

Director-General's Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

Project	Orange drought relief connection consisting of an approximate 40 kilometre pipeline, pumping stations, transmission line and associated infrastructure to transfer water from the Macquarie River to Orange's water supply system.
Site	The pipeline corridor will generally run in a north-south direction between the Macquarie River and the township of Orange, passing through Orange and Cabonne local Government areas.
Proponent	Orange City Council
Date of Issue	24 March 2011
Date of Expiration	24 March 2013
General Requirements	The Environmental Assessment (EA) must include: • an executive summary; • a detailed description of the project including: • proposed construction methods of all components of the project clearly defining the proposal corridor, types of watercourse and infrastructure crossings and ancillary infrastructure; • location and alignment of project components, operation details, including pumping technology and water quality standards to be applied, interfaces with watercourses, energy requirements and associated greenhouse gas emissions and any staging; • any implications for the existing operational capacity (including water volumes and treatment procedures) for Orange water treatment facilities; • details of the operation of the offtake (in terms of river flow and off take volumes) under different climatic conditions and the preferred option for securing a water entitlement under the <i>Water Act 1912</i>; • details of maintenance activities (for the pipeline and corridor) including contingency management in the case of pipeline failure. • justification for undertaking the project with consideration of the benefits and impacts of the proposal; • consideration of any relevant statutory provisions including the consistency of the project with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; the <i>Central West Catchment Action Plan</i> and any subsequent revision; the <i>Blayney, Cabonne and Orange Rural and Industrial Lands Strategy 2008</i>; <i>Macquarie-Cudgegong Water Sharing Plan</i>, <i>Water Act 1912</i> and <i>Water Management Act 2000</i>; <i>NSW Office of Water's Guidelines for Controlled Activities and Crown Lands Act 1989</i>. • an assessment of the key issues outlined below, during construction, operation and decommissioning (as relevant). The EA must provide an equal level of assessment for all route options for connections at the Macquarie River and Orange should a preferred option not be determined at the time of the EA lodgement; • a draft Statement of Commitments detailing measures for environmental mitigation, management and monitoring for the project; • a conclusion justifying the project taking into consideration the environmental, social and economic impacts of the project; the suitability of the site; and the public interest; and • certification by the author of the EA that the information contained in the Assessment is neither false nor misleading.

