

Appendix A

Regulatory Correspondence and Existing Development Consent

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**Record of Minister's opinion for the purposes of Clause 6(1) of State Environmental
Planning Policy (Major Projects) 2005**

I, the Director-General of the Department of Planning, as delegate of the Minister for Planning under delegation executed on 31 October 2005, have formed the opinion that the development described in the Schedule below, is development of a kind that is described in Schedule 1 of the *State Environmental Planning Policy (Major Projects) 2005*, namely Group 2, Clause 9 (b) being development for the purpose of ceramic works or tile manufacture, that has a capital investment value of more than \$30 million or employs 100 or more people. The project is thus declared to be a project to which Part 3A of the *Environmental Planning and Assessment Act 1979* applies for the purpose of section 75B of that Act.

Schedule

An expansion of the National Ceramic Industries Australia, ceramic tile manufacturing facility at Rutherford to increase production from 12.8 million square metres of tiles to 25.6 million square metres of tiles a year. The project is located on Racecourse Road, Rutherford on Lot 101 of DP 1062820. The project is as generally described in the Environmental Assessment Scoping Report prepared by ENSR Australia dated 27 June 2008.


for Sam Haddad
Director-General

Date:

25/7/08



Contact: Felicity Greenway
Phone: 02 9228 6338
Fax: 02 9228 6466
Email: felicity.greenway@planning.nsw.gov.au

Mr James McIntyre
Project Planner
AECOM Australia Pty Ltd
PO Box 73
HUNTER REGION MC NSW 2310

Our ref: S02/01183

Dear Mr McIntyre

Change in Scope for the Expansion of Ceramic Tile Manufacturing Facility (MP09_006)

I refer to your letter dated 29 October 2009 regarding the above matter. The Department advises that the Director-Generals Requirements issued on 25 February 2009 do not need to be modified with the removal of the co-generation facilities from the application.

However, we would appreciate if you could update the Preliminary Environmental Assessment to remove all references to the co-generation facilities at your earliest convenience. This will ensure a clear description of your project is provided to the public

If you have any questions or comments, please contact Felicity Greenway on 9228 6338 or via email felicity.greenway@planning.nsw.gov.au.

Felicity Greenway 19/11/09

Felicity Greenway
Senior Environmental Planner
Mining and Industry



NSW GOVERNMENT
Department of Planning

Major Projects Assessment
Major Development Assessment
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Level 3
23-33 Bridge Street
GPO Box 39
SYDNEY NSW 2001

Mr Leonardo Pereira
Managing Director
National Ceramics Industries Australia
PO BOX 765
MAITLAND NSW 2320

Dear Mr Pereira

Director-General's Requirements
Expansion of Ceramic Tile Manufacturing Facility
Project Application MP09_0006

The Department has received your application for the Expansion to the existing Ceramic Tile Manufacturing Facility at Racecourse Road, Maitland.

I have attached a copy of the Director-General's requirements for the project. These requirements have been prepared in consultation with the relevant agencies, and are based on the information you have provided to date. I have also attached a copy of the agencies comments for your information.

Please note that the Director-General may alter these requirements at any time.

If your proposal is likely to have a significant impact on matters of National Environmental Significance, it will require an approval under the Commonwealth *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act). This approval is in addition to any approvals required under NSW legislation. It is your responsibility to contact the Department of Environment, Water, Heritage and the Arts in Canberra (6274 1111 or <http://www.environment.gov.au>) to determine if the proposal requires an approval under the EPBC Act. The Commonwealth Government has accredited the NSW environmental assessment process, so if it is determined that an approval is required under the EPBC Act, please contact me immediately as supplementary Director-General's requirements may need to be issued.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit your Environmental Assessment for the project. This will enable the Department to determine the:

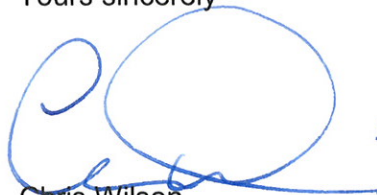
- applicable fee (see Division 1A, Part 15 of the *Environmental Planning and Assessment Regulation 2000*);
- consultation and public exhibition arrangements; and
- number of copies (hard-copy or CD-ROM) of the Environmental Assessment that will be required for exhibition purposes.

Once it receives the Environmental Assessment, the Department will review it in consultation with the relevant agencies to determine if it adequately addresses the Director-General's requirements, and may require you to revise it prior to public exhibition.

The Department is required to make all the relevant information associated with the project publicly available on its website. Consequently, I would appreciate it if you would ensure that all the documents you subsequently submit to the Department are in a suitable format for the web, and arrange for an electronic version of the Environmental Assessment to be hosted on a suitable website during the exhibition period.

If you have any enquiries about these requirements, please contact Felicity Greenway on 9228 6338 or felicity.greenway@planning.nsw.gov.au.

Yours sincerely



25.2.09

Chris Wilson
Executive Director
Major Project Assessment
As delegate for the Director-General

Director-General's Requirements

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

Application number	MP09_0006
Project	Modification and expansion to the existing tile manufacturing facility and associated infrastructure. Additions will comprise of a second factory building with four additional production lines, four co-generation plants and other associated infrastructure.
Location	Racecourse Road, Maitland, Lot 101 DP 1062820
Date of Issue	February 2009
Proponent	National Ceramic Industries Australia
General Requirements	<p>The Environmental Assessment of the project must include:</p> <ul style="list-style-type: none"> • an executive summary; • a detailed description of the project, including the: <ul style="list-style-type: none"> – need for the project; – alternatives considered, including a justification for the proposed manufacturing facility on economic, social and environmental grounds; – likely staging of the project; and – plans of any proposed building works. • a risk assessment of the potential environmental impacts of the project, identifying the key issues for further assessment; • a detailed assessment of the key issues specified below, and any other significant issues identified in the risk assessment (see above), which includes: <ul style="list-style-type: none"> – a description of the existing environment, using sufficient baseline data; – an assessment of the potential impacts of all stages of the project, including any cumulative impacts, taking into consideration any relevant statutory provisions and technical or policy guidelines (see below); – a description of the measures that would be implemented to avoid, minimise, mitigate, rehabilitate/remediate, monitor and/or offset the potential impacts of the project, including detailed contingency plans for managing any potential significant risks to the environment; • a statement of commitments, outlining all the proposed environmental management and monitoring measures; • a conclusion justifying the project on economic, social and environmental grounds, taking into consideration whether the project is consistent with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; • a signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading.
Key Issues	<ul style="list-style-type: none"> • Noise & Vibration – including construction, operational and traffic noise and particularly the impact of the proposed development to sensitive receptors (both current and proposed). • Air Quality and Odour – air quality impacts for construction and operation of the proposed development, particularly in relation to particulates and impacts to sensitive receptors (both current and proposed). Details of proposed mitigation measures. • Traffic & parking– including details of access to the site; details of the traffic volumes likely to be generated during construction and operation; an assessment of the predicted impacts of this traffic on the safety and efficiency of the surrounding road network and car parking requirements. • Visual – assess the visual impact of design and siting of the facilities &

