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 Oct 2009 File No: S08/00661

SCHEDULE 1

Application No:	07_0175
Proponent:	EnergyAustralia
Approval Authority:	Minister for Planning
Land:	Land required for the construction and operation of the project.
Project:	The Marulan Power Station 1 Project: construction and operation of a 350 megawatt open cycle gas-fired power station for peak electricity generation.
Major Project:	The project is part of the Marulan Gas Fired Power Stations, which was declared a Major Project under section 75B(1)(a) of the *Environmental Planning and Assessment Act 1979*, because it is development of a kind described in clause 24 of Schedule 1 of *State Environmental Planning Policy (Major Development) 2005.*
Concept Approval:	The project is part of the approved concept plan for the Marulan Gas Fired Power Stations (07_0174).
Critical Infrastructure:	The project is part of the Marulan Gas Fired Power Stations, which is classified as critical infrastructure within the meaning of section 75C of the *Environmental Planning and Assessment Act* as it meets the definition of development for the purposes of a facility for the generation of electricity that has a capacity to generate at least 250 megawatts and is the subject of an

application lodged pursuant to Section 75E or 75M of the Act prior to 1 January 2013, pursuant to the Minister's critical infrastructure declaration dated 26 February 2008.

KEY TO CONDITIONS

SCHEDULE 2

Act, the	*Environmental Planning and Assessment Act, 1979*
CASA	Commonwealth Civil Aviation Safety Authority
CMA	Catchment Management Authority
Concept Plan	The approved concept plan for the Marulan Gas Fired Power Stations (07_0174)
Conditions of Approval	The Minister's conditions of approval for the concept plan.
Construction	All pre-operation activities associated with the project **other than** survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys or other activities determined by the Environmental Representative to have minimal environmental impact such as minor access roads, minor adjustments to services / utilities and establishing temporary construction sites.
Council	Upper Lachlan, Goulburn Mulwaree and/ or Wingecarribee Councils as relevant.
DECCW	Department of Environment, Climate Change and Water incorporating the former Departments of Environment Climate Change (DECC) and Water and Energy.
Department, the	Department of Planning
Director-General, the	Director-General of the Department of Planning (or delegate).
Director-General's approval, agreement or satisfaction	A written approval from the Director-General (or delegate).
Dust	Any solid material that may become suspended in air or deposited.
EPA	Environment Protection Authority as part of the Department of Environment, Climate Change and Water
Gunlake Quarry	Major Project 07_0074 granted project approval by the Minister on 24 September 2008.
Minister, the	Minister for Planning
Operation	When the project commences contributing electricity to the grid but excluding commissioning activities.
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 / 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.
Site	Comprising the "Power Station Site", including land required for the power station facilities, construction lay-down area, transmission line and connection to the adjacent TransGrid switchyard, gas pipeline (purple dashed route and orange dashed route) and access road (including connection to and upgrade of the existing adjacent access road off Canyonleigh Road, as required) as generally identified in the concept plan.

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_0175;
   b) *Marulan Gas Turbine Facility Environmental Assessment Project Application (EnergyAustralia)*, dated August 2008 and prepared by URS Pty Ltd;
   c) *Marulan Gas Turbine Facilities Submissions Report and Preferred Project Report*, dated May 2009, and prepared by URS Pty Ltd;
   d) the concept plan approval granted with respect to the Marulan Gas Fired Power Stations (07_0174); and
   e) 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) and 1.1c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
   b) any document listed from condition 1.1a) and 1.1c) inclusive, and any other document listed from condition 1.1a) and 1.1c) inclusive, the most recent document shall prevail to the extent of the inconsistency.

1.3 If there is any inconsistency between the concept plan approval granted with respect to the Marulan Gas Fired Power Stations (07_0174) and this project approval, the concept plan approval shall prevail to the extent of the inconsistency.

1.4 The Proponent shall comply with any reasonable requirement(s) 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

1.5 This project approval shall lapse 10 years after the date on which it is granted, unless the works subject of this approval are physically and substantially commenced on or before that time.

1.6 The Proponent may elect to construct the project in discrete work packages or stages. In this case, these conditions of approval may be complied with separately for each discrete work package or stage, as relevant.

Statutory Requirements

1.7 The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of 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

Air Quality Impacts

Dust Generation

2.1 The Proponent shall construct the project in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust. 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.

