

OUT18/15533

May Patterson  
Team Leader  
Resource Assessments  
NSW Department of Planning and Environment

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Dear Ms Patterson

**Sutton Forest Quarry (SSD 6334)  
Response to Submissions – Water-related Consultation**

I refer to RW Corkery and Co Pty Limited's email of 22 August 2018 to the Department of Industry (DoI) in respect to the above matter. Comment has been sought from relevant branches of Lands & Water and Department of Primary Industries. Any further referrals to Department of Industry can be sent by email to [landuse.enquiries@dpi.nsw.gov.au](mailto:landuse.enquiries@dpi.nsw.gov.au).

DoI Water makes the following recommendations in relation to the project. Additionally, relevant guidelines and policies are provided in Attachment A.

**Recommendations**

- A water monitoring program is required to be implemented prior to the progression of the project. The program will require both surface water and groundwater monitoring. Further detail regarding recommendations for the program is provided in Attachment A.
- The groundwater model is to be updated annually during the life of the project to include additional monitoring information as acquired.
- Before completion of Stage 5 of the operations, a model review and assessment of the potential impacts of the quarry is required and should include model predictions of the planned Stages 6 and 7 quarrying activities on both the regional groundwater level, Long Swamp GDE and other groundwater users.

Yours sincerely



Alison Collaros  
A/Manager, Assessment Advice  
**Lands and Water - Strategy and Policy**  
8 October 2018

**Sutton Forest Quarry (SSD 6334)  
Response to Submissions – Water-related Consultation**

**Water Resources**

**Recommendations for the water monitoring program**

The following is recommended to ensure adequate monitoring is completed during the life of the project life:

- Construction of two additional observation bores along the northern edge of proposed excavation. The bores are to be located between the excavation and Long Swamp Creek as recommended by model peer reviewer Dr Kalf.
- All monitoring bores, on-site and selected off-site, are to be included in all monitoring program activities, assessment of hydraulic gradients and ongoing around the quarry site over time with annual major updates.
- Water level monitoring should be undertaken monthly and water quality monitoring should be undertaken every three months from all monitoring bores for at least a 2 year period.
- Two years of baseline sampling is required prior to intersection of groundwater table within the Hawkesbury Sandstone Formation. The two year baseline sampling is to include; biannual testing of water quality sampling in Long Swamp Creek, downstream of the pit and upstream of peat deposits and, testing every three months (3) of volume estimation of inflow to the excavation and water quality monitoring of inflow groundwater.
- Water volume inflow to excavation area is to be monitored daily. An Assessment of the groundwater is to be assessed every six (6) months for the extent of the project.
- Develop a schedule for monitoring bore decommissioning and replacement throughout quarrying activities and report in all water management plans.
- Establish three surface water monitoring points on Long Swamp Creek, north, west and south west of the planned quarry. All monitoring points are to measure water levels via automated system continuous logging, and at least one data logger will need to measure surface stream flow.

**Guidelines/policies**

- NSW Aquifer Interference Policy (2012)
- Australian Groundwater Modelling Guidelines (2012)
- Minimum Construction Requirements for Water Bores in Australia (2012)

**END ATTACHMENT A**