

Project Approval

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

I, the Minister for Planning, approve the project referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.



The Hon. Kristina Keneally MP
Minister for Planning

Sydney

26 NOV 2008

2008

File No: S07/00001

SCHEDULE 1

Application No:	07_0005
Proponent:	Delta Electricity
Approval Authority:	Minister for Planning
Land:	Land generally located within Lot 16 DP 555844, Lot 17 DP 855844 and Lot 5 DP 829137, in the Lithgow local government area.
Project:	Extension of the existing Kerosene Vale Ash Repository Area to permit the continued disposal of ash generated by the Wallerawang Power Station.
Part 3A Project:	The proposal is a project to which Part 3A of the Act applies by virtue of an Order made by the Minister for Planning and gazetted on 29 July 2005.

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SCHEDULE 2

DEFINITIONS

Act, the	<i>Environmental Planning and Assessment Act 1979</i>
Ancillary Facility	Temporary facility for construction. Examples may include an office and amenities compound, construction compound, batch plant, materials storage compound, stockpile areas.
AEMR	Annual Environmental Management Report
Conditions of Approval	The Minister's Conditions of Approval for the project.
Construction	Includes all work in respect of the project other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, minor clearing (except where threatened species, populations or ecological communities would be affected), establishing ancillary facilities, or other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor adjustments to utilities).
DECC	NSW Department of Environment and Climate Change
Department, the	NSW Department of Planning
Director-General, the	Director-General of the NSW Department of Planning (or delegate)
Director-General's Approval	A written approval from the Director-General (or delegate). Where the Director-General's approval is required by a condition, the Director-General will endeavour to provide a response within one month of receiving an approval request. The Director-General may ask for additional information if the approval request is considered incomplete. When further information is requested the time taken for the Proponent to respond in writing will be added to the one month period.
DPI	NSW Department of Primary Industries
DWE	NSW Department of Water and Energy
Environment Protection Licence	An Environment Protection Licence issued by the NSW Environment Protection Authority pursuant to the <i>Protection of the Environment Operations Act 1997</i> .
Environmental Incident	Any incident with actual or potential significant impacts on the biophysical environment and/or off-site impacts on people.
EPA	NSW Environment Protection Authority as part of the NSW Department of Environment and Climate Change.
Minister, the	Minister for Planning
Operation	Means the Operation of the Project, including ash haulage, ash truck movements, ash placement and management, operation of on-site water management systems, landscaping and revegetation/rehabilitation of the site but does not include commissioning trials of equipment or temporary use of parts of the project during construction.
Project	The project that is the subject of Major Project Application 07_0005.
Proponent	Delta Electricity
Publicly Available	Available for inspection by a member of the general public (for example, available on an internet site or at a display centre).

Reasonable and Feasible	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account mitigation benefits, cost of mitigation versus benefits provided, community views, and nature and extent of potential improvements.
RTA	NSW Roads and Traffic Authority
SCA	Sydney Catchment Authority
Sensitive Receiver	Residence, educational institution (e.g. school, TAFE college), health care facility (e.g. nursing home, hospital), religious facility (e.g. church), or child care facility.
Stages A, B and C placement activities	Staged placement activities as defined in the Placement Strategy described in the document referred to in condition 1.1c) of this approval.

1. ADMINISTRATIVE CONDITIONS

Terms of Approval

- 1.1 The Proponent shall carry out the project generally in accordance with the:
 - a) Major Project Application 07_0005;
 - b) *Kerosene Vale – Stage 2 Ash Repository Area* (two volumes) – *Environmental Assessment*, prepared by Parsons Brinckerhoff and dated 1 April 2008;
 - c) *Kerosene Vale – Stage 2 Ash Repository Area – Submissions Report*, prepared by Parsons Brinckerhoff and dated 30 May 2008; and
 - d) the conditions of this approval.
- 1.2 In the event of an inconsistency between:
 - a) the conditions of this approval and any document listed from condition 1.1a) to 1.1c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
 - b) any of the documents listed from condition 1.1a) to 1.1c) inclusive, the most recent document shall prevail to the extent of the inconsistency.
- 1.3 The Proponent shall comply with the reasonable requirements of the Director-General arising from the Department's assessment of:
 - a) any reports, plans or correspondence that are submitted in accordance with this approval; and
 - b) the implementation of any actions or measures contained in these reports, plans or correspondence.

Limits of Approval

- 1.4 This approval shall lapse five years after the date on which it is granted, unless the works that are the subject of this approval are physically commenced on or before that time.

Statutory Requirements

- 1.5 The Proponent shall ensure that all licences, permits and approvals are obtained as required by law and maintained as required with respect to the project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals.

2. SPECIFIC ENVIRONMENTAL CONDITIONS

Ash Management

- 2.1 The Proponent shall prepare a long-term ash management strategy including a program for investigation and assessment of alternative ash management measures with a goal of 40% reuse of ash by 31 December 2013. The report shall be submitted to the Director-General within six months of the commencement of operations. The Proponent shall report on the status and outcomes of its investigations to the Director-General every two years from the commencement of the operation of the project, unless otherwise agreed by the Director-General.
- 2.2 To facilitate assessment of the viability of coal resources in the project area and provide a finite opportunity for their extraction, the Proponent shall undertake revised staging of ash placement activities as described in the document referred to in condition 1.1c) of this approval.