Odour

2.2 The Proponent shall not permit any offensive odour, as defined under section 129 of the Protection of the *Environment Operations Act 1997*, to be emitted from the site which impacts on any sensitive surrounding receivers identified in the documents listed in condition 1.1.

Monitoring and Discharge Points

2.3 For the purposes of this approval, air monitoring/ air discharge points shall be identified as provided in Table 1 below.

Table 1 - Identification of Air Monitoring and Discharge Points

Monitoring / Discharge Point Identifier	Monitoring/ Discharge Point Location
1	Turbine Stack 1
2	Turbine Stack 2

Discharge Limits

2.4 The Proponent shall design, construct, operate and maintain the project to ensure that for each turbine stack discharge point, the concentration of each pollutant listed in Table 2 is not exceeded. This condition only applies to the project operating under normal operating conditions and does not apply during start-up, shut-down or emergency situations.

Table 2 - Maximum Allowable Discharge Concentration Limits (Air)

Pollutant	Fuel Type	100 Percentile limit (mgm^{-3})	Averaging Period	Reference conditions
Nitrogen dioxide (NO_2) or nitric oxide (NO), or both (as NO_2)	Natural Gas	51	Annual	dry, 273 K, 101.3 kPa, and 15 % O_2

Noise Impacts

Vibration Impacts

2.5 The Proponent shall ensure that the vibration resulting from construction and operation of the project does not exceed the preferred values vibration (for low probability of adverse comment) presented in *Assessing Vibration: A Technical Guideline* (DECC, February 2006), at any affected residential dwelling identified in the documents listed in condition 1.1.

Construction Noise

2.6 The Proponent shall only undertake construction activities associated with the project that would generate an audible noise at any sensitive receptor 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.

This condition does not apply in the event of a direction from police or other relevant authority for safety reasons or emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

2.7 The hours of construction activities specified under condition 2.6 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 2.6 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 written evidence demonstrating consultation with the DECCW in relation to the proposed variation in construction times (including consideration of any comments made by the DECCW).

Operational Noise

2.8 The Proponent shall design, construct, operate and maintain the project to ensure that the noise contributions from the project do not lead to an exceedance of the noise limits specified in Table 3 (at the locations and during the periods indicated) for the concurrent operation of the project and the Marulan Power Station 2 Project, unless subject to a negotiated noise agreement established consistent with Section 8.3 of the *New South Wales Industrial Noise Policy* (EPA, 2000). The noise limits apply under wind speeds up to 3 ms^{-1} (measured at 10 metres above ground level), or under temperature inversion conditions of up to 3 °C/ 100 metres and wind speeds of up to 2m/s at 10 metres above the ground. This condition only applies to the project operating under normal operating conditions and does not apply during start-up, shut-down or emergency situations.

Table 3 - Operational Noise Limits

Location	Day 7:00am to 6:00pm Mondays to Saturdays 8:00am to 6:00pm Sundays and public holidays	Evening 6:00pm to 10:00pm on any day	Night 10:00pm to 7:00am Mondays to Saturdays 10:00pm to 8:00am Sundays and public holidays	
	$L_{Aeq(15\ minute)}$	$L_{Aeq(15\ minute)}$	$L_{Aeq(15\ minute)}$	$L_{A1\ (1\ minute)}$
R25	35 dB(A)	36 dB(A)	35 dB(A)	45 dB(A)
R26	37dB(A)	38 dB(A)	38 dB(A)	
R15, R16, R17, R18, R19, R20, R21	35 dB(A)	35 dB(A)	35 dB(A)	

2.9 For the purpose of assessment of noise contributions specified under condition 2.8 of this approval, noise from the project shall be:

a) measured at the most affected point within the residential boundary or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary to determine compliance with the $L_{Aeq(15\ minute)}$ noise limits;

b) measured at 1 metre from the dwelling façade to determine compliance with the $L_{A1\ (1\ minute)}$ noise limits; and

c) subject to the modification factors provided in Section 4 of the *New South Wales Industrial Noise Policy* (EPA, 2000), except as provided in condition 2.10.

Notwithstanding, should direct measurement of noise from the project be impractical, the Proponent may employ an alternative noise assessment method deemed acceptable by the EPA (refer to Section 11 of the *New South Wales Industrial Noise Policy* (EPA, 2000)). Details of such an alternative noise assessment method accepted by the EPA shall be submitted to the Director-General prior to the implementation of the assessment method.

