NSW GOVERNMENT
Department of Planning

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Our ref: S07/00001
Your ref:

Mr Stephen Saladine
Delta Electricity
201 Sussex Street
SYDNEY NSW 2001

Dear Mr Saladine

Proposed Kerosene Vale Ash Dam – Stage 2 Dry Ash Placement – Lithgow Local Government Area (MP 07_0005)

Pursuant to section 75F(3) of the *Environmental Planning and Assessment Act 1979* (the EP&A Act), you are hereby notified of the Director-General's Environmental Assessment requirements for the above proposal, which are provided in the attachment to this letter.

It should be noted that the Director-General's requirements have been prepared based on the information provided to date, including the major project application and preliminary environmental assessment (December 2006) for the proposal and the feed back obtained from the Planning Focus Meeting held on the 6 February 2007. Under section 75F(3) of the EP&A Act, the Director-General may alter or supplement these requirements if necessary and in light of any additional information that may be provided prior to the proponent seeking approval for the project.

You should ensure that you consult with the Department prior to submission of a draft Environmental Assessment to determine:

- fees applicable to the application;
- relevant land owner notification requirements;
- consultation and public exhibition arrangements that will apply; and
- number and format (hard-copy or CD-ROM) of the Environmental Assessments that will be required.

Once you have lodged the Environmental Assessment, the Department will consult with the relevant authorities to determine the adequacy of the Environmental Assessment. Following this review period the Environmental Assessment will be made publicly available for a minimum period of 30 days.

You should keep the contact officer for this project, Ricardo Prieto-Curiel ((02) 9228 6112, ricardo.prieto-curiel@planning.nsw.gov.au), up to date with the progress of preparation of the Environmental Assessment, and seek clarification of any issues that may be unclear or may arise during this process.

Yours sincerely

27.2.07

Chris Wilson
Executive Director
As delegated for the Director-General

ENVIRONMENTAL ASSESSMENT REQUIREMENTS UNDER PART 3A OF THE *ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979*

Project	Construction and operation of Stage 2 Kerosene Vale Dry Ash Dam, Lithgow Local Government Area
Site	Lot 16 DP 555844, Lot 17 DP 855844 and Lot 5 DP 829137, Wallerawang, in the Lithgow Local Government Area
Proponent	Delta Electricity
Date of Issue	27 February 2007
Date of Expiration	27 February 2009
General Requirements	The Environmental Assessment (EA) must include: • an executive summary; • a description of the proposal, including construction, operation and staging; • details of the location of the project and environmental planning provisions applicable to the site and the project; • consideration of alternatives to the project; • an assessment of the environmental impacts of the project, with particular focus on the key assessment requirements specified below; • proposed mitigation/ management /compensatory measures to prevent, control, abate or minimise identified environmental impacts and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after the measures are implemented; • justification for undertaking the project with consideration of the benefits/ impacts of the proposal, and proposed management/ mitigation/ monitoring; • a draft Statement of Commitments for environmental mitigation, management and monitoring for the project; and • certification by the author of the Environment Assessment that the information contained in the Assessment is neither false nor misleading.
Key Assessment Requirements	The Environmental Assessment must include assessment of the following key issues: • **Ash Management** – the Environmental Assessment must detail options investigated to date for ash disposal and management (including reuse and recycling options), justification for the preferred ash disposal option, a strategy for developing and implementing short, medium and long term ash management options (including ash reprocessing, reuse and recycling options) with the aim of maximising the use of this potential resource and maximise the available emplacement area life, details of any proposed staged implementation of the proposed ash disposal option (in conjunction with other ash management options as required), and anticipated annual quantities of ash waste to be managed over the life of the project. The Environmental Assessment must describe the physical and chemical characteristics of the ash, and any limitations and opportunities associated with such characteristics for the purpose of developing alternative ash management options. • **Realignment of Sawyers Swamp Creek** – The Environmental Assessment must include detailed information of the proposed realignment of the creek, including (but not limited to) design parameters, construction techniques and methods, and operational maintenance and monitoring requirements. The Environmental Assessment must demonstrate that the realigned creek is geomorphologically stable in the long term. Options for the creek realignment, including (but not limited to) realignment to a naturalised condition or reinstating the alignment of the original creek that are affected by the ash dam, must be considered. The Environmental Assessment must include a draft Rehabilitation Plan for Sawyers Swamp Creek, covering the section of the creek from where it enters the open channel below the ash dam (wet emplacement) wall to the Lidsdale cut (with particular emphasis on the relocated section of the creek), which gives consideration to incorporating aquatic habitat elements into the rehabilitation of the creek including snags and instream structures, planting of macrophytes and endemic riparian vegetation, weed management, natural channel morphology and pool/riffle sequences, a buffer zone of rehabilitated land along the northern side of the realigned creek to protect the creek from areas of coal waste and provides for erosion control.