Noise Impacts

Construction Hours

- 2.3 Construction activities associated with the project shall only be undertaken during the following hours:
- a) 7:00 am to 6:00 pm, Mondays to Fridays, inclusive;
 - b) 8:00 am to 1:00 pm on Saturdays; and
 - c) at no time on Sundays or public holidays.
- 2.4 Activities resulting in impulsive or tonal noise emission (such as rock breaking or rock hammering) shall be limited to 8:00 am to 12:00 pm, Monday to Saturday and 2:00 pm to 5:00 pm, Monday to Friday. The Proponent shall not undertake such activities for more than three continuous hours and must provide a minimum one-hour respite period.
- 2.5 Construction outside the hours stipulated in condition 2.3 of this approval is permitted in the following circumstances:
- a) where construction works do not cause audible noise at any sensitive receiver; or
 - b) for the delivery of materials required outside these hours by the Police or other authorities for safety reasons; or
 - c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.
- 2.6 The hours of construction activities specified under condition 2.3 of this approval may be varied with the prior written approval of the Director-General. Any request to alter the hours of construction specified under condition 2.3 shall be:
- a) considered on a case-by-case basis;
 - b) accompanied by details of the nature and need for activities to be conducted during the varied construction hours; and
 - c) accompanied by any information necessary for the Director-General to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of sensitive receivers in the vicinity of the site.

Construction Noise

- 2.7 The construction noise objective for the project is to manage noise from construction activities (as measured by a L_{A10} (15 minute) descriptor) so as not to exceed the background L_{A90} noise level by more than 10 dB(A) at any sensitive receiver.

Any activities that have the potential for noise emissions that exceed the objective must be identified and managed in accordance with the Construction Noise Management Plan (as referred to under condition 6.3b) of this approval). The Proponent shall implement all reasonable and feasible noise mitigation measures with the aim of achieving the construction noise objective.

Operational Hours

- 2.8 Operational activities associated with the project shall only be undertaken from 7.00 am to 10.00 pm Monday to Sunday.
- 2.9 Within six months of commencement of operation of the project the Proponent shall prepare and submit to the Director-General a review of the logistical arrangements for ash haulage and placement to determine the feasibility of reducing the hours of operation. If, as a result of the review, it is determined that ash haulage and placement times can commence later and/or finish earlier, the Proponent shall aim to observe the reduced hours whenever possible.
- 2.10 Operations outside the hours stipulated in condition 2.8 of this approval are only permitted in the following emergency situations:
- a) where it is required to avoid the loss of lives, property and/or to prevent environmental harm; or
 - b) breakdown of plant and/or equipment at the repository or the Wallerawang Power Station with the effect of limiting or preventing ash storage at the power station outside the operating hours defined in condition 2.8; or
 - c) a breakdown of an ash haulage truck(s) preventing haulage during the operating hours stipulated in condition 2.8 combined with insufficient storage capacity at the Wallerawang Power Station to store ash outside of the project operating hours; or
 - d) in the event that the National Electricity Market Management Company (NEMMCO), or a person authorised by NEMMCO, directs the Proponent (as a licensee) under the National Electricity Rules to maintain, increase or be available to increase power generation for system security and there is insufficient ash storage capacity at the Wallerawang Power Station to allow for the ash to be stored.

In the event of conditions 2.10b) or 2.10c) arising, the Proponent is to take all reasonable and feasible measures to repair the breakdown in the shortest time possible.

- 2.11 In the event that an emergency situation as referred to under condition 2.10b) or 2.10c) occurs more than once in any two month period, the Proponent shall prepare and submit to the Director-General for approval a report including, but not limited to:
- a) the dates and a description of the emergency situations;
 - b) an assessment of all reasonable and feasible mitigation measures to avoid recurrence of the emergency situations;
 - c) identification of a preferred mitigation measure(s); and
 - d) timing and responsibility for implementation of the mitigation measure(s).

The report is to be submitted to the Director-General within 60 days of the second exceedence occurring. The Proponent shall implement all reasonable and feasible mitigation measures in accordance with the requirements of the Director-General.

- 2.12 The Proponent shall notify the DECC prior to undertaking any emergency ash haulage or placement operations outside of the hours of operation stipulated in condition 2.8 of this approval and keep a log of such operations.
- 2.13 The Proponent shall notify the Director-General in writing within seven days of undertaking any emergency ash haulage or placement operations outside of the hours of operation stipulated in condition 2.8 of this approval.

- 2.14 The Proponent shall notify nearby sensitive receivers (as defined in the Operational Noise Management Plan required under condition 6.5a) of this approval) prior to 8.00 pm where it is known that emergency ash haulage or placement operations will be required outside of the hours of operation stipulated in condition 2.8 of this approval.

Operational Noise

- 2.15 The cumulative operational noise from the ash placement area and ash haulage activity shall not exceed an L_{Aeq} (15 minute) of 40 dB(A) at the nearest most affected sensitive receiver during normal operating hours as defined in condition 2.8 of this approval.

This noise criterion applies under the following meteorological conditions:

- a) wind speeds up to 3 m/s at 10 metres above ground; and/or
- b) temperature inversion conditions of up to 3°C/100 m and source to receiver gradient winds of up to 2 m/s at 10 m above ground level.

This criterion does not apply where the Proponent and the affected landowner have reached a negotiated agreement in regard to noise, and a copy of the agreement has been forwarded to the Director-General and the DECC.

