



Contact: Mark Turner
Phone: 02 9228 6339
Fax: 02 9228 6335
Email: mark.turner@planning.nsw.gov.au

Mr David Watson
Keepit Dam Upgrade Project Manager
State Water Corporation
PO Box W16 Westfield
PARRAMATTA NSW 2150

Our ref: 9040628
Your ref: 060518 Keepit Major Project App

Dear Mr Watson

Subject: Keepit Dam Upgrade – Director-General’s Requirements

Reference is made to your request of 18 May 2006 for Director-General’s requirements (DGRs) for the preparation of a Concept Plan to upgrade Keepit Dam. It is understood that you are seeking requirements for three upgrade options which will meet the following common operational criteria:

- Resolves the existing safety concerns and protects Keepit Dam from extreme floods and earthquakes;
- Has no affect on current flood operations or results in any different impacts than currently occurs, until a flood of less than 1:1 800 Annual Exceedance probability (or twice the largest flood over the last 108 years);
- Reduces the consequences of dam failure from 1:2 800 Annual Exceedance Probability to probable maximum flood event which, although cannot be converted to an Annual Exceedance Probability, would be at least 1:500 000 Annual Exceedance Probability;
- Maintains the current dam full supply level;
- Operates the existing gated spillway (main dam wall) first for all floods up to 1:1 800 Annual Exceedance Probability, then operates a proposed new additional right-hand abutment spillway up to around 1:10 000 Annual Exceedance Probability and then, as appropriate, the subsidiary dam wall, boat ramp and/or sailing club spillways (as appropriate to each option);
- Results in temporary additional inundation of upstream areas;
- Results in the reduction of the peak flood levels downstream of the dam during very large to extreme flood events, slightly reducing the magnitude and extend of flood damage on natural and anthropological values of the Namoi floodplain.

In preparing your Environmental Assessment report you should describe the project options and any staging in sufficient detail to allow a thorough assessment of each option. You should also be aware that the Minister, when determining a Concept Plan, may require further environmental assessments to be carried out, and may specify if and what environmental planning and assessment process is to apply to further stages of the project (e.g. no further approval, or further assessment under Part 3A or another part of the EP&A Act).

Any construction activities associated with an approval for this Concept Plan issued by the Minister for Planning that involves dredging works, extractive industries, concrete works, and crushing grinding and separating works may require an Environment Protection Licence (EPL)

from the Department of Environment and Conservation (DEC). The Proponent should refer to the following DEC website to determine whether an EPL is required:

<http://www.environment.nsw.gov.au/licensing/licenceguide.htm>.

It should be noted that the DGRs have been prepared based on the information provided to date. These requirements may be altered or supplemented, if necessary and in light of any additional information that may be provided (see Section 75F(3) of the *Environmental Planning and Assessment Act*).

Prior to exhibiting the Environmental Assessment, the Department will review the document to determine if it adequately addresses the DGRs. The Department will consult with other relevant government agencies in making this decision. You will be advised if it is necessary for you to revise the Environmental Assessment to address any matters that are not adequately addressed in the Environmental Assessment. Following this review period the Environmental Assessment will be made publicly available for a minimum period of 30 days.

It would be appreciated if you would contact the Department at least two weeks prior to submitting the Environmental Assessment for the project to determine:

- The fees applicable to the application;
- Relevant land owner notification requirements;
- Consultation and public exhibition arrangements that will apply;
- Options available in publishing the Environmental Assessment via the Internet; and
- Number and format (hard-copy and CD-ROM) of the Environmental Assessments that will be required.

The Director-General has decided that the matters specified in Table 1 (see attachment) will be required to be addressed in any Environmental Assessment report in accordance with Section 75F of the *Environmental Planning and Assessment Act*.

Please contact Mark Turner if you have any queries.

Chris Wilson
Acting Executive Director
Sustainable Development Assessments
As delegate for the Director-General