	Floodplain Management Manual (DNR)
	Floodplain Risk Management Guideline (DECC)
	Technical Guidelines: Bunding & Spill Management (DECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC)
	Environmental Guidelines: Use of Effluent by Irrigation
<i>Wastewater Reuse</i>	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMCC & AHMC)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
<i>Groundwater</i>	NSW State Groundwater Policy Framework Document (DLWC)
	NSW State Groundwater Quality Protection Policy (DLWC)
	Draft NSW State Groundwater Quantity Management Policy (DLWC)
<i>Contamination</i>	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	Draft Guidelines for the Assessment and Management of Groundwater Contamination (DECC)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Managing Land Contamination - Planning Guidelines SEPP 55 – Remediation of Land (DUAP and EPA)
Waste	
	Waste Avoidance and Resource Recovery Strategy 2007 (DECC)
	Environmental Guidelines: Assessment Classification and Management of Non-Liquid and Liquid Waste (DECC)
Noise	
	NSW Industrial Noise Policy (DECC)
	Environmental Criteria for Road Traffic Noise (NSW EPA)
	Environmental Noise Control Manual (DECC)
Regional Strategies	
	Lower Hunter Regional Strategy
Flora and Fauna	
	Draft Guidelines for Threatened Species Assessment under Part 3A of the <i>Environmental Planning and Assessment Act 1979</i> (DEC)
	NSW Groundwater Dependent Ecosystem Policy (DLWC)
	Policy & Guidelines - Aquatic Habitat Management and Fish Conservation (NSW Fisheries)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS 4282)
Heritage	
<i>Aboriginal</i>	Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC)
<i>Non- Aboriginal</i>	NSW Heritage Manual (NSW Heritage Office & DUAP)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)

	<p>buildings, lighting and any signage. Proposed landscaping including details of indigenous vegetation planting to off-set any clearing.</p> <ul style="list-style-type: none"> • Soils & Water– including the proposed erosion and sediment controls (during construction); water quality management; the proposed stormwater management system; water supply including consideration of the potential for rainwater harvesting / recycling; and wastewater disposal. • Greenhouse Gas and Energy Efficiency – including an assessment of the energy use on site, and demonstrate what measures would be implemented to ensure that the proposal is energy efficient. • Hazards and Risk – including potential hazards and risk implications to the existing operations from the proposed development.
References	While not exhaustive, the following attachment contains a list of guidelines, policies, and plans that may be relevant to the project.
Consultation	<p>During the preparation of the Environmental Assessment, you should consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups or affected landowners.</p> <p>In particular you must consult with the:</p> <ul style="list-style-type: none"> • Department of Environment and Climate Change; • Department of Water and Energy; • NSW Fire Brigade; • Roads and Traffic Authority; and • Maitland City Council. <p>The consultation process, and the issues raised during this process, must be described in the Environmental Assessment.</p>
Deemed refusal period	60 days

Technical and Policy Guidelines

Aspect	Policy /Methodology
Risk Assessment	AS/NZS 4360:2004 Risk Management (Standards Australia) HB 203: 203:2006 Environmental Risk Management – Principles & Process (Standards Australia)
Air Quality	Protection of the Environment Operations (Clean Air) Regulation 2002 Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DECC) Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DECC)
Greenhouse Gas and Energy	National Greenhouse Accounts (NGA) Factors Guidelines for Energy Savings Action Plans (DEUS)
Odour	Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DEC) Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
Transport	Guide to Traffic Generating Development (RTA) Road Design Guide (RTA)
Hazards	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development Applying Sepp 33: Hazardous And Offensive Development Application Guidelines (DUAP) Hazardous Industry Planning Advisory Paper No. 6 (HIPAP No 6): <i>Guidelines for Hazardous Analysis</i> , (DUAP) Hazardous Industry Planning Advisory Paper No. 4 (HIPAP No 4): <i>Risk Criteria for Land Use Safety Planning</i>
Soil and Water	
<i>Surface Water</i>	Guidelines for Water Savings Action Plans (DEUS) National Water Quality Management Strategy: Water quality management - an outline of the policies (ANZECC/ARMCANZ) National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ) National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ) National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ) National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ) Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC) State Water Management Outcomes Plan NSW Government Water Quality and River Flow Environmental Objectives (DECC) Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC) Managing Urban Stormwater: Soils & Construction (Landcom) Managing Urban Stormwater: Treatment Techniques (DECC) Managing Urban Stormwater: Source Control (DECC)

**DETERMINATION OF A DEVELOPMENT APPLICATION FOR STATE SIGNIFICANT,
DESIGNATED AND INTEGRATED DEVELOPMENT UNDER SECTION 80 OF
THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979**

I, the Minister for Infrastructure and Planning, under Section 80 of the *Environmental Planning and Assessment Act 1979* ("the Act"), determine the development application ("the Application") referred to in Schedule 1 by granting consent subject to the conditions set out in Schedule 2.

The reason for the imposition of conditions is to:

- a) minimise any adverse environmental impacts associated with the development;
- b) provide for the on-going environmental management of the development; and
- c) provide for regular monitoring and reporting on the development.

