

OUT18/13467

Matthew Rosel
Senior Planner, Key Sites Assessments
NSW Department of Planning and Environment

matthew.rosel@planning.nsw.gov.au

Dear Mr Rosel

**The Star Casino (MP 08_0098 MOD13)
EA Exhibition**

I refer to your email of 21 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. The department provides the following recommendations for consideration in assessment of the proposal. Recommendations for post project determination and relevant guidelines are provided in **Attachment A**.

Recommendations prior to project determination

It is recommended that the proponent provide following information to DoI:

- Evidence of adequate water access licenses/shares for the proposed works.
- The design of the below-groundwater levels.
 - It is noted that the design and construction of the building must be completely watertight to prevent any take or inflow of groundwater after the completion of construction.
- A groundwater dewatering report for assessment prior to determination of the proposal. The report is to be provided to the DoI – Lands and Water Division with the water licence application for the dewatering activity. The report should address:
 - methods of dewatering;
 - disposal of any contaminated water pumped from the groundwater (sometimes called “tailwater”); and
 - Demonstration that the works comply with the requirements of the Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2011.
- All groundwater quality testing data.
- Analysis of the contaminant hydrochemistry of groundwater and the potential impact of dewatering on the quality and quantity of the groundwater source.

Yours sincerely



Alison Collaros
A/Manager, Assessment Advice
Lands and Water - Strategy and Policy
5 November 2018

**The Star Casino (MP 08_0098 MOD13)
EA Exhibition**

Water Resources

Recommendations post project determination

Should the project be approved, the Department recommends the following:

- Contaminated groundwater should not be reinjected into any geological formation. If reinjection is proposed, the reinjection system design and treatment methods to remove contaminants are to be described in the groundwater dewatering report. The quality of any reinjected water is to be clearly demonstrated to be compatible and/or improve the groundwater in the vicinity of the reinjection site.
- Groundwater Monitoring Plan and Groundwater Trigger Plan are required and should include the following:
 - Daily measurements of water levels from monitoring bores outside basement support walls,
 - weekly measurements of groundwater and discharge water quality,
 - weekly measurements of pumped volumes shall be recorded by the proponent throughout the construction phase of the development,
 - raw data form, and
 - a completion report prior to building certification.
- Groundwater will not be pumped or extracted for any purpose other than temporary dewatering during the period of construction at the site identified in the modification application unless done so in accordance with a licence or approval under the *Water Management Act 2000* or the *Water Act 1912*.
- The design of the below-groundwater levels should be modified to be completely watertight. The design and construction of the building must prevent any take or inflow of groundwater after the completion of construction. Sufficient permanent drainage should be provided beneath and around the outside of the watertight structure to ensure that natural groundwater flow is not impeded.
- The methods and the materials used for construction should be designed to account for the likely range of salinity and pollutants which may occur in groundwater beneath the site.
- All assessment should be undertaken by suitably qualified persons with the intent of identifying the presence of any contaminants. A comparison of the data against accepted water quality objectives or criteria for the intended dewatering purpose is to be conducted. In the event of adverse quality findings, the proponent must develop a plan to mitigate the impacts of the hydrochemistry on the dewatered groundwater.

Relevant Guidelines and Policies

Guidelines/policies that should be addressed include:

- NSW Aquifer Interference Policy 2012
- Department of Industry – Water's Guidelines for Controlled Activities on Waterfront Land (2012)

- Australian Groundwater Modelling Guidelines (2012)
- Guidelines for the Assessment and Management of Groundwater Contamination (OEH)
- Risk Assessment Guidelines for Groundwater Dependent Ecosystems (DPI).
- Acid Sulfate Soils Assessment Guidelines (ASSMAC);
- Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ);
- Minimum Construction Requirements for Water Bores in Australia (NUDLC); and
- Risk Assessment Guidelines for Groundwater Dependent Ecosystems (DPI).

END ATTACHMENT A