- 2.16 The Proponent shall implement measures to ensure noise attenuation of trucks. These measures may include, but are not necessarily limited to, installation of residential class mufflers, engine shrouds, body dampening, speed limiting, fitting of rubber stoppers to tail gates, limiting the use of compression braking, and ensuring trucks operate in a one-way system at the ash repository where feasible.
- 2.17 The Proponent shall liaise with the owner/operator of Angus Place Coal Mine with the aim of preparing a protocol which provides for a co-operative approach for the management and mitigation of noise impacts associated with coal and ash truck movements along the private haul road.
- 2.18 Where noise monitoring (as required by conditions 3.2 or 3.3 of this approval) identifies any non-compliance with the operational noise criterion specified under condition 2.15 of this approval the Proponent shall prepare and submit to the Director-General for approval a report including, but not limited to:
- a) an assessment of all reasonable and feasible physical and other mitigation measures for reducing noise at the source including, but not limited to -
 - i) construction of a noise barrier along the haulage road,
 - ii) alternative ash haulage routes, and
 - iii) alternative methods of ash conveyance to the repository; and
 - b) identification of the preferred measure(s) for reducing noise at the source;
 - c) feedback from directly affected property owners and the DECC on the proposed noise mitigation measures; and
 - d) location, type, timing and responsibility for implementation of the noise mitigation measure(s).

The report is to be submitted to the Director-General within 60 days of undertaking the noise monitoring which has identified exceedances of the operational noise criterion specified under condition 2.15, unless otherwise agreed to by the Director-General. The Proponent shall implement all reasonable and feasible mitigation measures in accordance with the requirements of the Director-General.

Additional Noise Mitigation Measures

- 2.19 If, after the implementation of all reasonable and feasible source controls, as identified in the report required by condition 2.18, the noise generated by the project exceeds the criterion stipulated in condition 2.15 at:
- a) any sensitive receiver in existence at the date of this approval; or
 - b) any residential dwelling for which an approval has been sought or obtained under the *Environmental Planning and Assessment Act 1979* no later than six months after the confirmation of operational noise levels;

upon receiving a written request from an affected landowner (unless that landowner has acquisition rights under condition 2.20 of this approval and has requested acquisition) the Proponent shall implement additional noise mitigation measures such as double glazing, insulation, air conditioning and or other building acoustic treatments at any residence on the land, in consultation with the landowner.

For the purpose of this condition and condition 2.20, confirmation of operational noise levels means:

- a) completion of the operational noise review required under condition 3.2 of this approval; and
- b) implementation of any source controls, as required under condition 2.18 of this approval, should the operational noise review indicate noise levels in excess of the operational noise criterion specified in condition 2.15; and
- c) monitoring of operational noise levels, as required under condition 3.3b) of this approval, following the implementation of any source controls.

The additional mitigation measures must be reasonable and feasible. If within three months of receiving this request from the landowner the Proponent and landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution, whose decision shall be final.

Land Acquisition Criteria

- 2.20 If, after the implementation of all reasonable and feasible source controls, as identified in the report required by condition 2.18, the noise generated by the project exceeds the criterion stipulated in condition 2.15 by more than 5 dB(A):
- a) at a sensitive receiver in existence at the date of this approval; or
 - b) at any residential dwelling for which an approval has been sought or obtained under the *Environmental Planning and Assessment Act 1979* prior to the landholder receiving written notification that they are entitled to land acquisition rights, as per condition 2.25 of this approval; or
 - c) over 25% or more of the area of a vacant allotment in existence at the date of this approval, and where a dwelling is permissible under the *Environmental Planning and Assessment Act 1979* at that date, with the exception of land that is currently used for industrial or mining purposes;

the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 2.22 to 2.24 of this approval.

Any landowner that has agreed to, or property that has been the subject of, the application of additional noise mitigation measures under condition 2.19 of this approval waives the right to land acquisition.

- 2.21 The land acquisition rights under condition 2.20 of this approval do not apply to landowners who have sought approval to subdivide their land after the date of this approval, unless the subdivision is created pursuant to condition 2.24 of this approval.

- 2.22 Within three months of receiving a written request from a landowner with acquisition rights under condition 2.20 of this approval, the Proponent shall make a binding written offer to the landowner based on:
- (a) the current market value of the landowner's interest in the property at the date of this written request, as if the property was unaffected by the project which is the subject of the project application, having regard to the:
 - i) existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
 - ii) presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of condition 2.19 of this approval;
 - (b) the reasonable costs associated with:
 - i) relocating within the Lithgow local government area, or to any other local government area determined by the Director-General;
 - ii) obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and
 - (c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the Proponent and landowner cannot agree on the acquisition price of the land, and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Director-General for resolution.

Upon receiving such a request, the Director-General shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, and/or terms upon which the land is to be acquired.

Within 14 days of receiving the independent valuer's determination, the Proponent shall make a written offer to purchase the land at a price not less than the independent valuer's determination.

If the landowner refuses to accept this offer within six months of the date of the Proponent's offer, the Proponent's obligations to acquire the land shall cease, unless otherwise agreed by the Director-General.

- 2.23 The Proponent shall bear the costs of any valuation or survey assessment requested by the independent valuer or the Director-General and the costs of determination referred to above.
- 2.24 If the Proponent and landowner agree that only part of the land shall be acquired, then the Proponent shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.
- 2.25 The Proponent shall provide written notice to all landowners that are entitled to rights under conditions 2.19 and 2.20 within 21 days of determining the landholdings where additional noise mitigation measures or land acquisition apply. For the purpose of condition 2.20b), this condition only applies where operational noise levels have been confirmed in accordance with the definition in condition 2.19.