Craig Knowles MP
Minister for Infrastructure and Planning
Minister for Natural Resources

Sydney,

2003

File No. S02/01183

SCHEDULE 1

Application made by: National Ceramic Industries Australia Pty Ltd ("the Applicant");

To: The Minister for Planning;

In respect of: Lot 1223 DP 1017710 and Lot 405 DP 881621, Racecourse Road, Rutherford, Maitland local government area;

For the following: The construction and operation of a ceramic tile manufacturing facility ("the development"). The scope of the development is described in the document titled *Ceramic Tile Manufacturing at Rutherford NSW – Environmental Impact Statement*, prepared by Parsons Brinckerhoff Australia Pty Ltd and dated 10 December 2002, including:

- civil works such as clearing and grading and construction of erosion and sediment control infrastructure;

- construction of the building in two stages and the building fitout in four stages, including -
 - installation, commissioning and operation of one spray drier, one clay mill and two kilns with each kiln built at approximately 8 month intervals and the capacity to produce 3.2 million square metres of ceramic tiles each per annum (fitout stages 1 and 2)
 - installation, commissioning and operation of a second spray drier, second clay mill and two more kilns built at approximately 8 month intervals and the capacity to produce 3.2 million square metres of ceramic tiles each per annum (fitout stages 3 and 4)

Development Application:

Integrated DA No. 449-12-2002-i, lodged with the Department of Planning on 16 December 2002, accompanied by *Ceramic Tile Manufacturing at Rutherford NSW – Environmental Impact Statement* prepared by Parsons Brinckerhoff Australia Pty Ltd and dated 10 December 2002;

Modifications:

MOD 1 - Amendment of maximum allowable discharge concentration limits for the dryer stack (D1), kiln exhaust stack (KP1) and hot air cooler stack (HAC1).

MOD 2 – Correction to maximum allowable discharge concentration limit for hot air cooler stack (HAC1) as modified by MOD 1 dated 4 March 2008.

MOD 3 – Amendment of maximum allowable discharge concentration limits for the dryer stack (D2), kiln exhaust stack (KP2) and hot air cooler stack (HAC2).

MOD 4 – Amendment of maximum allowable discharge concentration limits for the dryer stacks (D3 and D4), kiln exhaust stacks (KP3 and KP4) and hot air cooler stacks (HAC3 and HAC4); and amendment to annual load limits.

State Significant Development:

Under section 76A(7) of the Act, the proposed development is classified as State significant development because it is a type of development (metals, minerals or extractive materials processing) listed in Schedule 1 of *State Environmental Planning Policy No. 34 – Major Employment-Generating Industrial Development* and has a capital investment in excess of \$20 million.

BCA Classification:

Class 5 – Office
Class 8 – Ceramic Tile Factory

Note:

- 1) To ascertain the date upon which this consent becomes effective, refer to section 83 of the Act.
- 2) To ascertain the date upon which this consent is liable to lapse, refer to section 95 of the Act.
- 3) If the Applicant is dissatisfied with this determination, section 97 of the Act grants him or

her a right of appeal to the Land and Environment Court, which is exercisable within 12 months of receiving notice of this determination.

SCHEDULE 2

In this consent, except in so far as the context or subject-matter otherwise indicates or requires, the following terms have the meanings indicated:

Act	<i>Environmental Planning and Assessment Act, 1979</i>
AEMR	Annual Environmental Management Report
Applicant	National Ceramic Industries Australia Pty Ltd
ARI	Average recurrence interval
BCA	Building Code of Australia
ceramic tile manufacturing facility	the development to which this consent applies
commissioning	any activity, prior to the commencement of operation of the ceramic tile manufacturing facility, with the aim of testing or verifying any component of the plant, but without the production, or intended production, of commercial quantities of ceramic tiles
construction	any activity requiring a Construction Certificate, the laying of a slab or significant excavation work
Council	Maitland City Council
dB(A)	decibel (A-weighted scale)
Department	NSW Department of Planning
Director-General	Director-General of the NSW Department of Urban and Transport Planning, or delegate
DLWC	NSW Department of Land and Water Conservation
dust	any solid material that may become suspended in air
EIS	Environmental Impact Statement for the ceramic tile manufacturing facility entitled <i>Ceramic Tile Manufacturing Facility at Rutherford – Environmental Impact Statement</i> , dated 10 December 2002 and prepared by Parsons Brinckerhoff Australia Pty Ltd (PB).
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence issued under the <i>Protection of the Environment Operations Act, 1997</i>
L _{Aeq} (15 minute)	equivalent average sound pressure level that is measured over a 15 minute period
Minister	NSW Minister for Infrastructure and Planning, or delegate
operation	any activity that results in the production, or intended production of commercial quantities of ceramic tiles
Principal Certifying Authority	the Minister or an accredited certifier, appointed under section 109E of the Act, to issue a Part 4A Certificate as provided under section 109C of the Act
Regulation	<i>Environmental Planning and Assessment Regulation, 2000</i>
site	the land to which this consent applies
stage 1	works as described in section 4.12 of the EIS
stage 2	works as described in section 4.12 of the EIS
stage 3	works as described in section 4.12 of the EIS
stage 4	works as described in section 4.12 of the EIS
utility	any infrastructure or service associated with water supply, sewerage, electricity supply, telecommunications or gas supply

1. GENERAL

Obligation to Minimise Harm to the Environment

- 1.1 The Applicant shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, commissioning and operation of the ceramic tile manufacturing facility.

Scope of Development

- 1.2 ¹The Applicant shall carry out the development generally in accordance with:
- a) Development Application No. 449-12-2002-i, lodged with the former Department of Planning (now Department of Urban and Transport Planning) on 16 December 2002;
 - b) *Ceramic Tile Manufacturing Facility at Rutherford NSW – Environmental Impact Statement* prepared by Parsons Brinckerhoff Australia Pty Ltd and dated 10 December 2002;
 - c) additional information supplied to the Department from Parsons Brinckerhoff Australia Pty Ltd regarding noise and air quality impacts and dated 24 January 2003;
 - d) additional information supplied to the Department from Parsons Brinckerhoff Australia Pty Ltd regarding hazards, traffic, and flora and fauna impacts, and water reuse and dated 30 January 2003;
 - e) additional information supplied to the Department from Parsons Brinckerhoff Australia Pty Ltd regarding fluoride emissions and dated 10 April 2003;
 - f) MOD 1 dated 6 November 2007 and accompanying Air Quality Mitigation Study prepared by HLA ENSR and dated 7 September 2007;
 - g) MOD 2 dated 15 April 2008;
 - h) MOD 3 dated 5 May 2008;
 - i) MOD 4 dated 23 October 2009; and
 - j) the conditions of this consent.

