

## **Proposal to expand the Kerosene Vale Ash Repository**

### **Commencement of environmental assessment**

The Kerosene Vale Ash Repository Area has been used over the last five years for placement of dry conditioned ash. The ash is a by-product of electricity generation at the Wallerawang Power Station. Existing storage at the site is now reaching capacity.

In order for the Wallerawang Power Station to continue operating, Delta Electricity (Delta) is proposing the expansion of the existing area used for the placement of dry conditioned ash. This will provide for a further 11 to 15 years of ash storage.

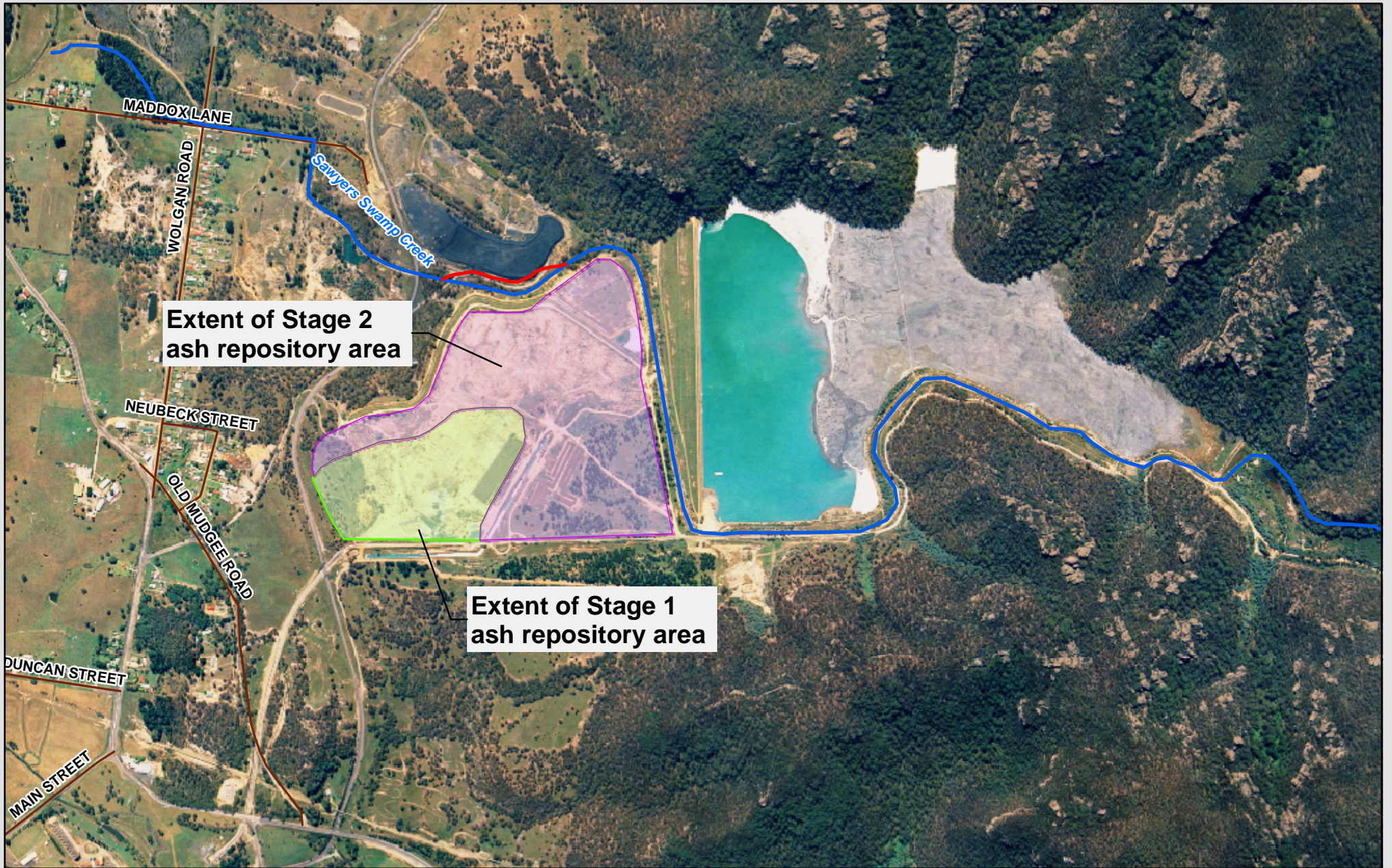
The expansion of the Kerosene Vale Ash Repository is classified as a major infrastructure project under the *State Environmental Planning Policy (Major Projects) Act 2005*. As such, an environmental assessment is required under Part 3A of the *Environmental Planning & Assessment Act 1979*.