Sawyers Swamp Creek Realignment

- 2.26 The Proponent shall prepare and submit to the Director-General for approval a **Rehabilitation Plan** addressing the restoration of the in-stream area (i.e. bed and bank) of Sawyers Swamp Creek and the associated riparian corridor at least two months prior to the realignment of the creek, unless otherwise agreed by the Director-General. The Plan shall be developed in consultation with, and to the satisfaction of, the DPI (Fisheries) and shall include, but not necessarily be limited to:
- a) the objectives and outcomes that would be sought through the implementation of the Plan;
 - b) performance criteria for the realigned creek and associated riparian zone against which the impact of the project on the ecological health of Sawyers Swamp Creek will be assessed;
 - c) methodology used in developing the realignment planform;
 - d) details of the final creek realignment including bank, meander, depth and slope characteristics (including pool-riffle sequences), flow and channel capacity characteristics, scour potential, and in-stream vegetation;
 - e) timing of the creek realignment;
 - f) a description of the proposed riparian zone and restoration works along the entire length of the creek realignment, including details of plant species to be used in rehabilitation;
 - g) details of any proposed riparian and in-stream controls to be implemented in the reach upstream of the alignment to ensure the effectiveness of the proposed creek realignment and rehabilitation;
 - h) a description of the initial and ongoing weed control measures;
 - i) the methodology and timing of post realignment monitoring of the hydrology and ecological health of the aquatic and riparian vegetation as required under conditions 3.6 and 3.7 of this approval, respectively;
 - j) mitigation measures to be implemented in the event of an identified decline in ecosystem health as a direct result of the realignment of the creek or construction or operation of the project, including a timetable for implementation;
 - k) program for ongoing maintenance of the realigned creek system and associated riparian zone;
 - l) any compensatory measures to offset the impacts of the project on the aquatic habitat and local waterways, if and as required by the DPI (Fisheries); and
 - m) provisions for periodic reporting of monitoring results to the DPI (Fisheries).

The Proponent shall not commence any construction work that would result in the disturbance of Sawyers Swamp Creek until the Rehabilitation Plan has been approved by the Director-General.

- 2.27 The rehabilitation and restoration of Sawyers Swamp Creek and associated riparian zone are to be consistent with the *Works and Watercourse Design Guideline* (DWE, April 2007) and *Guidelines for Controlled Activities: Vegetation Management Plans* (DWE, February 2008).
- 2.28 A riparian zone consisting of local native plant species shall be established and maintained in and adjacent to Swayers Swamp Creek, for the entirety of the site and be a minimum width of 20 m on both sides of the creek. Seed and propagule sources are to be from local botanical provenance and same general habitat.
- 2.29 The riparian zone referred to under condition 2.28 of this approval shall be maintained for a period of at least five years after final planting.

Surface Water Quality

Water Quality

- 2.30 The Proponent shall take all reasonable and feasible measures to prevent discharge of sediments and pollutants from the construction and operation of the project entering waterways.

Note: Section 120 of the *Protection of the Environment Operations Act 1997* prohibits the pollution of water except where expressly provided by an Environment Protection Licence.

- 2.31 Earthworks not associated with the realignment of Sawyers Swamp Creek shall not be undertaken within 50 m of the creek where reasonable and feasible.
- 2.32 All equipment, machinery and vehicles associated with the construction and operation of the project shall be operated and maintained in a manner that minimises the potential for oil and grease spills/leaks.

Air Quality Impacts

- 2.33 The Proponent shall construct and operate the project in a manner that minimises dust impacts generated by construction works and operational activities, including wind-blown and traffic-generated dust, on the receiving environment. All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.
- 2.34 The Proponent shall ensure that the load carrying compartment(s) of all ash haulage trucks are covered at all times except when loading or unloading ash material.

Lighting Emissions

- 2.35 The Proponent shall take all practicable measures to mitigate off-site lighting impacts from the project and ensure all external lighting associated with the project complies with *Australian Standard AS4282 1997 – Control of the Obtrusive Effects of Outdoor Lighting*.

Construction Traffic and Transport Impacts

- 2.36 The Proponent shall ensure that construction vehicles associated with the project:
- minimise the use of local roads (though residential streets and town centres) to gain access to the site;
 - adhere to any nominated haulage routes identified in the Construction Traffic Management Plan as referred to in condition 6.3a) of this approval; and
 - adhere to a Construction Vehicle Code of Conduct prepared to manage driver behaviour along the local road network to address traffic impacts (and associated noise) along nominated haulage routes.

Heritage Impacts

- 2.37 The Proponent shall ensure that all construction personnel are educated on their obligations in respect of the protection of Aboriginal and non-indigenous heritage sites and items.
- 2.38 If any previously unidentified heritage sites or items (Aboriginal and/or non-indigenous) are discovered during construction works or operational activities, all work likely to affect the heritage sites or item(s) is to cease immediately and the discovery of the objects shall be reported to DECC or the Department as relevant.

Waste Management

- 2.39 All waste materials shall be assessed, classified, managed and disposed of in accordance with *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes* (EPA, 1999).
- 2.40 All waste materials removed from the site shall only be directed to a waste management facility lawfully permitted to accept the materials.
- 2.41 The Proponent shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.

3. ENVIRONMENTAL MONITORING

Construction Noise Monitoring

- 3.1 The Proponent shall prepare and implement a **Construction Noise Monitoring** Program to confirm the predictions of the noise assessment detailed in the document referred to under condition 1.1b) of this approval and assess compliance against the construction noise criterion stipulated in condition 2.7 of this approval. The noise monitoring program shall be prepared in consultation with, and to the satisfaction of, the DECC. The monitoring program shall form part of the Construction Noise Management Plan referred to in condition 6.3b) of this approval and must include monitoring of the construction noise generated during:
- a) the realignment Sawyers Swamp Creek;
 - b) construction of the stabilisation berm;
 - c) excavation of the former pine plantation area;
 - d) relocation and construction of surface water management structures; and
 - e) concurrent construction activities.