In the event of an inconsistency between a condition of this consent and the documents listed from a) to f) above, the condition of consent shall prevail to the extent of the inconsistency.

- 1.3 At the conclusion of all construction works, the ceramic tile manufacturing facility shall be limited to the production of 12.8 million square metres of ceramic tiles per annum.

Note: The capacity of the ceramic tile manufacturing facility at the completion of each stage of construction shall be consistent with that described in the EIS.

Staging of Works

- 1.4 Prior to the commencement of construction of stages 2, 3 and 4 of the ceramic tile manufacturing facility, the Applicant shall submit for the approval of the Director-General, a predictive air quality assessment for the operation of the stage of the ceramic tile manufacturing facility to be constructed. The predictive air quality assessment shall:
- a) utilise the findings of performance monitoring and verification required under condition 5.6 of this consent, and any Air Quality Mitigation Study prepared in accordance with condition 5.7, to predict the air quality performance of the stage of the ceramic tile manufacturing facility to be constructed. Where performance monitoring and verification has yet to be undertaken (ie within 90 days of the commencement of operation of the current stage of the ceramic tile manufacturing facility), the Applicant shall undertake equivalent performance monitoring and verification to satisfy this condition;
 - b) employ contemporaneous background air quality data, representative of the background air quality likely to be experienced during the operation of the stage of

¹ Incorporates an EPA General Term of Approval (A1.1)

- the ceramic tile manufacturing facility to be constructed. Depending on the period since undertaking performance monitoring and verification required under condition 5.6 of this consent, background air quality data may or may not be the same as that applied to the performance monitoring and verification. The Applicant shall provide justification for the background air quality data employed;
- c) assess the air quality performance of the stage of the ceramic tile manufacturing facility to be constructed in accordance with *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales* (EPA, 2001);
 - d) detail additional air emissions mitigation measures to be applied to the stage of the ceramic tile manufacturing facility to be constructed, in the event that the air quality criteria in *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales* (EPA, 2001) are predicted to not be met.

The Applicant shall not commence construction of the relevant stage of the ceramic tile manufacturing facility until it has received the Director-General's written approval of the predictive air quality assessment.

Note: Air quality impacts associated with the ceramic tile manufacturing facility have been assessed to be a key issue in relation to environmental planning and assessment. A stringent feed-forward/ feedback mechanism (conditions 1.4, 5.6 and 5.7 of this consent) has been required to confirm the air emissions performance of the ceramic tile manufacturing facility at each stage (feedback), and to use established monitoring data to demonstrate acceptable air emissions performance prior to the progression to each subsequent stage of the facility (feed-forward). This concept is illustrated in Attachment A.

Provision of Documents

- 1.5 Where practicable, the Applicant shall provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format. Provision of documents and reports to other parties, as required under this consent, shall be in a format acceptable to those parties and shall aim to minimise resource consumption.

Note: At the date of this consent, an appropriate electronic format for submission to the Director-General is the "portable document format" (pdf) or another format that may be readily converted to pdf.

Statutory Requirements

- 1.6 The Applicant shall ensure that all necessary licences, permits and approvals are obtained and kept up-to-date as required throughout the life of the ceramic tile manufacturing facility. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.

Compliance

- 1.7 The Applicant shall ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent.
- 1.8 The Applicant shall be responsible for the environmental impacts resulting from the actions of all persons on the site, including any visitors.
- 1.9 Prior to the commencement of each of the events listed from a) to b) below, or within such period as otherwise agreed by the Director-General, the Applicant shall certify in writing, to the satisfaction of the Director-General, that it has complied with all conditions of this consent applicable prior to the commencement of that event.

Where an event is to be undertaken in stages, the Applicant may, subject to the agreement of the Director-General, stage the submission of compliance certification consistent with the staging of activities relating to that event. The events referred to in this condition are as follows:

- a) construction of the ceramic tile manufacturing facility; and
- b) operation of the ceramic tile manufacturing facility.

1.10 Notwithstanding conditions 1.9 of this consent, the Director-General may require an update on compliance with all, or any part, of the conditions of this consent. Any such update shall meet the reasonable requirements of the Director-General and be submitted within such period as the Director-General may agree.

1.11 The Applicant 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 consent, and general consistency with the EIS and those documents listed under condition 1.2. The Director-General may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent, within such time as the Director-General may agree.

Dispute Resolution

1.12 In the event that a dispute arises between the Applicant and Council or a public authority other than the Department, in relation to a specification or requirement applicable under this consent, the matter shall be referred by either party to the Director-General, or if not resolved, to the Minister, whose determination of the dispute shall be final and binding on all parties. For the purpose of this condition, "public authority" has the same meaning as provided under section 4 of the Act.

Note: Section 121 of the *Environmental Planning and Assessment Act 1979* provides mechanisms for resolution of disputes between the Department, the Director-General, councils and public authorities.

2. CONSTRUCTION AND OCCUPATION CERTIFICATION

2.1 In relation to the construction and occupation of the ceramic tile manufacturing facility, the Applicant shall provide to the Director-General and Council, the following:

- a) written notification of the appointment of a Principal Certifying Authority;
- b) copies of all Construction Certificates issued for the ceramic tile manufacturing facility;
- c) written notification of the intention to commence construction work, to be received at least two working days prior to the commencement of construction. In the event that more than one Construction Certificate is issued, notification shall be provided prior to the commencement of construction the subject of each Certificate;
- d) copies of all Occupation Certificates issued for the ceramic tile manufacturing facility; and
- e) written notification of the intention to occupy the ceramic tile manufacturing facility, to be received at least two working days prior to occupation. In the event that more than one Occupation Certificate is issued, notification shall be provided prior to the occupation the subject of each Certificate.

2.2 The Applicant shall provide all information necessary for the Principal Certifying Authority to determine that the ceramic tile manufacturing facility will comply with:

- a) the Building Code of Australia; and
- b) all relevant provisions of the Act, including the payment of a long service levy under section 34 of the *Building and Construction Industry Long Service Payments Act 1986*.

