Director-General's Requirements

Application number	MP 10_0197
Project	Project Application: construction, operation and maintenance of drinking water and wastewater lead-in infrastructure, including a one kilometre long water pipeline and 1.5 kilometre long wastewater pipeline, to service the early release of the West Horsley Precinct, within the West Dapto Urban Release Area. The wastewater pipeline would connect to an existing sewage pumping station that forms part of the Wollongong Wastewater Treatment System. The water pipeline would connect to the existing network supplied by the Kembla Grange Water Filtration Plant.
Location	The West Horsley Precinct, which is a part of the West Dapto Release Area and located in the Wollongong Local Government Area.
Proponent	Sydney Water Corporation
Date issued	7 December 2010
Expiry date	7 December 2012
General requirements	 The Environmental Assessment (EA) must include: an executive summary; a detailed description of the project including construction methods, location and alignment of project components, operation details including treatment technology and water quality standards to be applied, means of minimising wet weather infiltration, water demand management measures and interfaces with existing sewage treatment infrastructure, energy requirements and any staging. This shall include a description of the existing water and wastewater treatment systems, including system capacity and ability to continue to operate under existing licence conditions; consideration of any relevant statutory provisions including the consistency of the project with the objects of the Environmental Planning and Assessment Act 1979 and permissibility; an assessment of the environmental impacts of the project, with particular focus on the key assessment requirements specified below; a draft Statement of Commitments detailing measures for environmental mitigation, management and monitoring for the project; justification for undertaking the project with consideration of the environmental, social and economic benefits and impacts of the proposal;
Key issues	 and certification by the author of the Environmental Assessment that the information contained in the Assessment is neither false nor misleading.
	The EA must include assessment of the following key issues:
	 Strategic Justification – the EA must: > clearly outline the strategic context of the project, having regard to
	existing and future development of West Dapto;
	> discuss how the project relates to relevant strategic and statutory

planning documents including the following: the Illawarra Regional Strategy (2007); the West Dapto Release Area Review Planning and Infrastructure Report (Growth Centres Commission, 2008); the Sydney Water Integrated Servicing Strategy; the Lake Illawarra Estuary Management Study and Strategic Plan (March 2006); the Illawarra Regional Environmental Plan No. 1; and relevant local environmental plans including draft Wollongong Local Environmental Plan (West Dapto) 2009; and

- describe the need for and objectives of the project, including its relevance to the overall water and wastewater scheme for the West Dapto Urban Release Area and Adjacent Growth Areas; alternatives considered, including locations and routes for linear infrastructure (including an assessment of the environmental costs and benefits of the project relative to alternatives) and provide justification for the preferred project.
- Flora and Fauna the EA must:
- include an assessment of flora and fauna impacts taking into consideration impacts on any threatened species, populations, ecological communities and/or critical habitat listed under both State and Commonwealth legislation that have been recorded on the site and/or surrounding land and any relevant recovery plan, consistent with the Draft Guidelines for Threatened Species Assessment (DEC, 2005). The assessment must take into consideration the Illawarra Escarpment and Coastal Plain Bioregional Assessment (DEC July 2003), demonstrate how the project design has avoided impacts where possible and clearly identify the existing condition and extent of vegetation (including fragmentation impacts and impacts to biodiversity corridors) and habitat on site (including riparian and/or instream habitat in the case of disturbance of waterways);
- document and map each of the ecosystems (vegetation communities), including any foraging, roosting, feeding and nesting trees that will be impacted, quantify the impacts, and assess the significance of the impact within the context of the landscape and region in which the ecosystem is located, including the location, intensity and extent of impact;
- provide details of how flora and fauna impacts would be managed during all stages of the project; and
- describe the measures to avoid, mitigate or offset impacts to vegetation, consistent with "improve or maintain" principles. Sufficient details must be provided to demonstrate the availability of viable and achievable options to offset the impacts of the project.
- Aboriginal Heritage include an assessment of the potential impact on Aboriginal heritage values/items and proposed mitigation measures in accordance with the Draft *Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC, 2005). The EA must demonstrate effective consultation with indigenous stakeholders during the assessment and in developing mitigation options (including the final recommended measures) and describe the actions that will be taken to avoid, mitigate or offset impacts.
- Non Indigenous Heritage the EA must include an assessment of the potential impact on non indigenous heritage values/items and proposed mitigation measures, consistent with updated guidelines in the NSW Heritage Manual. Where impacts to State or local non-indigenous heritage items are proposed, a statement of heritage significance must be included and measures identified to mitigate and manage impacts.