The Proponent shall forward to the DECC and the Director-General a report containing the results of each noise assessment and describing any non-compliance within 14 days of conducting a noise assessment.

Operational Noise Review

- 3.2 Within 60 days of the commencement of operation of the project, unless otherwise agreed to by the Director-General, the Proponent shall submit for the approval of the Director-General an **Operational Noise Review** to confirm the operational noise impacts of the project. The Operational Noise Review must be prepared in consultation with, and to the satisfaction of, the DECC. The Review shall:
- a) identify the appropriate operational noise objectives and level for sensitive receivers;
 - b) describe the methodologies for noise monitoring including the frequency of measurements and location of monitoring sites;
 - c) document the operational noise levels at sensitive receivers as ascertained by the noise monitoring program;
 - d) assess the noise performance of the project against the noise criterion specified in condition 2.15 of this approval and the predicted noise levels as detailed in the report referred to under condition 1.1b) of this approval; and
 - e) provide details of any entries in the Complaints Register (as required under condition 5.4 of this approval) relating to noise impacts.

Where monitoring indicates noise levels in excess of the operational noise criterion specified in condition 2.15 of this approval, the Proponent shall prepare a report as required by condition 2.18 of this approval.

Ongoing Operational Noise Monitoring

- 3.3 The Proponent shall prepare and implement an **Operational Noise Monitoring Program** to assess compliance against the operational noise criterion stipulated in condition 2.15 of this approval, throughout the life of the project. The noise monitoring program shall be prepared in consultation with, and to the satisfaction of, the DECC.

The noise monitoring program shall be prepared in accordance with the requirements of the *New South Wales Industrial Noise Policy* (EPA, 2000) and must include, but not be limited to:

- a) monitoring during ash placement in the far western area of the site adjacent to the haul road; and
- b) monitoring of the effectiveness of any noise mitigation measures implemented under condition 2.18 of this approval, against the noise criterion specified in condition 2.15 of this approval.

Noise from the project is to be measured at the most affected point on or within the residential boundary, or at the most affected point within 30 metres of a dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise criterion stipulated in condition 2.15 of this approval. Where it can be demonstrated that direct measurement of noise from the project is impractical, the DECC may accept alternative means of determining compliance (see Chapter 11 of the *NSW Industrial Noise Policy*). The modification factors in Section 4 of the *NSW Industrial Noise Policy* shall also be applied to the measured noise levels where applicable.

The Proponent shall forward to the DECC and the Director-General a report containing the results of any non-compliance within 14 days of conducting a noise assessment.

Where monitoring indicates noise levels in excess of the operational noise criterion specified in condition 2.15 of this approval, approval, the Proponent shall prepare a report as required by condition 2.18 of this approval.

The monitoring program shall form part of the Operational Noise Management Plan referred to in condition 6.5a) of this approval.

Groundwater Monitoring

- 3.4 The Proponent shall prepare and implement a **Groundwater Monitoring Program** to monitor the impacts of ash placement activities on local groundwater quality and hydrology. The Program shall be developed in consultation with, and to the satisfaction of, the SCA, and shall describe the location, frequency, rationale and procedures and protocols for collecting groundwater samples as well as the parameters analysed and methods of analysis. The monitoring program shall be ongoing for the life of the project and include, but not be limited to:

- a) monitoring at established bore sites (or replacement bore sites in the event that existing sites are damaged or lost) as described in the document referred to under condition 1.1b) of this approval; and
- b) a schedule for periodic monitoring of groundwater quality, depth and flow at all monitoring sites, at an initial frequency of no less than once every month for the first 12 months of operation.

The monitoring program shall form part of the Groundwater Management Plan referred to in condition 6.5b) of this approval.

Surface Water Quality Monitoring

- 3.5 The Proponent is to implement a surface water quality monitoring program to monitor the impacts of the ash placement activities on, and the realignment of, Sawyers Swamp Creek. The Program shall be developed in consultation with and to the satisfaction of the DPI (Fisheries) and SCA, and shall describe the location, frequency, rationale and the procedures and protocols for collecting water samples as well as the parameters analysed and methods of analysis. The program shall include, but not necessarily be limited to:
- a) monitoring at the four existing water quality monitoring sites as described in the document referred to under condition 1.1b) of this approval;
 - b) monitoring downstream of the realigned section of Sawyers Swamp Creek;
 - c) monitoring at groundwater discharge points into Sawyers Swamp Creek;
 - d) wet weather monitoring with a minimum of two events recorded within the first 12 months of both the operation of the project and post realignment of Sawyers Swamp Creek; and
 - e) a schedule for periodic monitoring of surface quality at all sites throughout the life of the project, at an initial frequency of no less than once every month for the first 12 months and must include, but not be limited to, dissolved oxygen, turbidity, total phosphorus and total nitrogen.

The monitoring program shall form part of the Surface Water Management Plan referred to in condition 6.5c) of this approval.

Sawyers Swamp Creek Realignment Monitoring

- 3.6 The Proponent is to implement a **Hydrological Monitoring Program** to assess and quantify the impacts and effectiveness of the realigned section of Sawyers Swamp Creek in consultation with and to the satisfaction of the DPI (Fisheries). Monitoring is to be undertaken for a period of five (5) years upon completion of the creek realignment and is to include scour and erosion monitoring. The program must include sampling before and after the realignment works and include a sampling site downstream of the realigned section of creek. In the first 12 months following completion of the realignment, monitoring is to be undertaken at least every three (3) months upon completion of the creek realignment and after any wet weather/bankful flow event.