Low Frequency Noise

2.10 Unless otherwise agreed by the Director-General, the modification factors presented in Section 4 of the *Industrial Noise Policy* in relation to low frequency noise, only apply if the difference between the A weighted and the C weighted noise is greater than or equal to 15 dB and the measured sound pressure level is greater than L_{eq} 65 dB(C).

Hazards and Risk

Safety Management System

2.11 The Proponent shall develop and implement a Safety Management System consistent with the Department's publication *Hazardous Industry Planning Advisory Paper No. 9 - Safety Management*, covering the operation of the project including any transport activities involving hazardous materials. The system shall clearly specify all safety-related procedures,

responsibilities and policies, along with details of mechanisms for ensuring adherence to safety procedures. System records shall be kept on site and shall be available for inspection by the Director-General on request.

Aviation Hazards

2.12 Prior to the commencement of construction of the project, the Proponent shall consult with CASA and AirServices Australia in relation to the management of aviation hazards associated with the project and provide written evidence to the Director-General that the following matters have been addressed to the satisfaction of these agencies:

a) updates to navigational aids including flight plans, maps and other relevant documentation to identify the project as a potential aviation hazard;
b) aviation hazard lighting requirements; and
c) such other matters as the agencies may consider relevant.

Bunding and Spill Management

2.13 The Proponent shall store and handle all dangerous goods, as defined by the Australian Dangerous Goods Code, strictly in accordance with:

a) all relevant Australian Standards;
b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
c) the EPA's Environment Protection Manual Technical Bulletin *Bunding and Spill Management*.

In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

Traffic and Transport Impacts

2.14 Except as provided in condition 2.15, the Proponent shall ensure that (unless otherwise agreed to by the RTA) all vehicles associated with the project enter and exit the Hume Highway via the north Marulan Interchange (Brayton Road/ George Street intersection).

2.15 At the completion of the upgrade of Redhills Road as part of Stage 2 of the Gunlake Quarry project, the Proponent shall ensure that Redhills Road is utilised to access the site during construction and operation as far as practicable (where reasonable and feasible), to minimise the incidence of traffic travelling along Brayton Road through the village of Marulan.

2.16 Prior to the commencement of construction, the Proponent shall level, grade and apply a single coat seal onto the portion of Canyonleigh Road between the Brayton Road intersection and the Power Station Site access, unless those works have previously been completed.

2.17 Unless otherwise agreed by the Director-General, the Proponent shall commission an independent, qualified person or team to undertake the following in consultation with Council and the RTA:

a) prior to the commencement of construction, review existing access provisions to the Power Station Site off Canyonleigh Road, to determine whether the existing provisions allow for safe access of construction and operational vehicles associated with the project (including appropriate site distances and provisions for over-mass or over-dimensional transport). Where improvements are required, the Proponent shall implement these in consultation with Council and the RTA, prior to the commencement of construction;
b) assess all roads proposed to be used for over-mass and/ or over-dimensional transport (including intersections, bridges, culverts and other road features) prior to the commencement of construction, to determine whether the existing road condition can accommodate the proposed over-mass and/ or over-dimensional haulage. Where improvements are required, the Proponent shall implement these in consultation with Council and the RTA, prior to the commencement of construction; and

c) assess the pavement condition of all roads proposed to be used for construction haulage by heavy vehicles both prior to the commencement of construction and prior to the commencement of operation to determine any damage caused to the roads attributable to the project during construction and detail any works required to restore the roads to a standard equal to or better than the existing condition. The "existing" road condition shall be taken to be that following upgrade in accordance with conditions 2.17a) and b) and in addition in the case of Canyonleigh Road (between the Brayton Road intersection and the Power Station Site access), following upgrade to the road as specified in condition 2.16. Where restoration works are required, the Proponent shall implement these in consultation with Council and the RTA, prior to the commencement of operation.

A report(s) detailing the results of the above assessments shall be submitted to the Director-General prior the commencement of construction in relation to a), b) and c) above and prior the commencement of operation in relation to c) above, including clear documentation of how any issues raised by Council and the RTA have been addressed.

In the event of a dispute between the Proponent, Council and/ or the RTA with respect to the extent of improvement/ restorative work that may be required under this condition, any party may refer the matter to the Director-General for resolution. The Director-General's determination of any such dispute shall be final and binding to all parties.

