

13 March 2025

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Dear Georgia,

Bulli Seam Operations - Appin Mine Area 7 – Impact Report dated 23/08/2024 (NSW Planning Ref: MP08-0150-PA-122)

I refer to your letter dated 18 February 2025 in relation to V2 impact report dated 23/08/2024 (Revised 6/01/2025) that reported a gas leakage at the private groundwater bore at Area 7, Lot 3 in DP1004595, which constitutes a Level 3 trigger under the Appin LW709-711 and 905 Water Management Plan (WMP) Trigger Action Response Plan (TARP), specifically: *Mining results in groundwater bores unsafe, unserviceable, or damaged.*

The groundwater bore is unregistered and was not captured in pre-mining assessments as part of the Extraction Plan process. Private groundwater bores are not monitored under the WMP, and therefore the only TARP trigger level that applies is level 3.

Please find this letter a response to your request for information.

- **Identify and advise whether the development is the cause of Level 3 trigger at Appin Area 7, Lot 3, DP1004595, AA7_LW710_001.**

Response:

An analysis of the data will be undertaken to determine whether the impacts were greater than predicted. The following is noted:

- The Groundwater model does not make predictions for gas migration (SLR 2022).
- The Surface Water Assessment (SLR 2021) states that “The emission of such gases typically occurs within deep river valleys, although some gas emissions have also been observed in creeks and water bores”, with some discussion on past emissions in the Nepean River. There is no specific prediction nor discussion on gas impacts to landholder bores and dams.
- Groundwater drawdown in nearby monitoring wells will be compared to assess if this differs to what was predicted, however, this may not be directly relevant to the mechanism of gas release.
- Given that the 2021/2022 assessments for Longwalls 709-711 do not make specific predictions on gas emissions at landholder water assets, a listing of historic gas impacts to dams and bores will be provided to determine whether this is unusual.

- A LiDAR subsidence map will be used to determine if there has been anomalous subsidence in this area.

This analysis will be provided in the Longwall 710 End of Panel Report.

- **identify and advise of any non-compliances, and/or exceedances of any relevant limits and/or performance criteria in the consent.**

Response:

Schedule 3 of the BSO Project Approval 08_0150 stipulates subsidence performance measures for specific environmental conditions – underground mining. Performance measures for built features that may be relevant is included in Table 2 under Condition 3 as listed and addressed below:

Table 1: Compliance with relevant Subsidence Impact Performance Measures for Built Features under BSO Project Approval

Public Safety	Performance Measure	Comment
Public safety	Negligible additional risk	Immediate actions taken to ensure no additional risk to public safety.

The groundwater bore is located on private property. At the time the gas leakage was identified, precautions were taken to ensure the area was avoided, to remove livestock and not operate electrical equipment near the bore. The power supply was disconnected to the bore pump and control system, and fencing erected around the borehole to limit access. The bore was grouted and sealed in September 2024. Therefore, there has been no additional risk to public safety.

ICH consider that there has been no non-compliance or exceedance of limits or performance criteria in the consent as a result of the TARP trigger.

- **identify and advise of any actual and/or potential material harm to the environment and/or people.**

Response:

Material harm to the environment as defined under Clause 147 of the Protection of the Environment Operations Act, 1997 is:

- (a) *harm to the environment is material if –*
 - i. *it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or*
 - ii. *it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and*
- (b) *loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.*

The gas leakage did not involve actual or potential harm to the health and safety of human beings or to ecosystems for the following reasons:

- The gas discharge was evaluated by the Appin Mining Engineering Manager with the assistance of the Infrastructure Protection team. Bag samples taken from the area verified methane was present. The amount of methane gas being released from the bore appeared to be minor in both volume and pressure from the investigation and was dissipated into the general atmosphere.
- The bore is located on private property and access is restricted by external fencing and localised fencing around the bore.
- No persons were exposed to a serious risk emanating from an immediate or imminent exposure to the hazard. Persons were not reasonably in the vicinity, and from investigations, the volume, pressure and concentrations of methane in the atmosphere around the area do not constitute serious risk to persons in usual circumstances.
- Action was taken to seal bore for any nuisance gas release, and review future bores that may be under similar influence for hazards.

The gas leakage did not involve harm to the environment, or actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000.

- **provide details of any bore repair works and any compensation, including compensatory water supply that have been, or will be, implemented to address the affected groundwater bore.**

Response:

The groundwater bore has been grout filled to eliminate the risk of any further gas leakage. GM³ is in ongoing communication with the property owners, and a project to provide a permanent compensatory water supply will be implemented following completion of mining induced ground movements at the property. This is likely to include the drilling of a new groundwater bore.

Water storage tanks and pumping infrastructure have been installed at the site to accommodate and distribute the compensatory water supply.

Deliveries of compensatory water have commenced on an as required basis, with the property owner advising GM³ when water is required.

- **provide details of any corrective and preventative actions that have been, or will be, implemented to address the gas leakage and/or prevent recurrence.**

Response:

The groundwater bore has been grout filled to eliminate the risk of any further gas leakage.

- **provide updated details of any further communication with any other government agencies and any actions requested and/or taken by these agencies regarding the reported gas leakage.**

Response:

Communication with other government agencies and all actions requested and implemented regarding the reported gas leakage is included in the revised impact report dated 6/01/2025. No further communication received.

Please contact me if you have any questions or require additional information.

Yours sincerely,



Linda Zanotto

Principal Mining Approvals