- 2.3 Prior to the commencement of any construction work associated with the ceramic tile manufacturing facility, the Applicant shall erect signs at the construction site and in a prominent position at the site boundary where the sign can be viewed from the nearest public place. The sign shall indicate:
- a) the name, address and telephone number of the Principal Certifying Authority;
 - b) the name of the person in charge of the construction site and telephone number at which that person may be contacted outside working hours; and
 - c) a statement that unauthorised entry to the construction site is prohibited.

The signs shall be maintained for the duration of construction works.

3. UTILITIES AND PUBLIC WORKS

- 3.1 The Applicant shall identify (including, but not limited to the position and level of service) all public utility services on the site, roadway, nature strip, footpath, public reserve, or any public areas that are associated with, and/ or adjacent to the site, and/ or are likely to be affected by the construction and operation of the ceramic tile manufacturing facility.
- 3.2 The Applicant shall consult with the relevant provider of the utilities identified in condition 3.1 and make arrangements to adjust and/ or relocate their services as required. The cost of any such adjustment and/ or relocation of services shall be borne by the Applicant.
- 3.3 Prior to the issuing of the first construction certificate, the Applicant shall provide documentary evidence from the utility providers identified in condition 3.1, to the Principal Certifying Authority, confirming that their requirements have been satisfied.
- 3.4 Prior to the commencement of any construction works required in relation to the ceramic tile manufacturing facility, the Applicant shall advise the Council in writing and/or photographs of any existing damage to Council's property. Should no damage exist to Council's property, then a statement to this effect must be provided to Council in writing, prior to the commencement of construction.

4. ENVIRONMENTAL PERFORMANCE

Air Quality Impacts

Odour

- 4.1 ²The Applicant must not cause or permit the emission of offensive odours from the site. For the purpose of this condition, "offensive odour" has the same meaning as defined under Section 129 of the *Protection of the Environment Operations Act 1997*.

Dust Emissions

- 4.2 ³The Applicant shall design, construct, operate and maintain the ceramic tile manufacturing facility in a manner that minimises or prevents the emission of dust from the site.
- 4.3 ⁴The Applicant shall take all practicable measures to ensure that all vehicles entering or leaving the site and carrying a load that may generate dust are covered at all times, except during loading and unloading. Any such vehicles shall be covered or enclosed in a manner that will prevent emissions of dust from the vehicle at all times.

² Incorporates an EPA General Term of Approval (O1.1)

³ Incorporates an EPA General Term of Approval (O2.1)

⁴ Incorporates an EPA General Term of Approval (O2.3)

- 4.4 ⁵All trafficable areas and vehicle manoeuvring areas on the site shall be maintained in a condition that will minimise the generation or emission of wind blown or traffic generated dust from the site at all times.

Discharge Limits

- 4.5 ⁶The Applicant shall design, construct, operate and maintain the ceramic tile manufacturing facility to ensure that emissions of pollutants to air only occur from the discharge points listed in Table 1 below, and that for each discharge point, the concentration of each pollutant listed does not exceed the maximum allowable discharge concentration limit for that pollutant at the discharge point. All concentration limits specified in the table are based on 101.3 kPa, 273 K, dry reference conditions, or as otherwise indicated in this condition, and are to be determined in accordance with the monitoring requirements described under conditions 5.1 and 5.3.

Table 1. Maximum Allowable Discharge Concentration Limits (Air)

Discharge Point	Pollutant	Maximum Allowable Discharge Concentration Limit (mgm ⁻³)
1 – Dust extractor clay preparation CP1&2	Solid particles	20
2 – Dust extractor clay preparation CP3&4	Solid particles	20
3 – Pressing and drying PD1&2	Solid particles	20
4 – Pressing and drying PD3&4	Solid particles	20
5 – Drier D1	Solid particles	20
6 – Drier D2	Solid particles	20
7 – Drier D3	Solid particles	20
8 – Drier D4	Solid particles	20
9 – Glaze Line	Solid particles	20
10 – Selection SL1234	Solid particles	20
11 – Vacuum Plant 1234	Solid particles	20
12 – Spray Drier SD1 (for stages 1 & 2)	Solid particles	20
13 – Spray Drier SD2 (for stages 3 & 4)	Solid particles	20
14 – Kiln KP1	H ₂ SO ₄ mist, SO ₃ , or both as SO ₃	100
	Any fluorine compound (HF)	5
	NO ₂ or NO, or both ^a	100
	Hazardous substances (Sb, As, Cd, Pb, Hg, Be, Cr, Co, Mn, Ni, Se, Sn, V)	1
	Cadmium	0.1
	Mercury	0.1
	Solid particles ^a	20
15 – Kiln KP2	H ₂ SO ₄ mist, SO ₃ , or both as SO ₃	100
	Any fluorine compound (HF)	5
	NO ₂ or NO, or both ^a	100
	Hazardous substances (Sb, As, Cd, Pb, Hg, Be, Cr, Co, Mn, Ni, Se, Sn, V)	1
	Cadmium	0.1
	Mercury	0.1
	Solid particles ^a	20
16 – Kiln KP3	H ₂ SO ₄ mist, SO ₃ , or both as SO ₃	100
	Any fluorine compound (HF)	5
	NO ₂ or NO, or both ^a	100

⁵ Incorporates an EPA General Term of Approval (O2.2)

⁶ Incorporates EPA General Terms of Approval (P1.1 and L3.1)

	Hazardous substances (Sb, As, Cd, Pb, Hg, Be, Cr, Co, Mn, Ni, Se, Sn, V)	1
	Cadmium	0.1
	Mercury	0.1
	Solid particles ^a	20
17 – Kiln KP4	H ₂ SO ₄ mist, SO ₃ , or both as SO ₃	100
	Any fluorine compound (HF)	5
	NO ₂ or NO, or both ^a	100
	Hazardous substances (Sb, As, Cd, Pb, Hg, Be, Cr, Co, Mn, Ni, Se, Sn, V)	1
	Cadmium	0.1
	Mercury	0.1
	Solid particles ^a	20
18 – Hot air cooling HAC1	Solid particles	5
19 – Hot air cooling HAC2	Solid particles	5
20 – Hot air cooling HAC3	Solid particles	5
21 – Hot air cooling HAC4	Solid particles	5

a. Concentration limits apply under 101.3 kPa, 273 K, 7% O₂, dry reference conditions

Load Limits

- 4.6 ⁷For each assessable pollutant identified in Table 2 below, the total load discharged from the site during the reporting period must not exceed the load limit specified for that pollutant in that Table. The total load of the assessable pollutant must be calculated in accordance with the relevant load calculation protocol, as defined by EPA guidelines.