	Water Quality, Hydrology and Soils – the Environmental Assessment must:
X	include an assessment of water quality impacts arising from the construction and operation of the project, taking into account applicable NSW Government policies. Construction risks, including watercourse crossings, potential for acid sulfate soils, salinity, erosion and sedimentation must be addressed. Measures to prevent or minimise sewage discharge or overflows and subsequent impacts to nearby watercourses, groundwater and water bodies shall be addressed;
A	include an assessment of the potential flood risks associated with the project including a risk screening of proposed water infrastructure development areas against the benchmarks identified in the <i>NSW Coastal Planning Guideline: Adapting to Sea Level Rise</i> (DOP, 2010). The assessment shall consider the full range of flood events including probable maximum flood and proposed mitigation measures with respect to operation;
A	provide details on the impacts and management of wastewater, including frequency, overflow volume and pollutant load for dry and wet weather events, the quality of the treated wastewater in dry and wet weather, and potential effluent generation beyond existing approved levels;
-	Human Health – the Environmental Assessment must outline risks to human health, including mitigation measures and how the operation of the project would be consistent with current standards.
•	Dust and Odour – the Environmental Assessment shall include an assessment of the dust and odour impacts associated with construction and operation respectively. The odour analysis shall be undertaken in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC, 2005), Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2001) and Technical Notes: Draft Policy: Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2001).
	Noise and Vibration – the Environmental Assessment shall include an assessment of noise and vibration impacts during construction and operation and in a cumulative context with existing development. Construction traffic noise must also be addressed. The assessment must take into account the following guidelines, as relevant: <i>Interim Construction Noise Guidelines (DECC 2009), Environmental Criteria for Road Traffic Noise</i> (EPA, 1999), <i>Industrial Noise Policy</i> (EPA, 2000) and Assessing Vibration: A Technical Guideline (DECC, 2006).
•	Traffic and Transport – the EA shall include an assessment of impacts to the local and regional road network and intersections, including direct impacts from any traffic rerouting and any access restrictions to property. This assessment must include details on the nature/mode of traffic generated from the construction and operation of the project, transport routes and traffic volumes. Consideration must also be given to the impact of the project in the context of any other major construction traffic likely to be utilising the same roads during project construction.
8	Visual Amenity – the EA shall include an assessment of impacts on visual amenity, with reference to surface components such as ventilation shafts. This assessment must include any proposed mitigation measures for visual amenity.
2	Hazards and Risk – the Environmental Assessment shall include an assessment of the hazards and risk associated with the project including

-	 details of the handling and disposal of waste during construction and identification of existing management measures associated with the Wollongong Sewage Treatment Plant that are to be used during operation of the project. Environmental Risk Analysis— notwithstanding the above key assessment requirements, the Environmental Assessment shall include an environmental risk analysis to identify potential environmental impacts associated with the project (construction and operation), 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, an appropriately detailed impact assessment of this additional key environmental impact must be included in the Environmental Assessment.
Consultation	 You must undertake an appropriate and justified level of consultation with relevant parties during the preparation of the Environmental Assessment, including: local, State or Commonwealth government authorities and service providers such as the Department of Health, the NSW Office of Water, the Department of Environment, Climate Change and Water, the Lake Illawarra Authority, the Department of Industry and Investment, the Southern Rivers Catchment Management Authority, Roads and Traffic Authority, and Shellharbour and Wollongong City Councils; specialist interest groups, including local Aboriginal land councils; and the local community, including 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).