Delta is now in the process of compiling the environmental assessment as required by the Department of Planning. This process involves working closely with the community and various government bodies to ensure all potential environmental impacts have been identified and addressed.

Further information on the proposal is available on Delta's website ([www.de.com.au](http://www.de.com.au)). If you would like to discuss the expansion of the Kerosene Vale Ash Repository in further detail, you can contact PB's Community Liaison Representative on 1800 008 708 or by email at [kerosenevale@pb.com.au](mailto:kerosenevale@pb.com.au).

For more information on the environmental assessment, visit the Department of Planning website at <http://www.planning.nsw.gov.au/asp/register2006.asp#cw>.

If you would like to view the preliminary environmental assessment, go to [http://www.planning.nsw.gov.au/asp/pdf/07\\_0005\\_preliminary\\_assessment.pdf](http://www.planning.nsw.gov.au/asp/pdf/07_0005_preliminary_assessment.pdf).



211869A\_2007\_ash\_placement\_areas.mxd .JL 31 October, 2006

- Stage 1 operations
- Proposed Stage 2 operations
- Proposed creek alignment
- Current creek alignment

Current Stage 1 and proposed Stage 2 areas



# **Expansion of Ash Storage at the Kerosene Vale Ash Repository Area**

## **Message to staff**

This letter is to let you know that Parsons Brinkerhoff (PB) has been engaged by Delta to undertake the environmental assessment of a proposal to expand the Kerosene Vale Ash Repository Area. As you may be aware, this ash repository area is currently used for the placement of dry conditioned ash generated from Wallerawang Power Station. Community consultation is an essential part of the environmental assessment and will commence shortly.

### **Background**

The placement and storage of ash is an important component of Delta's operations and is essential to the ongoing operation of Wallerawang Power Station. Delta has, and continues to, investigate opportunities to reuse dry conditioned ash to minimise storage requirements but at the moment, most ash must be stored in the repository. The Kerosene Vale Ash Repository Area was constructed between 1960 and 1990 during which time it was filled with a combination of by-product ash from the Wallerawang Power Station and mining spoil. The repository area was capped around 1990.

In 2001, Delta determined that there was an operational need to change from managing the ash by-product from Wallerawang Power Station from wet to dry ash. The Kerosene Vale Ash Repository Area has been used over the last five years for placement of dry conditioned ash generated by the Wallerawang Power Station.

### **The Proposal**

Existing storage at the site is now reaching capacity. In order for Wallerawang Power Station to continue operating, Delta is proposing to further develop the Kerosene Vale Ash Repository Area.

It is proposed that the existing area used for the placement of dry conditioned ash be expanded to provide an additional capacity of around 5.3 million cubic metres. This will bring the total storage capacity of the Kerosene Vale Ash Repository Area up to 7.8 million cubic metres and will ensure that ash can be stored for a further 11 to 15 years of operation.

The expansion of dry conditioned ash storage would see ash placed in an easterly direction over the pine plantation area and then in a northerly direction towards Sawyers Swamp Creek over an expanded area of the original repository area. A map of the proposed storage expansion is attached to this letter.

The proposed Stage 2 development of the Kerosene Vale Ash Repository Area would require the diversion of Sawyers Swamp Creek and the excavation of material from the pine plantation to provide space for ash placement.

