

4. An assessment of all relevant impacts¹ with reference to the *EPBC Act Policy Statement 1.1 Significant Impact Guidelines Matters of National Environmental Significance (2009)* and species specific guidelines as relevant (available at: www.environment.gov.au/epbc/guidelines-policies.html) that the controlled action has, will have or is likely to have. Information must include:
 - a. a description of the relevant impacts of the action on matters of national environmental significance;
 - b. a detailed assessment of the nature and extent of the likely short term and long term relevant impacts;
 - c. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;
 - d. analysis of the significance of the relevant impacts;
 - e. any technical data and other information used or needed to make a detailed assessment of the relevant impacts.
5. Where there is a potential habitat for EPBC Act listed species (see Appendix A), surveys must be undertaken. These surveys must be timed appropriately and undertaken for a suitable period of time by a qualified person². A subsequent description of the relevant impacts on such EPBC Act listed species should include, inter alia, direct, indirect, cumulative and facilitative impacts on the:
 - a. population of the species at the site;
 - b. area of occupancy of the species;
 - c. habitat critical to the survival of the species;
 - d. breeding cycle of the population; and
 - e. availability or quality of habitat for the species.

If an endangered ecological community or threatened species listed at Appendix A is not believed to be present on the proposed site, detailed information must be included in the Environmental Impact Assessment to demonstrate that this community will not be impacted.
6. A description of the relevant impacts on the Temperate Highland Peat Swamps on Sandstone (THPSS) should include a detailed description of all potential and likely hydrological changes that may occur as a result from the proposed action, including from subsidence. Direct and indirect impacts must be included. Cumulative and facilitative impacts should also be included. Please include impacts on the:
 - a. extent of the THPSS, including hydrological connectivity with other areas of the ecological community;
 - b. quality or integrity of the THPSS including, but not limited to, assisting invasive species that are harmful to the ecological community to become established;
 - c. EPBC Act listed species in, or in any way dependent upon, the THPSS;
 - d. composition of the THPSS;

¹ The term "relevant impact" is defined in section 82 of the EPBC Act.

² Where available, species-specific survey guidelines can be obtained on the department's *Species Profile and Threats Database*: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>

- e. habitat present on site critical to the survival of the THPSS³; and
- f. abiotic (non-living) factors (such as water, nutrients or soil) necessary for peat swamp integrity and survival, for example subsidence related impacts, altering groundwater levels, soil disturbance or substantial alteration of surface water drainage patterns.

These impacts should be described for the construction, operational and decommissioning phases of the controlled action.

This information should be provided with reference to the ecological community as it is defined and listed under the EPBC Act.

7. An assessment of all relevant impacts to the World and National listed values of the Greater Blue Mountains World Heritage Area (GBMWA). The assessment should include:
 - a. a detailed description of the potential and likely hydrological change, including changes to water quality and quantity entering the heritage area, that may occur as a result of the proposed action. Direct and indirect impacts must be included. Cumulative and facilitative impacts should also be included;
 - b. a detailed description of the impact of the proposed action on the wilderness quality (as determined by the National Wilderness Inventory) of the GBMWA.
8. An assessment of all relevant impacts on water resources and water related values, including:
 - a. detailed information addressing the *Independent Expert Scientific Committee Information Guidelines for Proposals Relating to the Development of Coal Seam Gas and Large Coal Mines where there is a Significant Impact on Water Resources*, available at: www.environment.gov.au/coal-seam-gas-mining/pubs/iesc-information-guidelines.pdf;
 - b. detailed information addressing the department's Water Resources Terms of Reference, currently in preparation.

Proposed safeguards and mitigation measures

9. A description of feasible mitigation measures, changes to the action or procedures, which have been proposed by the proponent or suggested in public submissions, and which are intended to prevent or minimise relevant impacts. Information must include:
 - a. a description of the mitigation measures that will be undertaken to prevent or minimise the relevant impacts of the action. These mitigation measures should be justified and based on best available practices;
 - b. an assessment of the expected or predicted effectiveness of the mitigation measures including the effect on abundance and condition of species, suitable habitat and ecological communities, heritage values and/or water resources or water related values;
 - c. any statutory or policy basis for the mitigation measures;
 - d. the cost of the mitigation measures;
 - e. an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs (including any relevant thresholds for corrective actions) for the relevant impacts of the action. Include the person or agency responsible for implementing these programs and the effectiveness of all mitigation measures, including any provisions for independent environmental auditing;
 - f. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program;

³ "habitat critical to the survival of a species or ecological community" refers to areas that are necessary:

- for activities such as foraging, breeding, roosting, or dispersal;
- for the long-term maintenance of the species or ecological community (including the maintenance of species essential to the survival of the species or ecological community, such as pollinators);
- to maintain genetic diversity and long term evolutionary development; or
- for the reintroduction of population or recovery of the species or ecological community.

Such habitat may be, but is not limited to: habitat identified in a recovery plan for the species or ecological community as habitat critical for that species or ecological community; and/or habitat listed on the register of Critical Habitat maintained by the Minister under the EPBC Act.

- g. identification of mitigation measures proposed to be undertaken by State governments, local governments or the proponent;
- h. any changes to the action which prevent or minimise relevant impacts on listed threatened species and communities.