Attachment



Table 1

Director-General Requirements for the Keepit Dam Upgrade

Project	<p>A Concept Plan project to upgrade Keepit Dam by one of three options, B1, D2, or D3 as described in the report prepared for State Water Corporation by Parsons Brinckerhoff entitled <i>Keepit Dam Upgrade – Options Evaluation and Environmental Assessment – Options Comparison Report</i> (December, 2005). Each of the three options meet the following common criteria:</p> <ul style="list-style-type: none"> • Protects the dam from large to extreme flooding and earthquakes; • Maintains current full supply level; • Operates existing gated spillway first; • Operates the right-hand abutment next, when floods exceed 2 times the 1955 flood of record; • Provides opportunities to review flood operation procedures; and • Includes a multi-level off-take.
Site	<p>The Concept Plan project area is Keepit Dam, located between the townships of Gunnedah and Tamworth in the north-east of New South Wales on the Namoi River approximately 13 kilometres upstream of its confluence with the Peel River.</p>
Proponent	<p>State Water Corporation</p>
Date of Expiration	<p>These Director-General's Requirements expire two years from the date of issue.</p>
General Requirements	<p>The Environmental Assessment report must:</p> <ul style="list-style-type: none"> • Address those matters raised at the Keepit Dam Upgrade Planning Focus Meeting held on 3 February 2006 and reported in the Minutes to that meeting; • Include an Executive Summary; • Describe the current statutory processes that apply to this Concept Plan; • Include details of the applicable environmental planning provisions; • Provide a relative ranking for each option based on the social and environmental costs and benefits; • Incorporate a draft Statement of Commitments which addresses environmental mitigation, management and monitoring elements <u>common</u> to each option; • For each option: <ul style="list-style-type: none"> – Provide a description of the option, including construction, operation, and any staging; – Include a discussion of the relative long term strategic benefits for flood mitigation, improved water storage integrity, and increased economic and social benefits for the regional community; – Assess the key environmental impacts specified below; – Incorporate a draft Statement of Commitments which addresses mitigation, management and monitoring elements <u>unique</u> to that specific option;

	<ul style="list-style-type: none"> • Be certified by the author of the Environmental Assessment report that the information contained in the Assessment is neither false nor misleading.
Key Assessment Requirements	<p>The Environmental Assessment report must address the following key issues for each option:</p> <ul style="list-style-type: none"> • Impacts on the terrestrial ecology, land uses/users including the adjacent State Park, caravan park, ski club, cultural environment, and geomorphologic features associated with the higher probability, smaller floods that are large enough to trigger operation of the proposed new spillways. The assessment should be undertaken using a risk-based methodology to allow a comparison of the options. • Visual impacts associated with the proposed new works. • Changes to downstream and upstream flooding impacts associated with the low frequency, large floods including the extent of flooding, floodwater velocities, erosion and deposition of sediments noting, in particular, impacts on: <ul style="list-style-type: none"> – Indigenous and non-indigenous cultural heritage; – Terrestrial ecology; and – Public infrastructure and private properties; • Construction and operational impacts (i.e. high and low frequency flood events which trigger the operation of the proposed new works) on fish and aquatic ecosystems from changes to the: <ul style="list-style-type: none"> – Flow regime and flood patterns; – Channel morphology; – Patterns of sedimentation; – In-stream habitats; – Fish migration and fish passage taking into account any requirement by the Minister for Primary Industries to construct a suitable fishway or fish by-pass consistent with Section 218 of the <i>Fisheries Management Act</i> and the NSW Weirs Policy; – Water quality i.e. nutrients, dissolved oxygen, temperature etc; – Riparian vegetation. • Biodiversity offset strategies that may be used to mitigate impacts on terrestrial and aquatic threatened species or endangered ecological communities that have been identified or are predicted to be present. (Principles for biodiversity offsets and banking schemes are currently under development by the Department of Environment and Conservation, and can be found at http://www.environment.nsw.gov.au/threatspec/biobankscheme.htm). • Relationship of the proposed works to the Namoi Water Sharing Plan and the Murray-Darling Basin CAP.
Relevant Guidelines	<ul style="list-style-type: none"> • Draft <i>Guidelines for Threatened Species Assessment</i> (July, 2005), prepared by the Department of Environment and Conservation and the Department of Primary Industries. • Draft <i>Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation</i> (July, 2005), prepared by the Department of Environment and Conservation.
Consultation	You must consult with the following parties during the preparation of the

Requirements	<p>Environmental Assessment:</p> <ul style="list-style-type: none"> • Department of Environment and Conservation; • Department of Primary Industries; • Department of Natural Resources; • Namoi Catchment Management Authority; • Department of Lands; • NSW Dams Safety Committee; • Tamworth Regional Council; • Gunnedah Shire Council; • Local community including Aboriginal land councils; and • Commonwealth Department of Environment and Heritage regarding the application of the <i>Environment Protection and Biodiversity Conservation Act</i>.
Exhibition of EA and notification requirements	Pursuant to Section 75H(3) of the EP&A Act, the Environmental Assessment report must be exhibited for a minimum of 30 days.
Deemed refusal period	Not applicable. However, consistent with clause 8E(2) of the EP&A Regulations, the Department's indicative assessment period will be 120 days.