

Ref: D2016/90252

Paul Freeman
Team Leader
Resource Assessments
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Freeman

**Bulli Seam Operations Project Modification (08_0150 MOD 2)
Response to Exhibition of Modification Application and Environmental Assessment**

I refer to your email dated 6 July 2016 seeking comments from Water NSW on the Modification Application (08_0150 MOD 2) and Environmental Assessment (EA) for the construction and operation of a mine gas drainage pipeline between Appin Nos. 2 and 3 Ventilation Shafts.

Water NSW owns and manages the Upper Canal corridor, which will be crossed by the proposed mine gas pipeline. The Upper Canal is critical public infrastructure which supplies water to the Greater Sydney Region. As such it is vital there is no impact on the corridor, water supply infrastructure or on water quality in the open water parts of the Canal. The Canal corridor is also categorised as a "controlled area" under the *Water NSW Act 2014*. This means any access to the corridor is prohibited unless Water NSW has provided its written consent to enter and heavy fines can result from any trespass, pollution, dumping or other illegal activity impacting the corridor.

Water NSW has been consulted by Illawarra Coal during the development of the concept design for the mine gas pipeline and the EA includes an analysis of how Water NSW requirements will be addressed during the detailed design, construction and operation of the pipeline.

The key issues for Water NSW with regard to any works or development within or adjacent to the Upper Canal corridor include:

- There should be no impact on water quality within the open waters of the Upper Canal at any stage of the development.
- No damage should occur to the water supply infrastructure at any stage of the development, including the stormwater structures currently serving the Upper Canal corridor.
- 24 hour all weather access to the Upper Canal corridor must be retained or provided for Water NSW staff and contractors.
- For security and safety purposes, there is to be no public access into the Upper Canal corridor at any time. If access is required by the proponent and/or their contractors for any purpose during the development process, access permits will be required from Water NSW.

- The heritage values of the State Heritage listed Upper Canal System must be taken into consideration and protected at all stages of the development.

Water NSW has reviewed the Modification Application and provides the following comments:

1. Water quality

The EA includes details of how the quality of the water in the Upper Canal is proposed to be protected. To ensure its requirements are fully addressed, Water NSW requests the following conditions regarding water quality protection and stormwater management are included in the project approval:

- *Before a Construction Certificate is issued for any work on Water NSW land, final detailed design plans for that work shall be reviewed and accepted by Water NSW and the location of all works confirmed by Water NSW with a site meeting.*
- *Water NSW shall be consulted regarding the restoration or installation of drainage structures within the Upper Canal corridor. Restoration of drainage within the Canal corridor shall be at the proponent's expense and to the satisfaction of Water NSW.*
- *The Construction Environmental Management Plan (CEMP) or equivalent, for the project shall include all mitigation measures identified in the EA to protect the quality of the water in the Upper Canal, including erosion and sediment control measures. The section(s) of the CEMP relevant to works on Water NSW land shall be reviewed and accepted by Water NSW before any such works commence.*
- *All mitigation measures to protect the quality of the water in the Upper Canal shall be properly implemented and maintained throughout the construction period.*

2. Protection of Water NSW infrastructure

The Upper Canal is more than 120 years old, and many parts of the Canal are fragile and prone to cracking or collapse. Vibration from excavation and construction works occurring close to, under or over the Canal can increase the potential for damage to occur. The EA includes details of how the integrity of the Upper Canal is proposed to be protected. To ensure its requirements are fully addressed, Water NSW requests the following conditions regarding infrastructure protection are included in the project approval:

- *Any damage to the Upper Canal caused at any stage during the development process, shall be repaired by the proponent, or the proponent shall pay all reasonable costs associated with repairing the damaged water supply infrastructure, in a timely manner and to the satisfaction of Water NSW.*
- *A detailed dilapidation survey of the Upper Canal shall be undertaken prior to commencement of any works on Water NSW land. A Dilapidation Report shall be submitted to Water NSW for review at least four (4) weeks prior to works commencing.*
- *Vibration monitoring shall be undertaken during all earthworks undertaken within 25 metres of the Upper Canal. The German Standard DIN 4150-3:1999 "Structural Vibration Part 3: Effects of vibration in structures" should be used to assess vibration effects on the Canal. The guideline vibration velocity level to be adopted for the Upper Canal is Line 3 in Table 1 of the Standard. A fortnightly report on any vibration monitoring shall be provided to Water NSW for review.*

3. Operation and maintenance of the Upper Canal

Water NSW requires 24 hour access to the critical water supply infrastructure. The EA includes details of how the works have been designed and will be constructed and operated in such a way that does not restrict Water NSW from operating and maintain the Upper Canal. Water NSW requests the following conditions regarding its operation and maintenance of the Canal are included in the project approval:

- *The work shall be undertaken in a manner that allows the continued safe use of the Upper Canal.*

- *The detailed design shall include provision to allow vehicular access around the eastern end of the above ground section of the mine gas pipeline within the Upper Canal corridor.*

4. Security and working within the Controlled Area

Security and preventing illegal access is critical along the Upper Canal lands. Water NSW requires security to be maintained during the construction works. There is a risk to public safety if people enter the land on which the Canal is located.

Access to Water NSW lands is strictly prohibited, except as allowed by an access consent issued under clause 9 of the Water NSW Regulation 2013. The proponent of any works within or under the Upper Canal corridor, or any of its contractors, may only enter Water NSW land in accordance with an access consent issued under this regulation. Further, Water NSW requires the proponent of any proposed work on its land to enter into a licence agreement with Water NSW. On completion of construction, Water NSW requires the establishment of an easement for the mine gas pipeline.

Water NSW requests the following conditions are included in the project approval:

- *Before any work commences on Water NSW land, the proponent shall:*
 - *obtain an access consent issued under clause 9 of the Water NSW Regulation 2013 for the construction phase; and*
 - *execute a licence agreement with Water NSW.*
- *During the construction period, the proponent shall maintain appropriate fencing and security to prevent the public, or livestock, entering the Upper Canal corridor.*
- *All incidents, spills or fire sightings that affect or could affect the Upper Canal corridor shall be reported to Water NSW via the 24 hour Incident Notification Number 1800 061 069 as a matter of urgency.*
- *On completion of construction, the proponent shall establish an easement for the mine gas pipeline on Water NSW land.*


5. Heritage

The Upper Canal is listed on the State Heritage Register. The EA includes details of how the heritage significance of the Canal is proposed to be protected. Water NSW notes the EA concludes there will be minor visual impact on the Upper Canal from steel pipe bridging the Canal. Water NSW requests the following conditions are included in the project approval:

- *A copy of any report produced as part of the archival recording of the site should be forwarded to Water NSW for inclusion within the Sydney Water/Water NSW Archive and Heritage Facility.*
- *If any unanticipated relics are found in the Upper Canal corridor, the Water NSW Heritage Specialist should be contacted and appropriate liaison undertaken.*

Water NSW would appreciate being involved in any further environmental assessment or consultation process associated with the Bulli Seam Operations Project.

If you have any queries regarding the above please contact Neil Abraham on 4724 2456 or neil.abraham@waternsw.com.au



MALCOLM HUGHES
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