Table 2. Maximum Allowable Load Limits (Air)

Assessable Pollutant	Maximum Allowable Load Limit (kg)
Fine Particulates	49609
Coarse Particulates	26712
Fluoride	3701
Sulfur oxides	73657
Nitrogen oxides	73657

Note: an assessable pollutant is a pollutant which affects the licence fee payable for the Environment Protection Licence (EPL) issued. The reporting period is defined as the period of 1 year, the first reporting period commencing from the date on which the EPL commences.

Stack Discharge Design Requirements

- 4.7 ⁸The design parameters for each discharge point identified in Table 3 below shall meet the requirements specified in that Table. All stacks shall be designed, constructed, operated and maintained in accordance with good engineering practice in order to minimise the effects of stack tip downwash and building wake effects on ground-level air pollutant concentrations.

Table 3. Stack Discharge Design Requirements

Discharge Point ^a	Minimum Stack Height (m)	Minimum Stack Discharge Velocity (ms ⁻¹)	Maximum Stack Diameter (m)
1, 2	32	17.5	1.1
3, 4	32	17.7	1.0
5, 6, 7, 8	18	5.2	1.0
9	32	16.0	1.0
10	14	15.7	0.5
11	32	14.7	0.2
12, 13	32	21.9	1.3

⁷ Incorporates EPA General Terms of Approval (L2.1 and L2.2)

⁸ Incorporates an EPA General Term of Approval (U1.1)

14, 15, 16, 17	24	26.0	0.75
18, 19, 20, 21	16	17.4	1.0

a. The numbering system used to identify the discharge points in the above table is the same as that described in Table 1 of condition 4.5.

Note: For the purposes of this condition, a number of publications may be referred to for determining good engineering practice stack height, including:

- a) USEPA, 1985, *Guideline for Determination of Good Engineering Practice Stack Height (Technical Support Document for the Stack Height Regulations)*, revised EPA-450/4-80-023R, United States Environmental Protection Agency, Washington DC, USA;
- b) USEPA, 1995, *User's Guide to the Building Profile Input Program*, revised February 1995, EPA-454/R-93-038, United States Environmental Protection Agency, Washington DC, USA; and
- c) USEPA, 1997, *Addendum to ISC3 User's Guide, The PRIME Plume Rise and Building Downwash Model*, United States Environmental Protection Agency, Washington DC, USA.

4.8 ⁹To ensure undesirable building wake effects do not impede the predicted dispersion of air pollution from the ceramic tile manufacturing facility, the following requirements shall be met:

- a) no building or structure constructed at the site shall exceed the dimensions (height, width and length) specified for it in the EIS;
- b) buildings and structures may only be located strictly in accordance with the layout specified in the EIS; and
- c) only buildings and structures identified in the EIS or this consent shall be constructed.

Note: The Department recognises that the Applicant may be able to demonstrate that alternative works/ design would not adversely affect the dispersion of emissions from the ceramic tile manufacturing facility. Should the Applicant propose to make any alterations to works/ design for the facility, then an appropriate level of assessment/ approval under the *Environmental Planning and Assessment Act 1979* may be required.

4.9 ¹⁰The Applicant shall design, construct, operate and maintain the ceramic tile manufacturing facility in a manner that will enable:

- a) the kiln stacks (discharge points 14, 15, 16, and 17) to be increased in height and/ or have devices attached to increase discharge velocity; and
- b) retro-fitting of additional pollution control devices.

Note: This condition has been imposed to ensure the ceramic tile manufacturing facility is built in a manner that would not preclude the imposition of remedial measures on the facility, should the air quality monitoring required under this consent identify that remedial measures are necessary to bring the ceramic tile manufacturing facility into compliance.

Performance Guarantees

4.10 ¹¹Prior to the commencement of construction of the ceramic tile manufacturing facility, the Applicant shall provide manufacturer's performance guarantees for all plant and equipment to demonstrate to the satisfaction of the EPA, that all sources of air pollutants will comply with the emission concentration limits specified under condition 4.5.

Meteorological Station

⁹ Incorporates an EPA General Term of Approval (U1.2)

¹⁰ Incorporates an EPA General Term of Approval (U1.3)

¹¹ Incorporates an EPA General Term of Approval (U2.1)

- 4.11 ¹²In the event that the Applicant is unable to obtain data from a meteorological station that is representative of the conditions at the site, the Applicant shall establish its own meteorological station in the vicinity of the site, to meet the requirements of the EPA. The monitoring station shall be used to undertake the Meteorological Monitoring Program required under condition 5.9 of this consent.

Note: The Applicant must provide a detailed rationale, to the satisfaction of the EPA, that data obtained from the meteorological station (existing or otherwise) will be representative of the conditions at the site.

Noise Impacts

- 4.12 Construction activities associated with the ceramic tile manufacturing facility, including the arrival and departure of vehicles delivering or removing materials from the site, shall only be carried out between the following hours:
- 7:00 am and 6:00pm from Monday to Friday inclusive;
 - 7:00 am and 5:00pm on Saturdays; and
 - at no time on a Sunday or a public holiday.

Outside of these hours, construction activities are permitted to occur (with the exception of earthworks and building construction activities) provided it meets the operational noise criteria as defined in condition 4.14.

- 4.13 Operation activities associated with the ceramic tile manufacturing facility may be carried out 24 hours a day 7 days a week.
- 4.14 ¹³The Applicant shall operate and maintain the ceramic tile manufacturing facility to ensure that for the most affected residential receiver, the noise level at that receptor does not exceed the maximum allowable noise contribution limit specified in Table 4 below.

Table 4. Maximum Allowable Noise Contribution Limit (dB(A))

Receiver Location	Day ^a	Evening ^b	Night ^c
	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)
Most affected residential receiver	41 dB(A)	39 dB(A)	35 dB(A)

a. Day is defined as the period from 7:00am to 6:00pm Monday to Saturday and 8:00am to 6:00pm on Sundays and public holidays.

b. Evening is defined as the period from 6:00pm to 10:00pm Monday to Sunday and public holidays.

c. Night is defined as the period from 10:00pm to 7:00am Monday to Saturday and 10:00pm to 8:00am on Sundays and public holidays.