The monitoring program shall form part of the Rehabilitation Plan for the project as referred to in condition 2.26 of this approval.

- 3.7 The Proponent shall prepare an **Ecological Monitoring Program**, in consultation with, and to the satisfaction of, the DPI (Fisheries), to monitor and quantify the impacts of the realignment of Sawyers Swamp Creek on the ecology and ecosystems of the creek and the associated riparian environment. The Program shall include, but not necessarily be limited to:
- a) a sampling, data collection and assessment regime to establish baseline ecological health and for ongoing monitoring of ecological health of the in-stream environment during construction and throughout the life of the project;
 - b) at least one in-stream sampling period prior to the realignment of Sawyers Swamp Creek and at least two (2) sampling periods following the realignment of Sawyers Swamp Creek; and
 - c) an assessment regime for monitoring the ecological health of the riparian environment for a period of at least five (5) years after final planting.

The monitoring program shall form part of the Rehabilitation Plan for the project as referred to in condition 2.26 of this approval.

Air Quality Monitoring

- 3.8 The Proponent shall prepare an **Air Quality Monitoring Program**, in consultation with, and to the satisfaction of, the DECC. The Program shall include, but not necessarily be limited to, monitoring for dust at the monitoring sites identified in the document referred to under condition 1.1b) of this approval. The air quality monitoring program shall be ongoing for the life of the project, including final rehabilitation and stabilisation of the site.

The monitoring program shall form part of the Air Quality Management Plan referred to in condition 6.5d) of this approval.

4. COMPLIANCE MONITORING AND TRACKING

- 4.1 Prior to each of the events listed below, the Proponent shall certify in writing to the satisfaction of the Director-General that it has complied with all conditions of this approval applicable prior to that event:

- a) commencement of any construction works on the land subject of this approval; and
- b) commencement of operation of the project.

- 4.2 The Proponent shall develop and implement a **Compliance Tracking Program** for the project, prior to commencing operations, to track compliance with the requirements of this approval and shall include, but not necessarily limited to:

- a) provisions for periodic review of the compliance status of the project against the requirements of this approval and the Statement of Commitments detailed in the document referred to in condition 1.1c) of this approval;
- b) provisions for periodic reporting of the compliance status to the Director-General;
- c) a program for independent environmental auditing in accordance with *AS/NZ ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing*;
- d) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance;
- e) mechanisms for recording environmental incidents and actions taken in response to those incidents;
- f) provisions for reporting environmental incidents to the Director-General during construction and operation; and
- g) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.

The Compliance Tracking Program shall be implemented prior to operation of the project with a copy submitted to the Director-General for approval within four weeks of commencement of the project, unless otherwise agreed by the Director-General.

- 4.3 Nothing in this approval restricts the Proponent from utilising any existing compliance tracking programs administrated by the Proponent to satisfy the requirements of condition 4.2. In doing so, the Proponent must demonstrate to the Director-General how these systems address the requirements and/or have been amended to comply with the requirements of the condition.
- 4.4 The Proponent shall meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of this approval, and general consistency with the documents listed under condition 1.1 of this approval.

5. COMMUNITY INFORMATION AND COMPLAINTS MANAGEMENT

Provision of Information

- 5.1 Prior to the commencement of the project, the Proponent shall establish and maintain a website for the provision of electronic information associated with the project. The Proponent shall, subject to confidentiality, publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:
- a) the documents referred to under condition 1.1 of this approval;
 - b) this project approval, Environment Protection Licence and any other relevant environmental approval, licence or permit required and obtained in relation to the project;
 - c) all strategies, plans and programs required under this project approval, or details of where this information can be viewed;
 - d) information on construction and operational progress;
 - e) the outcomes of compliance tracking in accordance with the requirements of this project approval.
- 5.2 The Proponent shall make all documents required to be provided under condition 5.1 of this approval publicly available.

Complaints and Enquiries Procedure

- 5.3 Prior to the commencement of the project, the Proponent shall ensure that the following are available for community complaints and enquiries during construction and operation:
- a) a 24 hour contact number(s) on which complaints and enquiries about construction and operational activities may be registered;
 - b) a postal address to which written complaints and enquiries may be sent; and
 - c) an email address to which electronic complaints and enquiries may be transmitted.

The telephone number, postal address and email address shall be published in a newspaper circulating in the local area prior to the commencement of the project. The above details shall also be provided on the website required by condition 5.1 of this approval.

- 5.4 The Proponent shall record the details of all complaints received through the means listed under condition 5.3 of this approval in an up-to-date **Complaints Register**. The Register shall record, but not necessarily be limited to:
- a) the date and time of the complaint;
 - b) the means by which the complaint was made (e.g. telephone, email, mail, in person);
 - c) any personal details of the complainant that were provided, or if no details were provided a note to that effect;
 - d) the nature of the complaint;
 - e) the time taken to respond to the complaint;
 - f) any investigations and actions taken by the Proponent in relation to the complaint;
 - g) any follow-up contact with, and feedback from, the complainant; and
 - h) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the Director-General upon request.