Key Assessment Requirements	The EA must include assessment of the following key issues: • Strategic Planning and Project Justification – the EA must clearly: - o outline the regional strategic context of the project, having regard to existing and future development in the Orange and the Central West Catchment area, regional water supply, water management and water demand including the effect on downstream users of the Macquarie River including demonstrating that there is an adequate and secure water supply for the proposal during operation. - o describe the need, scale, scope, location and objectives of the project; and provide justification for the preferred project taking into consideration the objects of the <i>Environmental Planning and Assessment Act 1979</i> and consistency with relevant State and regional planning policies; • Alternatives – the EA must detail all alternatives considered, both in terms of water supply and corridor selection (including alignment within the identified corridor). Clear reasons and justification for the selected corridor/alignment must be presented, demonstrating how environmental, social and economic issues have been addressed in this process. • Land Use Planning Impacts - analyse the site suitability of the project considering potential conflicts with existing and future landuses and infrastructure (including existing residential and other sensitive landuse, known future development, infrastructure and utility corridors, land of high agricultural value, land of high conservation value, recreational land and Crown land), taking into account local and strategic land use objectives and potential pressure for further development in Orange and Cabonne local government areas due to the availability of water security to existing low density development. • Ecological Impacts – the EA must: - o include a flora and fauna impact assessment consistent with the <i>Guidelines for Threatened Species Assessment</i> (DEC and DPI, 2005) taking into consideration impacts on any threatened species, populations, ecological communities, critical habitat, riparian, instream ecology, water dependent ecosystems (including RAMSAR wetlands) and groundwater dependent communities affected by the project including consideration of the <i>NSW Groundwater Dependent Ecosystems Policy</i> and/ or relevant recovery plans; any impacts to local or regional biodiversity corridors; and riparian vegetation at watercourse crossings and downstream of the water offtake in the Macquarie River. - o include a management framework outlining the measures to be implemented to avoid, mitigate, manage, monitor and/ or offset flora and fauna impacts during construction and operation, including but not necessarily limited to progressive rehabilitation works. - o provide sufficient details to demonstrate the availability of viable and achievable options to offset the impacts of the project. Where impacts are unavoidable, how impacts would be minimised, mitigated and offset consistent with either the <i>Biobanking Methodology</i> or by following the <i>Principles for the use of biodiversity offsets in NSW</i>. - o outline any ongoing management requirements to maintain biodiversity values in perpetuity and associated responsibilities. - o include details of the ongoing management of erosion, weeds and flora and fauna along any of the areas disturbed by the project. - o assess the impacts of construction of the offtake pump on fish passage during construction including how the operation of the pump would be designed to avoid entrainment or entrapment of fish eggs and larvae.
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- **Heritage Impacts** – the EA must include sufficient information to demonstrate the likely impacts on Non-Indigenous and Aboriginal heritage values (archaeological and cultural) that may be impacted by the project with details on subsurface archaeological investigations undertaken for potential archaeological deposits and outline proposed mitigation measures to avoid or minimise any impacts.
 - o The Aboriginal heritage assessment must be consistent with the Draft *Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC, 2005). The EA must demonstrate effective consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and selecting options and mitigation measures.
- **Surface and Groundwater Impacts** – the EA must:
 - o assess the potential risks to surface and groundwater quality during construction and operation activities (including the proposed offtake, pump infrastructure and pipeline maintenance activities), demonstrating that the project can be designed and managed consistent with the principle of a neutral or beneficial effect on water quality in the water catchment;
 - o include a site water balance clearly identifying and quantifying water use for the project including: annual water demand and sources of input; water reuse and recycling measures; waste water generation and disposal requirements; and stormwater management;
 - o include an assessment of potential impacts on other groundwater and surface water users, and the environment under different climatic conditions with details of how existing water access rights will be protected, including with respect to availability, quantity and quality of water in the Macquarie Catchment;
 - o include a framework for the mitigation, management and monitoring of surface and groundwater quality impacts during construction and operation including reference to the *Managing urban stormwater soils and construction volume 1 and volume 2*.
 - o assess the potential for impacts to watercourses, including the Macquarie River, which are to be impacted by the project, including a risk assessment justifying the proposed construction method depending on stream classification and environmental significance and a strategy for the rehabilitation of any watercourses disturbed by the project to an existing or better standard.
- **Geomorphology and Hydrology** – the EA must:
 - o identify significant watercourses in terms of hydrological, hydraulic or ecological characteristics or sensitivity and an assessment of the impacts to the stability of these watercourses including the Macquarie River from the construction and operation of the project. The assessment must also include measures to monitor or mitigate any identified impacts during construction and operation;
- **Infrastructure Impacts** – the EA must include an impact assessment on infrastructure, including roads, communications, electricity, gas and water supply infrastructure. Mitigation measures to address these impacts shall be described, including the need for road upgrades and rectification of road damage.
- **Traffic and Transport** – the EA must include an assessment of impacts to the local and regional road network and intersections during construction, including direct impacts from traffic rerouting and any access restrictions to property, as well as details on the nature/ mode of traffic generated from the project, transport routes and traffic volumes. Consideration must also be given to the impact of the project on any existing and proposed railway infrastructure in the area.
- **Noise and Vibration** – the EA must include an assessment of noise and vibration impacts during construction and operation and in a cumulative context with existing development. The assessment must take into account the following guidelines, as relevant: *Industrial Noise Policy* (EPA, 2000), *Assessing Vibration: A Technical*

	<i>Guideline</i> (DECC, 2006) and <i>Interim Construction Noise Guideline</i> (DECC, 2009). The assessment is to identify sensitive receptors that have the potential to be impacted by the project and the likely impacts; and include a framework for the mitigation, management and monitoring of impacts during construction and operation (as relevant) with specific reference to noise and vibration-intensive construction works/ activities (drilling, blasting, bulk excavation) and heavy vehicle movements. • Visual Amenity – the EA is to fully describe all project components and their locations. A photographic assessment clearly demonstrating the potential visual amenity impacts of the proposal from key viewing locations must be provided along with a clear description of the visual impact amenity mitigation and management measures. • Contamination and Spoil Management – the EA must include: - o the identification of any contaminated land affected by the proposal and the potential to contaminate land, and identify mitigation measures; - o estimates of likely spoil generation, including identification of known or potential contamination issues, and options for spoil management, reuse and/ or disposal. • General Environmental Risk Analysis – notwithstanding the above key assessment requirements, the Environmental Assessment must include an environmental risk analysis to identify potential environmental impacts associated with the project (construction and operation), an outline of the proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional key environmental impacts are identified through this environmental risk analysis, a framework for the consideration of the additional key environmental impact(s) must be included in the Environmental Assessment.
Consultation Requirements	You must undertake an appropriate and justified level of consultation with the following parties during the preparation of the Environmental Assessment: • NSW Department of Environment, Climate Change and Water; • NSW Office of Water; • Industry & Investment NSW; • Central West Catchment Management Authority; • NSW Roads and Traffic Authority • Land and Property Management Authority; • Cabonne Shire Council; • relevant utility and service providers; and • the local community, including the Local Aboriginal Lands Council(s) and affected landowners. The Environmental Assessment must describe the consultation process, document all community consultation undertaken to date and identify the issues raised (including where these have been addressed in the Environmental Assessment).