The draft plan must include requirements for a 20-metre riparian zone each side of the top of bank of the creek. The draft plan must be prepared in consultation with DPI (aquatic ecology aspects) and DNR (in relation to geomorphic issues and foreshore matters), and must consider and apply the principles of the DNR's guidelines *How to prepare a Vegetation Management Plan* and *Watercourse and Riparian Area Planning, Assessment and Works Design Guideline*.

- **Water Quality and Hydrological Impacts** – The Environmental Assessment must include a water quality and hydrology impact assessment, and associated mitigation measures, demonstrating that the proposal (in its entirety) will have a neutral or beneficial effect on water quality, with overtime water quality improvements to original water quality conditions in the area. Appropriate models like MUSIC must be used to demonstrate a neutral or beneficial impact on water quality. The study must characterise and assess site hydrology and water management including drainage, stormwater and flooding, surface water and groundwater. The assessment must cover construction and operational phases and consider relevant state and ANZECC water related guidelines. The downstream impacts of the reuse of water captured off the ash emplacement areas also needs to be included in the assessment. The comprehensive groundwater impact assessment (including assessment of groundwater dependent ecosystems) must be prepared in accordance with the DNR's guideline *Groundwater Director General's Requirements Developments with the potential to impact upon groundwater*. The studies must also describe actual impacts identified on the existing operations of Stage 1 ash dam. The water quality investigations must address the cumulative impacts on water on the proposal in conjunction with other activities in the area such as power generation, coal mining and a proposed landfill. The Environmental Assessment must provide details of the current and proposed water quality monitoring during construction and operation as to assess changes to quality of receiving waters.
- **Aquatic Ecology Impacts** – The Environmental Assessment must include a description of baseline habitat, species and fishery. The whole area which may be directly or indirectly affected by the proposal must be identified and shown on an appropriate scaled map and aerial photographs. All waterways and water bodies within the proposed area of development, or likely to be affected by the proposal, including ephemeral freshwater lakes and streams, are to be identified. Descriptions of affected streams and rivers should include maximum and minimum or percentile flow (ML/day), length, presence of gravel beds, presence of waterfalls or barriers to fish movement, and substrate types. A description of aquatic vegetation, snags, gravel beds and any other protected, threatened or dominant habitats must be presented. Area, density and species composition must be included and mapped. A list of fish (finfish and macro-invertebrate) species present within the aquatic habitats that will be impacted compared to control (or reference) locations must be presented, including any threatened species, population or ecological communities of fish listed under the *Fisheries Management Act 1994* or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. The Environmental Assessment must include an assessment of the impact of the proposal on the aquatic environment, including, but not limited to, impacts by containment and isolation of surface water on the ash dam site, and effects on the frequency, duration and variability of local flow events and quantification of the total amount of water permanently prevented from entering the catchments. The Environmental Assessment must include safeguards and remedial measures proposed to reduce adverse effects including the creation of additional habitat and/or proposed habitat compensation measures, and details of any proposed compensation for water diversion that could be gained from Delta storages downstream.
- **Air Quality Impacts** – the Environmental Assessment must include a quantified assessment of the air quality impacts of the proposal (including ash transportation), with emphasis on TSP, PM_{10} and contaminants in the ash. The Environmental Assessment must detailed mitigation measures proposed to minimise identified impacts. The cumulative impacts of the proposal in relation to pollution emissions in the same locale (ie. power stations, coal mines, etc) must be assessed and mitigation measures proposed. The air quality assessment must be prepared in accordance with the DEC's guidelines *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*

	(2005), *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (2007) and *Action for Air; The NSW Government's 25 year Air Quality Management Plan* (March 1998). • **Noise Impacts** – the Environmental Assessment must include an assessment of all noise associated with the proposal (including the haulage of ash on the private haul road) in accordance with the DEC's *Industrial Noise Policy* (EPA, 1999) and associated *Industrial Noise Policy Application Notes*. The noise assessment must also consider the *NSW Environmental Criteria for Road Traffic Noise* (EPA 1999) and Chapter 171 *Noise Control Guideline, Construction Site Noise, Environmental Noise Control Manual 1994* as relevant to the project. The assessment must detail proposed measures to manage noise impacts, including any proposed acoustic barriers along the haul road, and must demonstrate compliance with the adopted noise criteria. The assessment must outline the proposed noise monitoring during the construction and operational phases of the proposal. • **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, 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 these additional key environmental impacts must be included in the Environmental Assessment. • The Environmental Assessment must considered relevant environmental planning instruments, state legislation and the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*.
Consultation Requirements	You must consult with the following parties during the preparation of the Environmental Assessment: • NSW Department of Environment and Conservation; • Sydney Catchment Authority; • Lithgow City Council; • Department of Primary Industries; • Department of Natural Resources; and • affected residents and relevant community and aboriginal groups.
Deemed refusal period	Pursuant to clause 8E(2) of the *Environmental Planning and Assessment Regulation 2000*, the deemed refusal period for the project will be 60 days.