

Project Details

Service Desk Request #

WaterNSW Contact

Project Title

Pindari Dam Bubble Plume Destratification System

Project Location

Pindari Dam

ARK REF#

F2022/7524 (REF D2025/10763)

Approval Activity including:

Construction and operation of a bubble plume destratification system within the impounded reservoir of Lake Pindari to reduce potential downstream cold water pollution from thermal stratification. This system involves pumping compressed air through a pipe network to diffusers generally located in the deepest part of a dam; however, the depth of the diffusers can be varied. Marker buoys and vertical profile system monitoring will be located on the surface of Lake Pindari to indicate the alignment of the bubble plume destratification system and monitor water quality parameters such as temperature profiles and turbidity within the reservoir. A boom will also be installed on Lake Pindari adjacent to the spillway as a safety measure to demarcate the bubble plume destratification system. The system is expected to operate during the summer season (September to April), typically commencing in spring if stratification is detected.

Key features of the project include:

- Site establishment for location of two oil-free compressors located at the base of the dam embankment*
- electrical and mechanical construction works (to power the compressors)*
- assembly and installation of aeration pipework*
- installation of a 500 metre boom adjacent to spillway*
- commissioning of compressors and air diffuser pipe*
- demobilisation and site restoration.*

Distribution List:

The REF has been prepared in accordance with Section 5.5 of the Environmental Planning and Assessment Act 1979 (EP&A Act). Under Division 5.1 of the EP&A Act, WaterNSW is both the proponent and determining authority for the proposed activity. The State Environmental Planning Policy (Transport and Infrastructure) 2021 permits the proposal to be carried out without development consent. WaterNSW has prepared this REF Variation in accordance with section 171(2) of the Environmental Planning and Assessment Regulation 2021. WaterNSW having considered the proposed project or works described above and, in accordance with Section 5.5 of the EP&A Act, have taken into account to the fullest extent possible all matters likely to affect the environment as a result of the proposed activity and has determined that, by adopting the measures identified in the REF, there is unlikely to be a significant environmental impact or significant impact to threatened species, populations or ecological communities as a result of undertaking the proposed activity. Accordingly, an Environmental Impact Statement (EIS) as described by Section 5.7 of the EP&A Act is not required and hereby approve activity subject to the Conditions specified in this approval.

Conditions of Approval

1. Preparation and acceptance of a construction environmental management plan (CEMP) to guide the activity
2. If works have not commenced within 2 years of this approval, re-submission to ensure the controls remain in line with current legislation and internal procedures including re-approval by the Environmental Services team prior to the commencement of works.

3. In carrying out the activity, the project manager must ensure compliance with this approval and the description of the activity given in the Review of Environmental Factors (REF), any environmental safeguards and any other commitments given in the REF and the plans required to be submitted under safeguard 1 of this Approval.

Project Specific Safeguards

Approved By:



Approval ARK Ref: *D2025/10765*

Sign:



Date: 11 February 2025

All approval documents must be saved as a pdf and sent to recipients as listed above