

Our reference: DOC15/397899; SF15/42133

> Ms Robyn Kruk AM Chairperson Planning Assessment Commission Level 13 301 George Street SYDNEY NSW 2000

> > 9 October 2015

#### Dear Ms Kruk

I refer to the Airly Mine Extension Project (State Significant Development 5581 – the "Project") and both recent discussions with the Planning Assessment Commission (PAC) for the Project and correspondence to the Environment Protection Authority (EPA) from the proponent, Centennial Airly, dated 2 October 2015.

As you are aware on 28 October 2015 the EPA will be attending an on-site meeting with Centennial Coal to resolve several elements of the Project. For the benefit of the PAC, the EPA's position on these matters which will be the subject of discussion and where applicable, resolution, is set out below.

## 1. Water discharge to Airly Creek

The EPA is requiring for any mine discharge to Airly Creek, that there is sufficient flow in Airly Creek just prior to discharge to achieve a 99% level of protection level (% species) (Australian and New Zealand Environment and Conservation Council 2000 – ANZECC 2000) within 1 km downstream of the licensed discharge point. To ensure 99% species protection (by way of adequate dilution) the following conditions are proposed:

- 1) No discharge to Airly Creek from both the 7 ML Dam and the Rail Loadout Dam is permitted except where rainfall exceeds the design criteria for those dams. Both these dams have small catchments and can be managed (ie: emptied following rainfall with water transferred to the 35 ML dam) such that they only discharge under high rainfall events (being a rainfall event where greater than 158 mm of rainfall is recorded over a 72 hour period). At these times Airly Creek would have a more than adequate dilution flow.
- 2) Water may only be discharged from the mines 35 ML dirty water dam when there is sufficient flow in Airly Creek. Based on Ecotox assessment, to achieve 99% species protection, the rate of discharge from the 35 ML dam to Airly Creek must not exceed 7 % of the volume of flow that is present within Airly Creek at the time of the discharge.
- 3) To determine adequacy of flow in Airly Creek for discharge from the 35 ML dam, level sensors and continuous loggers for flow monitoring are required on Airly Creek downstream of the 35 ML dam discharge. A sensor and logger is also required at the 35 ML dam discharge to record and ensure appropriate rates of discharge. Where flow in Airly Creek declines, the discharge permitted from 35 ML dam declines as per 7% rule.
- 4) To undertake environmental monitoring (Toxicity Assessment) during discharge at 35 ML dam and at a point on Airly Creek on or about 1 km downstream or where discharge flows in Airly Creek.

# 2. No Off-site discharges When the Production Bore is in Operation

The EPA recommends that there be no off-site discharge when the production bore is being used. The bore will only be used during dry (drought) conditions when all other surface sources of water are scarce (and storages near or approaching empty). Centennial Coal's letter of 2 October 2015 supports this recommendation.

As much as possible bore water should be recirculated in process to keep 35 ML dam level low such that any drought breaking rain will dilute any discharge from 35 ML dam. The 35 ML dam should be managed such that it has the capacity to store a 95 percentile rainfall event (capable of storing 44 mm of rainfall over 5 days).

However, there is a need to ensure this requirement is consistent with the future need to separate clean and dirty water at the mine site (refer to Point 3. below).

### 3. Separation of Clean and Dirty Water

The EPA did not initially raise this matter in its review of the Environmental Impact Statement (EIS). However, given the above matters raised in points 1 and 2, the EPA is of the view that clean water diversions should be put in place so as not to place an additional load on the dirty water system, and any discharge from the 35 ML dam. The diversion should aim to keep dirty water out of the 109 ML dam so that the 109 ML dam is not subject to same discharge management requirements that apply to 7ML, 35ML and Rail Loadout dams.

This is conventional practice but has not been discussed with Centennial Airly. The EPA still needs to resolve this requirement with Centennial Airly.

#### 4. The Reject Emplacement Area and Acid Mine Drainage

The PAC has sought the EPA's advice on the Reject Emplacement Area (REA) and any associated concerns about acid mine drainage. The EPA does not have the expertise to comment on the structural integrity of the REA; however, the EPA does not have specific concerns about acid mine drainage (the coal being mined is low in sulphur) affecting any discharge from LDP 1. Regarding the structural integrity, the EPA recommends that the Department of Industry (Resources and Energy) be consulted.

In summary, for those matters needing further resolution, the EPA intends to discuss these with Centennial Airly on 28 October 2015, and these discussions will have the benefit of a joint on-site inspection.

Should you have any questions please contact Allan Adams at the EPA's Central West Regional Office on 63 327 610.

Yours singerely,

RICHARD WHYTE Manager Central West

**Environment Protection Authority** 

cc: James Wearne - Centennial Coal.

Howard Reed - Department of Planning and Environment.