6. ENVIRONMENTAL MANAGEMENT

Environmental Representative

- 6.1 Prior to the commencement of any construction or operational activities, or as otherwise agreed by the Director-General, the Proponent shall nominate for the approval of the Director-General a suitably qualified and experienced Environmental Representative(s) independent of the design, construction and operation personnel. The Proponent shall engage the Environmental Representative(s) during any construction activities, and throughout the life of the project, or as otherwise agreed by the Director-General. The Environmental Representative(s) shall:
- a) oversee the implementation of all environmental management plans and monitoring programs required under this approval, and advise the Proponent upon the achievement of these plans/programs;
 - b) have responsibility for considering and advising the Proponent on matters specified in the conditions of this approval and the Statement of Commitments as referred to under condition 1.1c) of this approval;
 - c) oversee the implementation of the environmental auditing of the project in accordance with the requirements of condition 4.2 of this approval and all relevant project Environmental Management System(s); and
 - d) be given the authority and independence to recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts, and, failing the effectiveness of such steps, to recommend to the Proponent that relevant activities are to be ceased as soon as reasonably practicable if there is a significant risk that an adverse impact on the environment will be likely to occur.

Construction Environmental Management

- 6.2 Prior to the commencement of construction work, the Proponent shall prepare and implement a **Construction Environmental Management Plan (CEMP)**. The CEMP shall outline the environmental management practices and procedures to be followed during construction. The CEMP shall be prepared in accordance with *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004).

The Construction Environmental Management Plan for the project (or any stage of the project) shall be submitted to the Director-General for approval at least four weeks prior to the commencement of any construction work associated with the project (or stage as relevant), unless otherwise agreed by the Director-General. Construction shall not commence until written approval has been received from the Director-General.

- 6.3 As part of the Construction Environmental Management Plan for the project, the Proponent shall prepare and implement the following plans:
- a) a **Construction Traffic Management Plan**, prepared in consultation with RTA, the relevant Council and emergency services to manage the construction traffic impacts of the project, including but not limited to:
 - i) identifying construction vehicle volumes (construction staff vehicles, heavy vehicles and oversized loads) and haulage routes;
 - ii) identifying any road closures and/or traffic detours during the haulage of oversized loads as agreed to by the relevant roads authority;
 - iii) detailing a Construction Vehicle Code of Conduct to set driver behaviour controls to minimise impacts on the land uses along haulage routes (including noise minimisation measures); and
 - iv) complying with the document *Procedures for Use in the Preparation of a Traffic Management Plan* (RTA, 2001).
 - b) a **Construction Noise Management Plan** to detail how construction noise impacts would be minimised and managed. The Strategy shall be developed in consultation with, and to the satisfaction of, the DECC and shall include, but not necessarily be limited to:
 - i) details of construction activities and an indicative schedule for construction works;

- ii) identification of construction activities that have the potential to generate noise impacts on sensitive receivers,
 - iii) procedures for assessing noise levels at sensitive receivers and compliance;
 - iv) details of the reasonable and feasible actions and measures to be implemented to minimise noise impacts and, if any noise exceedance is detected, how any non-compliance would be rectified; and
 - v) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise amenity.
- c) an **Erosion and Sediment Control Plan** to detail measures to minimise erosion and the discharge of sediment and other pollutants to land and/or water during construction works. The Plan must include, but not necessarily be limited to:
- i) identification of the construction activities that could cause soil erosion or discharge sediment or water pollutants from the site;
 - ii) a description of the management methods to minimise soil erosion or discharge of sediment or water pollutants from the site, including a strategy to minimise the area of bare surfaces, stabilise disturbed areas, and minimise bank erosion; and
 - iii) demonstration that the proposed erosion and sediment control measures will conform with, or exceed, the relevant requirements of *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004).

Operational Environmental Management

- 6.4 The Proponent shall prepare and implement an **Operation Environmental Management Plan** to detail an environmental management framework, practices and procedures to be followed during operation of the project. The Plan shall be consistent with *Guideline for the Preparation of Environmental Management Plans* (DIPNR 2004) and shall include, but not necessarily be limited to:
- a) identification of all statutory and other obligations that the Proponent is required to fulfil in relation to operation of the project, including all approvals, licences, approvals and consultations;
 - b) a description of the roles and responsibilities for all relevant employees (including contractors) involved in the operation of the project;
 - c) overall environmental policies and principles to be applied to the operation of the project;
 - d) standards and performance measures to be applied to the project, and a means by which environmental performance can be periodically reviewed and improved, where appropriate;
 - e) management policies to ensure that environmental performance goals are met and to comply with the conditions of this approval;
 - f) the additional plans listed under condition 6.5 of this approval; and
 - g) the environmental monitoring requirements outlined under conditions 3.3 to 3.5 inclusive and 3.8 of this approval.

The Plan shall be submitted for the approval of the Director-General no later than four weeks prior to the commencement of operation of the project, unless otherwise agreed by the Director-General. Operation shall not commence until written approval has been received from the Director-General.

Nothing in this approval precludes the Proponent from incorporating the requirements of the Operational Environmental Management Plan into existing environmental management systems and plans administered by the Proponent.