- 4.15 ¹⁴For the purpose of assessment of noise contributions specified under condition 4.14, noise from the ceramic tile manufacturing facility shall be:
- measured at the most affected point on or within the receptor site boundary; and
 - where applicable, subject to the modification factors provided in Section 4 of the *New South Wales Industrial Noise Policy* (EPA, 2000).
- 4.16 ¹⁵Notwithstanding condition 4.15 of this consent, should direct measurement of noise from the site be impractical, the Applicant 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.
- 4.17 To protect against sleep disturbance, noise from the site shall not exceed the L_{A1(1 minute)} noise level of 45 dB(A) at the nearest residential receiver most affected by noise from

¹² Incorporates an EPA General Term of Approval (U3.3)

¹³ Incorporates an EPA General Term of Approval (L6.1)

¹⁴ Incorporates EPA General Terms of Approval (L6.2 and L6.3)

¹⁵ Incorporates an EPA General Term of Approval (L6.3)

the operation of the ceramic tile manufacturing facility. This noise limit shall be measured at 1 metre from the dwelling façade and shall apply during the night period only (defined in condition 4.14).

- 4.18 ¹⁶The maximum allowable noise contributions identified in conditions 4.14 and 4.17 apply under all meteorological conditions measured at 10 metres above ground level, except:
- during rain and wind speeds greater than 3ms⁻¹; or
 - from 6:00pm to 7:00am during intense temperature inversions, which are indicated by cloud cover of less than 40% and wind speeds of less than 1.0ms⁻¹.

Water Quality Impacts

- 4.19 ¹⁷Except as may be expressly provided by a licence under the *Protection of the Environment Operations Act 1997* in relation to the ceramic tile manufacturing facility, section 120 of that Act (pollution of waters) shall be complied with, in, and in connection with, the carrying out of the ceramic tile manufacturing facility.

Erosion and Sediment Control

- 4.20 Prior to the commencement of construction, the Applicant shall provide documentary evidence to, and to the satisfaction of, the Director-General confirming that all erosion and sedimentation controls are in place.
- 4.21 All construction vehicles exiting the site, having had access to unpaved areas, shall depart via a wheel-wash facility.
- 4.22 All erosion and sedimentation controls required as part of this consent shall be maintained at design capacity for the duration of the construction works, and until such time as all ground disturbed by the construction works, has been stabilised and rehabilitated so that it no longer acts as a source of sediment.

Site Drainage and Stormwater

- 4.23 The construction and operation of the ceramic tile manufacturing facility shall not concentrate or lead to an increase in the rate of flow of stormwater discharged from the site over and above the pre-development flow conditions.
- 4.24 The Applicant shall design, construct, operate and maintain all stormwater infrastructure to direct all stormwater runoff to the site's stormwater detention basins. Such stormwater infrastructure shall be capable of handling all stormwater discharges up to and including a 1 in 100 year ARI storm event.
- 4.25 Where stormwater discharge from the site is proposed in any location other than existing drainage lines, the Applicant shall create or have created any easements over the downstream connection point(s) such that the stormwater can legally be drained onto privately-owned adjoining property.

Note: This condition acknowledges that existing stormwater runoff from the site drains to the golf course and that the development is unlikely to affect the rate of flow or the point of discharge at that location, and therefore, no easement is required to legally drain the water.

Traffic and Transport Impacts

Parking

¹⁶ Incorporates an EPA General Term of Approval (L6.1)

¹⁷ Incorporates an EPA General Term of Approval (L1.1)

- 4.26 The Applicant shall make provisions for at least 42 car parking spaces and 2 additional disabled car parking spaces on-site. The carpark design shall comply with *AS2890.1 1993 Off-Street Car Parking*.
- 4.27 Disabled, visitor and service vehicle parking spaces and loading bays shall be clearly marked on the pavement, signposted and designated in accordance with the relevant Australian Standards.
- 4.28 All driveways, parking areas and vehicular turning areas shall be constructed to a standard of bitumen sealed gravel pavement or higher.
- 4.29 All parking and loading/unloading bays, truck docks, driveways and turning areas shall be kept clear of obstructions and shall not be used for the storage of goods, raw materials or waste material.
- 4.30 All loading and unloading of material associated with the ceramic tile manufacturing facility shall be carried out wholly within the site.
- 4.31 Vehicles associated with the ceramic tile manufacturing facility may not stand or park on any public road or footpath adjacent to the site at any time.

Access and Internal Roadworks

- 4.32 ¹⁸The Applicant shall design and construct all concrete kerb laybacks in accordance with Council's Standard Drawing SD50.

Note: Council's Standard Drawing SD50 requires that the design and construction of concrete kerb laybacks are consistent with the following specifications:

- a) layback thickness of not less than 150mm;
- b) double reinforcement with two layers of F72 mesh;
- c) the top layer of reinforcement shall have 25mm clear cover to the top;
- d) the bottom layer of reinforcement shall have 50mm clear cover to the bottom;
- e) ready mixed concrete of 28 day compressive strength, and not less than 32Mpa shall be used; and
- f) finish shall be plain concrete with a broom finish, or as otherwise specified in the EIS.

- 4.33 ¹⁹Heavy duty vehicular footpath crossings shall be designed and constructed as full width concrete slabs and in accordance with the design criteria contained in Council's Standard Drawings SD77 and SD78.

Note: Council's Standard Drawings SD77 and SD78 requires that the design and construction of heavy duty vehicular footpath crossings is consistent with the following specifications:

- a) concrete thickness not less than 150mm;
- b) double reinforcement with two layers of F72 mesh;
- c) the top layer of reinforcement shall have 25mm clear cover to the top;
- d) the bottom layer of reinforcement shall have 50mm clear cover to the bottom;
- e) ready mixed concrete of 28 day compressive strength, and not less than 32Mpa shall be used; and
- f) finish shall be plain concrete with a broom finish, or as otherwise specified in the EIS.