Visual Amenity Impacts

2.18 The Proponent shall minimise the use of reflective building elements and maximise the use of building materials and treatments which visually complement the surrounding bushland.

2.19 The Proponent shall ensure that all external lighting associated with the project is mounted, screened, and directed in such a manner so as not to create a nuisance to the surrounding environment, properties and roadway. The lighting shall be the minimum level of illumination necessary and shall comply with *AS 4282(INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting.* Where aviation hazard lighting is required by CASA and AirServices Australia all reasonable feasible attempt shall be made to ensure that this lighting is designed and directed so as not to create a nuisance to the surrounding environment, properties and roadway in consultation with CASA and AirServices Australia under the process specified in condition 2.12

2.20 Prior to the commencement of construction of the project, the Proponent shall submit to the Director-General details of urban design and landscaping measures to be implemented onsite and landscaping measures to be implemented offsite (with the agreement of relevant landowners) to minimise the visual impact of the project at relevant local and regional visual receptors and from Canyonleigh Road. In relation to offsite landscaping measures, details shall be provided of the landowner consultation undertaken to date in relation to landscaping options. Details shall be provided of the location and timing of proposed landscape planting (both onsite and offsite) as well as ongoing maintenance and monitoring responsibilities to determine the performance of the landscape planting. Native and indigenous species consistent with the surrounding vegetation communities shall be used for the purposes of all landscaping works, unless otherwise agreed to the Director-General.

Soil and Water Quality Impacts

2.21 Except as may be expressly provided by an Environment Protection Licence for the project, the Proponent shall comply with section 120 of the *Protection of the Environment Operations Act 1997* which prohibits the pollution of waters.

2.22 Soil and water management controls shall be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities, in accordance with Landcom's *Managing Urban Stormwater: Soils and Conservation*.

2.23 The Proponent shall not establish any new water storage structures or utilise any existing water storage structures on site for the purposes of stormwater capture during construction or operation unless granted exemption for this purpose under section 53 of the *Water Management Act 2000.*

2.24 The Proponent shall design, construct and maintain all wastewater storage structures associated with the operation of the project to minimise the risk of leachate to groundwater including adequate compaction to achieve a permeability standard equal to greater than $1x10^{-9}$ metres/second.

Waste Generation and Management

2.25 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.

2.26 The Proponent shall maximise the reuse and/or recycling of waste materials generated on site, to minimise the need for treatment or disposal of those materials outside the site.

2.27 The Proponent shall ensure that all liquid and/or non-liquid waste generated on the site is assessed and classified in accordance with *Waste Classification Guidelines* (DECC, 2008), or any future guideline that may supersede that document and where removed from the site is only directed to a waste management facility lawfully permitted to accept the materials.

3. ENVIRONMENTAL MONITORING

Air Quality Monitoring

3.1 The Proponent shall determine the pollutant concentrations and emission parameters specified in Table 4 below, at each of the turbine stack discharge points (established in strict accordance with the requirements of test method TM-1 as specified in *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales* (EPA, 2001)). Monitoring shall be undertaken during operation of the project, at the frequency indicated in the Table, unless otherwise agreed by the DECCW.

Table 4 – Periodic Pollutant and Parameter Monitoring (Air)

Pollutant/ Parameter	Units of Measure	Method	Frequency
Nitrogen dioxide (NO_2) or nitric oxide (NO), or both (as NO_2)*	mgm^{-3}	CEM-2	Continuous
Oxygen	%	CEM-3	
Velocity	ms^{-1}	TM-2	Post commissioning and annually thereafter
Volumetric flow rate	m^3s^{-1}	TM-2	
Temperature	°C	TM-2	
Moisture content in stack gases	%	TM-22	
Dry gas density	kgm^{-3}	TM-23	
Molecular weight of stack gases	$g.gmol^{-1}$	TM-23	
Carbon dioxide	%	TM-24	

*Nitrogen dioxide (NO_2) or nitric oxide (NO), or both (as NO_2) shall be reported on consistent with the reference conditions (dry, 273 K, 101.3 kPa, and 15 % O_2) identified in Table 2.