Delta will continue to investigate reuse of dry conditioned ash during the approval process and construction of the proposed new storage area. The assessment of reuse options will be incorporated into the environmental assessment currently being prepared.

### **Community Consultation**

PB is in the process of sending letters to the community and placing advertisements in local newspapers to provide information about the commencement of the environmental assessment process.

PB has established a community information line and an email address for members of the community to contact PB if they have any questions about the project. If you receive any enquiries about the project, please direct them to call PB's Community Liaison Representative on 1800 008 708 or by email at [kerosenevale@pb.com.au](mailto:kerosenevale@pb.com.au).

Information is also available on Delta's website ([www.de.com.au](http://www.de.com.au)). More information on the environmental assessment can be found by visiting the Department of Planning website at <http://www.planning.nsw.gov.au/asp/register2006.asp#cw>. You can view the Preliminary environmental assessment at [http://www.planning.nsw.gov.au/asp/pdf/07\\_0005\\_preliminary\\_assessment.pdf](http://www.planning.nsw.gov.au/asp/pdf/07_0005_preliminary_assessment.pdf)

### **For more information**

Contact

Michelle Blackley at Mt Piper Power Station

Tel: 6354 8130

Email: [michelle.blackley@de.com.au](mailto:michelle.blackley@de.com.au)



# Stage 2 KVAD Planning Focus Meeting

Minutes of Meeting  
Tuesday 6 February 2007

Delta Electricity Corporate Offices  
Mt Piper Power Station

<b>Attendance:</b>	Steve Clipperton	SC	NSW DPI (Fisheries)
	Matthew Ryan	MR	NSW DPI (Fisheries)
	Patricia Cabezan	PC	Department of Planning (DoP)
	Ricardo Prieto-Curiel	RPC	Department of Planning (DoP)
	Jason Scarborough	JS	NSW DEC
	T. Keogh	TK	Sydney Catchment Authority (SCA)
	Ravi Sundaram	RS	Sydney Catchment Authority (SCA)
	Gary Wallace	GW	Lithgow City Council (LCC)
	Skye Byrnes	SB	Delta Electricity (DE)
	Nino Di Falco	NDF	Delta Electricity (DE)
	Peter Reed	PR	Delta Electricity (DE)
	Michelle Blakely	MB	Delta Electricity (DE)
	Nigel Buchanan	NB	PB
	Jo Woodmansey	JW	PB

Distribution:	Nino Di Falco	Delta Electricity
	Peter Reed	Delta Electricity
	Carlos Olles	PB

Item no.	Description	Action
1	PC and RPC of DoP provided an outline of the Part 3A approval process – conformed that the Stage 2 KVAD expansion proposal will be assessed as a Part 3A project and will require ministerial approval. DoP will finalise the ‘key issues’ identified in the Project Application and Preliminary Environmental Assessment and issue the Director-General’s Requirements (DGRs). DGR’s should be written within a couple of weeks of this meeting.	Government authorities to make submissions by 14/2/07
2	NB of PB gave a presentation describing the proposed Stage 2 KVAD expansion. Key points included: <ul style="list-style-type: none"> <li>▶ Additional infrastructure (i.e. stabilisation works, realignment of creek) make the proposal assessable under Part 3A of EP&amp;A Act</li> <li>▶ As the creek is located very close to the existing dam bund, the proposed stabilisation works will require the creek to be moved further from the dam</li> <li>▶ Discussion on reuse options/alternatives. NDF of Delta explained that numerous expressions of interest have been received from companies wanting to reuse the ash. An appropriate reuse has not yet been determined.</li> </ul>	