- 6.5 As part of the Operation Environmental Management Plan for the project, required under condition 6.4 of this approval, the Proponent shall prepare and implement the following Management Plans:
- a) an **Operational Noise Management Plan** to detail measures to mitigate and manage noise during operation of the project. The Plan shall be prepared in consultation with, and to the satisfaction of, the DECC and include, but not necessarily be limited to:
 - i) procedures to ensure that all reasonable and feasible noise mitigation measures are applied during operation of the project;
 - ii) identification of all relevant sensitive receivers and the applicable criteria at those receivers commensurate with the noise limit specified under condition 2.15 of this approval;
 - iii) identification of activities that will be carried out in relation to the project and the associated noise sources;
 - iv) noise monitoring procedures (as referred to in condition 3.3 of this approval) for periodic assessment of noise impacts at the relevant receivers against the noise limits specified under this approval and the predicted noise levels as detailed in the report referred to under condition 1.1b) of this approval;
 - v) details of all management methods and procedures that will be implemented to control individual and overall noise emissions from the site during operation;
 - vi) procedures and corrective actions to be undertaken if non-compliance against the operational noise criteria is detected; and
 - vii) provisions for periodic reporting of results to DECC.
 - b) a **Groundwater Management Plan** to detail measures to mitigate and manage groundwater impacts. The Plan shall be prepared in consultation with, and to the satisfaction of, the SCA and include, but not necessarily be limited to:
 - i) baseline data on groundwater quality, depth and flow in the project area;
 - ii) groundwater objectives and impact assessment criteria;
 - iii) a program to monitor groundwater flows and groundwater quality in the project area as required by condition 3.4 of this approval;
 - iv) a protocol for the investigation of identified exceedences of the groundwater impact assessment criteria;
 - v) a response plan to address potential exceedences and groundwater quality impacts; and
 - vi) provisions for periodic reporting of results to the SCA.
 - c) a **Surface Water Management Plan** to outline measures that will be employed to manage water on the site, to minimise soil erosion and the discharge of sediments and other pollutants to lands and/or waters throughout the life of the project. The Plan shall be based on best environmental practice and shall be prepared in consultation with, and to the satisfaction of, the SCA and DPI (Fisheries). The Plan shall include, but not necessarily be limited to:
 - i) baseline data on the water quality and flow in Sawyers Swamp Creek up to the date of this approval;
 - ii) water quality objectives and impact assessment criteria for Sawyers Swamp Creek;
 - iii) a program to monitor surface water quality in Sawyers Swamp Creek as referred to in condition 3.5 of this approval;
 - iv) a protocol for the investigation of identified exceedences in the impact assessment criteria;
 - v) a response plan to address potential adverse surface water quality exceedences;
 - vi) a site water management strategy identifying clean and dirty water areas for Stages A, B and C of the project and the associated water management measures including erosion and sediment controls and provisions for recycling/reuse of water and the procedures for decommissioning water management structures on the site; and
 - viii) provisions for periodic reporting of results to the DPI (Fisheries) and the SCA.

- d) an **Air Quality Management Plan** to outline measures to minimise impacts from the project on local air quality. The Plan shall be prepared in consultation with, and to the satisfaction of, the DECC and include, but not necessarily be limited to:
 - i) baseline data on dust deposition levels;
 - ii) air quality objectives and impact assessment criteria;
 - iii) an air quality monitoring program as referred to in condition 3.8 of this approval;
 - iv) an assessment of alternative methods of ash placement to minimise the exposure of active placement areas to prevailing winds;
 - v) mitigation measures to be incorporated during emplacement activities and haulage of ash;
 - vi) an operating protocol for the repository irrigation system including activation rates, application rates and area of coverage;
 - vii) a protocol for the investigation of visible emissions from the repository area;
 - viii) a response plan to address visible emissions from the repository area; and
 - ix) provisions for periodic reporting of results to the DECC.
- e) a **Landscape/Revegetation Plan** to outline measures to minimise the visual impacts of the repository and ensure the long-term stabilisation of the site and compatibility with the surrounding land fabric and land use. The Plan shall include, but not necessarily be limited to:
 - i) identification of design objectives and standards based on local environmental values, vistas, and land uses;
 - ii) a description of short- and long-term revegetation measures;
 - iii) a schedule of species to be used in revegetation;
 - iv) timing and progressive implementation of revegetation works as placement areas are completed, including landscape plans; and
 - v) procedures and methods to monitor and maintain revegetated areas during the establishment phase and long-term.

Revegetation works must incorporate the use of local native species.

7. ENVIRONMENTAL REPORTING

Environmental Incident Reporting

- 7.1 The Proponent shall notify the Director-General of any environmental incident within 12 hours of becoming aware of the incident. The Proponent shall provide full written details of the incident to the Director-General within seven days of the date on which the incident occurred.
- 7.2 The Proponent shall meet the requirements of the Director-General to address the cause or impact of any environmental incident, as it relates to this approval, reported in accordance with condition 7.1 of this approval, within such period as the Director-General may require.

Annual Performance Reporting

- 7.3 The Proponent shall, throughout the life of the project, prepare and submit for the approval of the Director-General, an **Annual Environmental Management Report (AEMR)**. The AEMR shall review the performance of the project against the Operation Environmental Management Plan (refer to condition 6.4 of this approval) and the conditions of this approval. The AEMR shall include, but not necessarily be limited to:
 - a) details of compliance with the conditions of this approval;
 - b) a copy of the Complaints Register (refer to condition 5.4 of this approval) for the preceding twelve-month period (exclusive of personal details), and details of how these complaints were addressed and resolved;
 - c) identification of any circumstances in which the environmental impacts and performance of the project during the year have not been generally consistent with the environmental impacts and performance predicted in the documents listed under condition 1.1 of this approval, with details of additional mitigation measures applied to the project to address recurrence of these circumstances;

- d) results of all environmental monitoring required under conditions 3.3 to 3.8 of this approval, including interpretations and discussion by a suitably qualified person; and
- e) a list of all occasions in the preceding twelve-month period when environmental goals/objectives/impact assessment criteria for the project have not been achieved, indicating the reason for failure to meet the criteria and the action taken to prevent recurrence of that type of failure.

The Proponent shall submit a copy of the AEMR to the Director-General every year, with the first AEMR to be submitted no later than twelve months after the commencement of operation of the project. The Director-General may require the Proponent to address certain matters in relation to the environmental performance of the project in response to review of the Annual Environmental Report. Any action required to be undertaken shall be completed within such period as the Director-General may require. The Proponent shall make copies of each AEMR available for public inspection on request.