Air Quality Performance Verification

3.2 Within 90 days of the commencement of operation of the project and within 90 days of the commencement of the concurrent operation of the project and the Marulan Power Station 2 Project or as otherwise agreed by the Director-General, and during a period in which the project is operating under normal operating conditions, the Proponent shall undertake a program to confirm the air emission performance of the project. The program shall include, but not necessarily be limited to:

a) point source emission sampling and analysis subject to the requirements listed under condition 3.1 to determine compliance with the stack discharge concentration limits identified in condition 2.4;
b) a comprehensive air quality impact assessment in accordance with the methods outlined in *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (DECC, 2005), using actual air emission data collected under condition 3.1 to determine performance against the ground-level concentrations for air pollutants predicted for the project and cumulatively for the project and the Marulan Power Station 2 Project in the documents listed under condition 1.1 of this approval; and
c) details of any entries in the Complaints Register (condition 5.3 of this approval) relating to air quality impacts.

A report providing the results of the program shall be submitted to the Director-General and DECCW within 28 days of completion of the testing required under a).

3.3 In the event that the program undertaken to satisfy condition 3.2 of this approval indicates that the operation of the project, under normal operating conditions, will lead to:
a) greater point source emissions than the stack discharge concentration limits identified in condition 2.4; or
b) greater ground-level concentrations of air pollutants than that predicted for the project and cumulatively for the project and the Marulan Power Station 2 Project in the documents listed under condition 1.1 of this approval;

then the Proponent shall provide details of remedial measures to be implemented to reduce point source emissions to no greater than the stack discharge concentration limits identified in condition 2.4 and to reduce ground-level concentrations of air pollutants to no greater than that predicted for the project and cumulatively for the project and the Marulan Power Station 2 Project in the documents listed under condition 1.1 of this approval and under no circumstance greater than the limits detailed in the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (DECC, 2005). Details of the remedial measures and a timetable for implementation shall be submitted to the Director-General for approval within such period as the Director-General may require, and be accompanied by evidence that the DECCW is satisfied that the remedial measures are acceptable.

Noise Monitoring

3.4 Within 90 days of the commencement of operation of the project and within 90 days of the commencement of the concurrent operation of the project and the Marulan Power Station 2 Project or as otherwise agreed by the Director-General, and during a period in which the project is operating under normal operating conditions, the Proponent shall undertake a program to confirm the noise emission performance of the project. The program shall meet the requirements of the DECCW, and shall include, but not necessarily be limited to:
a) noise monitoring, consistent with the guidelines provided in the *New South Wales Industrial Noise Policy* (EPA, 2000), to assess compliance with condition 2.8 of this approval;
b) methodologies, locations and frequencies for noise monitoring;
c) identification of monitoring sites at which pre- and post-project noise levels can be ascertained; and
d) details of any entries in the Complaints Register (condition 5.3 of this approval) relating to noise impacts.

A report providing the results of the program shall be submitted to the Director-General and the DECCW with 28 days of completion of the testing required under a).

3.5 In the event that the program undertaken to satisfy condition 3.4 of the approval indicates that the operation of the project, under normal operating conditions, will lead to greater noise impacts than permitted under condition 2.8 of this approval, then the Proponent shall provide

details of remedial measures to be implemented to reduce noise impacts to levels required by that condition. Details of the remedial measures and a timetable for implementation shall be submitted to the Director-General for approval within such period as the Director-General may require, and be accompanied by evidence that the DECCW is satisfied that the remedial measures are acceptable.

4. COMPLIANCE MONITORING AND TRACKING

4.1 The Proponent shall develop and implement a **Compliance Tracking Program** to track compliance with the requirements of this approval. The Program shall be submitted to the Director-General for approval prior to the commencement of construction. The Program shall relate to both construction and operational stages of the project and shall include, but not necessarily be limited to:

a) provisions for periodic review of the compliance status of the project against the requirements of this approval, Statement of Commitments and relevant environmental approval, licence or permit required and obtained in relation to the project;
b) provisions for periodic reporting of compliance status against the requirements of this approval and Statement of Commitments to the Director-General including at least one month prior to the commencement of construction and operation of the project;
c) a program for independent environmental auditing in accordance with *AS/NZ ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing* at least once within six months of the commencement of construction and at least once within 12 months of the commencement of operation; and
d) mechanisms for rectifying any non-compliance identified during environmental auditing or review of compliance.

5. COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

5.1 Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.