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	<ul style="list-style-type: none"> <li>▶ Operating hours will not necessarily be 24 hours. Delta is looking into reducing the out of business hours operations</li> <li>▶ Complaints regarding light and noise have been made by residents. Delta advised that reversing truck beepers were no longer used. The use of sub-contractors has also been banned with tight controls on the type of trucks used. The haulage contractor is aware and accountable for their actions. A risk assessment of the haul road has been undertaken.</li> <li>▶ The creek has been previously diverted so is not currently in its natural form. Buttressing of the dam wall will be approximately 20m thick. The creek is connected to the water table and is likely to have groundwater in it. The groundwater is acidic and likely to contain iron and manganese. The groundwater has been affected by historical mining activities.</li> <li>▶ Most ash is alkali, but the ash stored at KVAD has a pH of ~4-5. The ash is also low in calcium which increases its acidity and reduces reuse options.</li> <li>▶ Geotechnical investigations have been undertaken in the pine plantation area. Coal seams exist but are very deep in this area.</li> <li>▶ A store of sandstone exists under the pine plantation that can be used for the creek realignment. Delta and PB will seek advice from NSW DPI (Fisheries) and DNR during the detailed environmental assessment phase.</li> </ul>	
3	Site visit to the ash dam	
4	<p>The government agencies present were given a chance to make comment on the proposal. Key comments were as follows:</p> <ul style="list-style-type: none"> <li>▶ GW of LCC stressed the importance of community consultation and thought that consultation should begin prior to the detailed environmental assessment phase of the project. DoP agreed with this comment. A pamphlet/letter drop at affected resident's houses was suggested. PC of DoP stated she would be happy for residents to contact her to discuss the planning process.</li> </ul>	
5	<ul style="list-style-type: none"> <li>▶ SC and MR of DPI voiced concerns regarding the impact on the Cox's River catchment. They believe the creek has a reasonable existing habitat and want rehabilitation including meanders/ripples etc. included in the creek realignment plans. DPI would also like to see an assessment of the baseline habitat within the creek, involving the identification of potential threatened species etc.</li> <li>▶ DPI also suggested obtaining information on the quantity of water to</li> </ul>	

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	<p>be diverted and the possibility of arranging an offset with an equivalent volume of water. They would like information included in terms of the volume of water that will be lost from the sub-catchment. This may be in the form of a temporary offset.</p> <ul style="list-style-type: none"> <li>▶ DPI suggested that ongoing monitoring should occur during the construction and operational stages of the project. DPI should be consulted during the detailed EA phase as they have expertise in the areas of biodiversity and aquatic habitat.</li> <li>▶ MR of DPI suggested they would like more information on the impacts of leachate from the KVAD and the downstream impacts associated with this.</li> </ul>	
6	<ul style="list-style-type: none"> <li>▶ SCA representatives suggested water modelling be undertaken as well as obtaining information on water quality. They suggested the possibility of rehabilitating other sections of the creek. They suggested that bank erosion issues should be referred to DNR.</li> <li>▶ Delta advised they want to remove as much overburden from the storage area as possible to optimise the room for ash placement.</li> </ul>	
7	<p>JS of DEC made the following comments:</p> <ul style="list-style-type: none"> <li>▶ The proposed air modelling for the detailed EA should include potential contaminants (toxins)</li> <li>▶ The cumulative impacts of atmospheric TSP and PM<sub>10</sub> should also be assessed to take into account load from other power stations etc.</li> <li>▶ Mitigation measures should be implemented to minimise emissions</li> <li>▶ Noise impacts may have to be assessed under the Industrial Noise Policy and the noise assessment should include: <ul style="list-style-type: none"> <li>– A statement of the hours of operation</li> <li>– Mitigation measures</li> <li>– Contingency plan for times when conditions are unusual</li> </ul> </li> <li>▶ Sediment erosion controls should be implemented during construction</li> <li>▶ Groundwater, hydrogeology and surface water impacts should be assessed</li> <li>▶ The lost creek habitat should be compensated for or enhanced in the realigned section. More isolated flora and fauna should be encouraged by providing a micro-ecology suited to their needs</li> </ul>	

