Supplementary Expert Report to the Land Court of Dr John Webb

1. Introduction

1.1. Name

[1] My name is Dr John Webb.

1.2. Address

[2] My business address is La Trobe University, Melbourne, Victoria 3086.

1.3. Relevant materials

[3] The relevant materials are contained within my expert report to the Queensland Land Court dated 27 June 2013 and the Joint Experts Report on Groundwater dated 5 August 2013 (Joint Report).

2. My qualifications

[4] A copy of my Curriculum Vitae is Annexure B to my expert report dated 27 June 2013.

3. My supplementary opinion

- [5] In respect of paragraph 151 within the matters of disagreement in the Joint Report provided to the Queensland Land Court on 5 August 2013, I make the following clarification.
- [6] The decrease in groundwater flow at the northern boundary of the model can be further refined by considering only the Colinlea-Bandana aquifer, which is the major aquifer at the mine site and is likely to feed the artesian Albro Springs to the north. This aquifer occurs only in the Tallarenha Creek - Lagoon Creek - Sandy Creek catchment and the part of the Belyando river catchment immediately to the north of the mine lease; it is completely absent from the area of the Belyando River catchment to the east of the Lagoon Creek catchment. If the groundwater catchment for the northern boundary of the model is restricted to the Colinlea-Bandana aquifer, then the groundwater flow from the catchment area to the south of and within the mine area (~2800 km²) represents ~75% of the total catchment for this aguifer at the northern boundary of the model (~3860 km²). Therefore ~75% of the groundwater flow at the northern boundary of the model in the Colinlea-Bandana aquifer will be intercepted by dewatering for the mine. The impact of this loss on the Albro Springs, which are believed to be fed by artesian flow from the Colinlea-Bandana aquifer, will be substantial, and if Degulla Lagoon is also fed by groundwater flow from this aquifer, then the effect on this lagoon could also be considerable.

4. Confirmation

[7] I confirm:

- (a) the factual matters stated in the report are, as far as I know, true; and
- (b) I have made all enquiries I consider appropriate; and
- (c) the opinions stated in the report are genuinely held by me; and
- (d) the report contains reference to all matters I consider significant; and
- (e) I understand my duty to the court and have complied with the duty.

13 August 2013