Complaints Procedure

5.2 Prior to the commencement of construction of the project, the Proponent shall ensure that the following are available for community complaints for the life of the project (including construction and operation):

a) a telephone number on which complaints about construction and operational activities at the site may be registered;
b) a postal address to which written complaints may be sent; and
c) an email address to which electronic complaints 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 construction of the project. The above details shall also be provided on the website required by condition 5.4 of this approval.

5.3 The Proponent shall record details of all complaints received through the means listed under condition 5.2 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, where relevant, of the complaint;
b) the means by which the complaint was made (telephone, mail or email);
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) any action(s) taken by the Proponent in relation to the complaint, including any follow-up contact with the complainant and the timing for implementing action; and
f) 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.

Provision of Electronic Information

5.4 Prior to the commencement of construction of the project, the Proponent shall establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with the project subject to confidentiality. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:

a) information on the current implementation status of the project;
b) the documents referred to under condition 1.1 of this approval;
c) a copy of this approval and any future modification to this approval;
d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project;
e) all plans, monitoring programs and strategies required under this project approval; and
f) details of the outcomes of compliance reviews and audits of the project.

6. ENVIRONMENTAL MANAGEMENT

Environmental Representative

6.1 Prior to the commencement of any construction 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 construction and operation. 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) consider and advise the Proponent on its compliance obligations against all matters specified in the conditions of this approval and the Statement of Commitments as referred to under condition 1.1c) of this approval, and any other relevant environmental approval, licence or permit required and obtained in relation to the project; and
c) have 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 Plan

6.2 The Proponent shall prepare and implement a **Construction Environmental Management Plan** (CEMP) to outline environmental management practices and procedures to be followed during construction of the project. The CEMP shall be prepared consistent with *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004) and shall include, but not necessarily be limited to:

a) a description of key activities to be undertaken during construction including details of staging, where relevant;
b) a description of the statutory obligations that the Proponent is required to fulfil prior to and during construction including all relevant approvals, licences and permits required and applicable key legislation and policies;
c) a description of the roles and responsibilities for all relevant employees involved in the construction of the project;
d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase and details of how environmental performance would be monitored and managed to meet acceptable outcomes including what actions will be taken to address identified potential adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:

i) measures to monitor and manage dust emissions;
ii) measures to monitor and manage soil and water impacts in consultation with DECCW including procedures that would be undertaken should groundwater be intercepted during construction;
iii) measures to monitor and manage construction traffic and access including details of road restoration works to be undertaken prior to the commencement of construction, identification of construction traffic volumes on all roads proposed to be used during construction, an analysis of potential road capacity and safety impacts associated with construction traffic on these roads, and measures for minimising traffic volumes along Brayton Road through the village of Marulan, with consideration to cumulative impacts from traffic generated by surrounding development such as quarry operations;
iv) measures to manage bushfire risk;
v) emergency management; and

e) complaints handling procedures during construction consistent with condition 5.2 of this approval.

The CEMP shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any construction works associated with the project, or within such period otherwise agreed by the Director-General. Construction works 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, required under condition 6.2 of this approval, the Proponent shall prepare and implement **Construction Noise and Vibration Management Plan** to manage noise and vibration impacts during construction with specific consideration to traffic noise impacts along Brayton Road through the village of Marulan with consideration to cumulative impacts from surrounding development such as quarry operations. The Plan shall be prepared with consideration to the *Interim Construction Noise Guideline* (DECC, July 2009) and include, but not necessarily be limited to:

a) details of all potentially affected sensitive receivers;
b) details of construction activities (including construction traffic and haulage) that have the potential to generate noise and vibration impacts on sensitive receivers;
c) identification of applicable construction noise and vibration goals (including road traffic noise goals) and all reasonable and feasible noise and vibration mitigation measures that will be implemented achieve the goals;
d) monitoring measures to be implemented to determine compliance with applicable construction noise and vibration goals;
e) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity; and
f) procedures for investigating and responding to noise and vibration complaints (including any additional monitoring requirements).