Offsets

10. Where impacts cannot be avoided or mitigated, an offset package to compensate for any predicted or potential residual significant impacts on matters of national environmental significance. Offsets should demonstrate consistency with the Commonwealth EPBC Act Environmental Offsets Policy (October 2012, or subsequent versions), available at www.environment.gov.au/epbc/publications/environmental-offsets-policy.html. The department's information requirements in relation to EPBC Act offset proposals is provided at Appendix B. Information must include:
- a. the description of any offset package should include how the offset compensates for the residual impacts, when the offset will be delivered and how the offset will be managed;
 - b. an assessment of the impact of the offsets on other matters of environmental, economic, or social significance; and
 - c. analysis of cost, both financial and other, related to offsets.

Other approvals and conditions

11. Any other requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action. Information must include:
- a. details of any local or State government planning scheme, or plan or policy under any local or State government planning system that deals with the proposed action, including:
 - i. what environmental assessment of the proposed action has been, or is being, carried out under the scheme, plan or policy; and
 - ii. how the scheme provides for the prevention, minimisation and management of any relevant impacts;
 - b. a description of any approval that has been obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the EPBC Act), including any conditions that apply to the action;
 - c. a statement identifying any additional approval that is required;
 - d. a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action.

Economic and social matters

12. A description of the short-term and long-term social and economic implications and/or impacts of the project.

Environmental record of person proposing to take the action

13. Details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:
- a. the proponent; and
 - b. for an action for which a person has applied for a permit, the person making the application.
14. Details of the proponent's environmental policy and planning framework.

Information sources

15. For information given in an environment assessment, the draft must state:
- a. the source of the information;

- b. how recent the information is;
- c. how the reliability of the information was tested; and
- d. what uncertainties (if any) are in the information.

Consultation

- 16. Any consultation about the action, including:
 - a. any consultation that has already taken place;
 - b. proposed consultation about relevant impacts of the action;
 - c. if there has been consultation about the proposed action — any documented response to, or result of, the consultation.
- 17. Identification of affected parties, including a statement mentioning any communities that may be affected and describing their views.

Appendix A

Threatened Flora

- Deane's Boronia (*Boronia deanei*)
- Austral Toadflax (*Thesium australe*)

Threatened Fauna

- Blue Mountain Water Skink (*Eulamprus leuraensis*)
- Regent Honeyeater (*Xanthomyza phrygia*)
- Giant Burrowing Frog (*Helioporus australaicus*)
- Southern Barred Frog (*Mixophyes balbus*)
- Brush-tailed Rock Wallaby (*Petrogale penicillata*)
- Large-eared Pied Bat (*Chalinolobus dwyeri*)
- Spotted-tail Quoll (*Dasyurus maculatus maculatus*)
- Koala (*Phascolarctos cinereus*)
- Broad-headed Snake (*Hoplocephalus bungaroides*)

Threatened ecological communities

- Temperate Highland Peat Swamps on Sandstone (THPSS)

Migratory Species

- Regent Honeyeater (*Xanthomyza phrygia*)

World Heritage properties

Greater Blue Mountains World Heritage Area (GBMWhA)

National Heritage places

Greater Blue Mountains World Heritage Area (GBMWhA)

Appendix B

Information requirements for EPBC Act offset proposals

Details in relation to the proposed offsets package, including:

- the location and size, in hectares, of any offset site(s);
- maps clearly showing for each offset site:
 - the relevant ecological features;
 - the landscape context; and
 - the cadastre boundary.
- the current tenure arrangements (including zoning and ownership) of any proposed offset sites;
- confirmed records of presence (or otherwise) of relevant protected matter(s) on the offset site(s); and
- detailed information regarding the presence and quality of habitat for relevant protected matter(s) on the offset site. The quality of habitat should be assessed in a manner consistent with the approach outlined in the document titled *How to use the offset assessment guide* available at:
www.environment.gov.au/epbc/publications/environmental-offsets-policy.html.

Provide information and justification regarding how the offsets package will deliver a conservation outcome that will maintain or improve the viability of the protected matter(s) consistent with the *EPBC Act environmental offsets policy* (October 2012) including:

- management actions that will be undertaken that improve or maintain the quality of the proposed offset site(s) for the relevant protected matter(s). Management actions must be clearly described, planned and resourced as to justify any proposed improvements in quality for the protected matter(s) over time;
- the time over which management actions will deliver any proposed improvement or maintenance of habitat quality for the relevant protected matter(s);
- the risk of damage, degradation or destruction to any proposed offset site(s) in the absence of any formal protection and/or management over a foreseeable time period (20 years). Such risk assessments may be based on:
 - presence of pending development applications, mining leases or other activities on or near the proposed offset site(s) that indicate development intent;
 - average risk of loss for similar sites; and
 - presence and strength of formal protection mechanisms currently in place.
- the legal mechanism(s) that are proposed to protect offset site(s) into the future and avert any risk of damage, degradation or destruction.

Provide information regarding how the proposed offsets package is additional to what is already required, as determined by law or planning regulations, agreed to under other schemes or programs or required under an existing duty-of-care.

The overall cost of the proposed offsets package; including costs associated with, but not limited to:

- acquisition and transfer of lands/property;
- implementation of all related management actions; and
- monitoring, reporting and auditing of offset performance.