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	<ul style="list-style-type: none"> <li>▶ Captured water should be reused</li> <li>▶ Downstream impacts on lake Wallace and the Cox's River should be assessed</li> <li>▶ Reuse opportunities for the ash should be investigated further</li> <li>▶ The pipeline running near the creek is likely to be made from asbestos-cement. A risk assessment should be undertaken to determine whether to remove, leave in-situ or bury the pipe</li> <li>▶ A low likelihood of Aboriginal/cultural heritage exists at the site. Something should be mentioned in the Statement of Commitments regarding the procedure to undertake in the event something of cultural heritage is found.</li> </ul>	
8	<ul style="list-style-type: none"> <li>▶ RPC of DoP stated that another ash dam expansion has recently been approved, with details available on the DoP website</li> <li>▶ The options assessment should be expanded to provide more detail on the efforts already undertaken to find a suitable reuse for the ash. DoP would be happy to review this section of the document for suitability prior to submission.</li> </ul>	





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**ABN 80 078 004 798**  
NCSI Certified Quality System ISO 9001

Our reference: 2115206A/LT\_6246/SH/ks

29 August 2007

Dear Resident,

## **Expansion of Ash Storage at the Kerosene Vale Ash Repository Area**

This letter is to provide you with information about Delta Electricity's proposal to expand the Kerosene Vale Ash Repository Area.

This ash repository area is currently used for the placement of dry conditioned ash generated from the Wallerawang Power Station.

Parsons Brinckerhoff (PB) has been engaged by Delta Electricity (Delta) to undertake the environmental assessment of the proposal. Community consultation is an essential aspect of the environmental assessment process and this letter includes contact details if you seek further information or wish to make comments.

### *Background*

The placement and storage of ash is an important aspect of Delta's operations and is essential to the ongoing operation of the Wallerawang Power Station. Delta has, and continues to, investigate opportunities to reuse dry conditioned ash to minimise storage requirements but at the moment, most ash must be stored in the repository.

The Kerosene Vale Ash Repository Area was constructed between 1960 and 1990 during which time it was filled with a combination of by-product ash from the Wallerawang Power Station and mining spoil. The repository area was capped around 1990.

In 2001, Delta determined that there was an operational need to change from managing the ash by-product from Wallerawang Power Station from wet to dry ash. The Kerosene Vale Ash Repository Area has been used over the last five years for placement of dry conditioned ash generated by the Wallerawang Power Station.

### *The Proposal*

Existing storage at the site is now reaching capacity. In order for the Wallerawang Power Station to continue operating, Delta is proposing to further develop the Kerosene Vale Ash Repository Area.

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Delta will continue to investigate reuse of dry conditioned ash during the assessment, approval process and construction of the proposed new storage area. The assessment of reuse options will be incorporated into the environmental assessment being prepared.

*More information*

Information on the proposal is available on Delta's website ([www.de.com.au](http://www.de.com.au)). If you have any queries please contact PB's Community Liaison Representative by email at [kerosenevale@pb.com.au](mailto:kerosenevale@pb.com.au) or on 1800 008 708.

For more information on the environmental assessment, visit the Department of Planning website at <http://www.planning.nsw.gov.au/asp/register2006.asp#cw>. If you would like to view the Preliminary Environmental Assessment, go to [http://www.planning.nsw.gov.au/asp/pdf/07\\_0005\\_preliminary\\_assessment.pdf](http://www.planning.nsw.gov.au/asp/pdf/07_0005_preliminary_assessment.pdf). If you would like to discuss the preliminary environmental assessment in more detail, please contact Ricardo Prieto-Curiel at the Department of Planning on (02) 9228 6112.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Nigel Buchanan', followed by a vertical red line.

Nigel Buchanan  
Project Manager  
Parsons Brinckerhoff Australia Pty Limited



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Dear resident,

Please find enclosed a reissue of the letter regarding the expansion of the Kerosene Vale Ash Repository Area dated 29<sup>th</sup> August 2007.

This letter was supposed to contain a map of the existing repository area and the proposed development. Due to our oversight, the map was not included with the original letter.

The map has been included with this copy of the letter. PB apologises for any confusion this may have caused.

Please do not hesitate to contact us if you have any questions about this proposal.

Regards,

Nigel Buchanan  
Project Manager



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