Operation Environmental Management Plan

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) a description of key operational and maintenance activities associated with the project;
b) identification of all statutory and other obligations that the Proponent is required to fulfil prior to and during operation of the project, including all approvals, licences, approvals and consultations;
c) a description of the roles and responsibilities for all relevant employees involved in the operation of the project;
d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase and details of how environmental performance

would be monitored and managed to meet acceptable outcomes including what actions will be taken to address identified potential adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:

i) operational water management measures to ensure that the project is managed as a nil discharge site including an operational water balance identifying maximum water use, wastewater generation and disposal requirements; identification of water and wastewater reuse and treatment options to be implemented on site; identification of clean water runoff and dirty water storage areas; measures for protecting groundwater resources from wastewater or contaminated leachate; contingency measures in the case of accidental discharge to surface or groundwater including remediation and monitoring measures;

ii) procedures to monitor, manage and maintain implemented landscape measures including details of periodic reporting on the performance of the measures consistent with condition 4.1b);

iii) measures to monitor and manage operational traffic and access including details of road restoration works to be undertaken prior to the commencement of operation, measures to monitor and minimise operational traffic noise, and measures to minimise traffic volumes along Brayton Road through the village of Marulan, with consideration to cumulative impacts from traffic generated by surrounding development such as quarry operations;

iv) measures to monitor and manage hazard and risk (including bushfire);

v) emergency management; and

e) complaints handling procedures during operation consistent with condition 5.2 of this approval.

The Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of operation of the project, or within such period otherwise agreed by the Director-General. Operation shall not commence until written approval has been received from the Director-General.

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 **Air Quality Management Plan** in consultation with DECCW to outline measures to monitor and manage the impacts of the project on local and regional air quality taking into account cumulative impacts from the concurrent operation of the Marulan Power Station 2 Project. The Plan shall include, but not necessarily be limited to:

i) identification of all major sources of particulate and gaseous air pollutants that may be emitted from the project, being both point-source and diffuse emissions, including identification of the major components and quantities of these emissions;

ii) monitoring procedures for gaseous and particulate emissions from the project to review and verify air quality modelling and predictions identified in the documents listed in condition 1.1 with air quality monitoring data, including (but not necessarily limited to) the requirements of conditions 3.2 and 3.3;

iii) pro-active and reactive management and response mechanisms for particulates and gaseous emissions, with specific reference to measures to be implemented and actions to be taken to minimise and prevent potential elevated air quality impacts on surrounding land uses as a consequence of meteorological conditions, process problems, or the mode of operation of the project at any time (including procedures aimed at maximising the efficiency of the start-up and shut-down cycles for the project);

iv) specific procedures for the management of generating efficiency and the minimisation of greenhouse gas emissions per unit of electricity generated; and

v) a contingency plan should an incident, process problems or other initiating factor lead to elevated air quality impacts, whether above normal operating conditions or environmental performance goals/ limits; and

b) a **Noise Management Plan** in consultation with DECCW to outline measures to monitor and manage the noise impacts of the project taking into account cumulative impacts form from the concurrent operation of the Marulan Power Station 2 Project. The Plan shall include, but not necessarily be limited to:

i) identification of all relevant receivers and the applicable criteria at those receivers commensurate with the noise limits and noise goals specified under this approval;

ii) identification of activities that will be carried out in relation to the project and the associated noise generation;

iii) noise monitoring procedures for the periodic consideration of noise impacts at the relevant receivers against the noise limits and noise goals specified under this approval including (but not necessarily limited to) the requirements of conditions 3.4 and 3.5;

iv) details of all reasonable and feasible noise mitigation and management measures/ procedures to control noise emissions from the project with specific reference to measures to be implemented and actions to be taken to minimise and prevent potential elevated noise generation impacts on surrounding land uses as a consequence of meteorological conditions, process problems, or the mode of operation of the project at any time (including procedures aimed at maximising the efficiency of the start-up and shut-down cycles for the project); and

v) reactive and pro-active strategies for dealing promptly with any noise complaints including timely response times and further investigation (including monitoring) procedures.

7. ENVIRONMENTAL REPORTING

Incident Reporting

7.1 The Proponent shall notify the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment within 24 hours of becoming aware of the incident. The Proponent shall provide full written details of the incident to the Director-General within 14 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 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.

Note: Nothing in this approval removes the Proponent's obligation under Section 148 of the *Protection of the Environment Operations Act 1997* to notify the appropriate regulatory authority (as defined under Section 6 of the *Protection of the Environment Operations Act 1997*) where a pollution incident occurs in the course of the development so that material harm to the environment is caused or threatened.