- 4.34 Prior to the commencement of construction for the works described in conditions 4.32 and 4.33, the Applicant shall provide documentary evidence to the Director-General, of Council's satisfaction with the design of the proposed works.

¹⁸ Incorporates a Council General Term of Approval (1)

¹⁹ Incorporates a Council General Term of Approval (2)

- 4.35 ²⁰The Applicant shall install and maintain barricades and lights to enclose the whole of the vehicular crossing work area for the duration of those works, and shall ensure that adjacent footpath areas are kept clear of debris at all times and in a safe condition for pedestrian access.
- 4.36 ²¹Where concrete has been poured, the Applicant shall ensure that the works are closed to vehicular and pedestrian traffic for 7 days after the pour.
- 4.37 ²²After completion of works identified in conditions 4.32 and 4.33, the Applicant shall trim and grade the adjacent footpath in accordance with the requirements of Council.

Note: Council has indicated that the following specifications would satisfy this condition for the adjacent footpath:

- a) trimmed or filled along the edges of the work up to an even grade of 1 (vertical) to 4 (height);
- b) finish shall be plain concrete with a broom finish, or as otherwise specified in the EIS;
- c) all edges and dummy joints finished with a 75mm edging tool; and
- d) the kerb layback and footpath crossing slab shall not be integral, but separated by a full depth, bitumen impregnated joint filling strip.

- 4.38 Heavy vehicles entering the site shall not queue on Racecourse Road or Kyle Street at any time.
- 4.39 ²³The combined entry/ exit driveway shall have a width of at least 8.0 metres and an unrestricted internal entry length of at least 50.0 metres.
- 4.40 Notwithstanding condition 4.39, the driveway shall be designed and constructed to ensure that B-double vehicles can turn into or out of the site from Racecourse Road without:
- a) crossing on to the opposite side of the road; or
 - b) crossing on to the opposite side of the driveway
- 4.41 A median strip or similar shall be installed on the driveway to ensure that internal two-way traffic are separated, and shall be designed and constructed to the satisfaction of Council.
- 4.42 Directional pavement arrows shall be installed on all internal roads.
- 4.43 Landscaping at the site, including advertising signs, shall not affect driver sight distances for vehicles entering and exiting the site.

Waste Management Impacts

- 4.44 The Applicant shall install and maintain toilet facilities at the site, at a rate of 1 toilet for every 20 persons (or part thereof) employed at the site during construction. Such toilet facilities shall be installed to the satisfaction of Council, and prior to the commencement of any other construction works at the site.
- 4.45 All building waste generated during the construction of the ceramic tile manufacturing facility shall be removed prior to the commencement of operation.

²⁰ Incorporates a Council General Term of Approval (3)

²¹ Incorporates a Council General Term of Approval (4)

²² Incorporates a Council General Term of Approval (4)

²³ Incorporates a Council General Term of Approval (5)

- 4.46 A designated area for the storage and collection of waste and recyclable materials shall be provided at the site and shall be designed, constructed, operated and maintained in a manner so as not to cause a nuisance to adjoining properties.
- 4.47 The Applicant 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, or any waste generated at the site to be disposed of at the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*.
- 4.48 All wastes generated on site during construction and operation of the ceramic tile manufacturing facility shall be classified in accordance with the EPA's publication *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* and disposed of to a facility that may lawfully accept the waste.

Hazards and Risk Impacts

Bunding and Spill Management

- 4.49 The Applicant shall store and handle all dangerous goods (as defined by the Australian Dangerous Goods Code) and combustible liquids strictly in accordance with:
- a) all relevant Australian Standards;
 - b) 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.

Soil Management

- 4.50 Prior to the commencement of any construction works that will result in the disturbance of any potentially contaminated soil, as identified in the report titled *Phase 1 Environmental Site Investigation – Proposed Lot 101, Racecourse Road, Rutherford* prepared by Parsons Brinckerhoff, dated 2002, the Applicant shall engage a suitably qualified person or team to undertake targeted soil sampling of those locations, to determine the potential impact on soil from previous land uses.
- 4.51 Should the sampling required under condition 4.50 identify contaminated soil, the Applicant shall, prior to the commencement of any remediation works on the site:
- a) provide the Director-General with a report that describes:
 - i) what the proposed remediation of the land would entail;
 - ii) how the proposed remediation of the land would be coordinated with the proposed construction works;
 - iii) what measures would be implemented to manage or mitigate any potential impacts associated with the remedial works;
 - iv) how the success of these measures would be monitored during the proposed remedial works; and
 - b) ensure that construction of any component of the ceramic tile manufacturing facility does not:
 - i) occur on any part of the site identified by the soil sampling required under condition 4.50, to be contaminated; or
 - ii) occur on any part of the site that may interfere with the ongoing remediation of those areas of the site identified under condition 4.50, to be contaminated;
- until such time as the Applicant demonstrates, to the satisfaction of the Director-General, that the site has been remediated.

Landscaping

- 4.52 Landscaping works at the site shall incorporate those species endemic to the area.
- 4.53 Landscaped areas at the site shall be kept clear of parked vehicles, stored goods, garbage and waste material.
- 4.54 The Applicant shall minimise the removal of trees and other vegetation from the site, and restrict any clearance to the areas occupied by buildings and paved surfaces, and those areas necessary for fire control, and shall be done in accordance with Council requirements.
- 4.55 Appropriate weed management for the site, especially landscaped areas, shall be undertaken for the life of the ceramic tile manufacturing facility. Details of the weed management for the site shall be included as part of the Landscape Management Plan required under condition 7.4 g).

Visual Amenity Impacts

- 4.56 The Applicant shall ensure that all external lighting associated with the ceramic tile manufacturing facility is mounted, screened, and directed in such a manner so as not to create a nuisance to surrounding properties or roadways. The lighting shall be the minimum level of illumination necessary and shall comply with *AS 4282(INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*.

5. ENVIRONMENTAL MONITORING AND AUDITING

General Monitoring Requirements

- 5.1 ²⁴The results of all monitoring required under this consent shall be:
- in a legible form, or in a form that can readily reduced to a legible form;
 - kept for at least four years after the monitoring or event to which the results relate took place;
 - produced in a legible form to any authorised officer of the EPA or the Director-General, upon request; and
 - kept with the following details for each sample required to be collected:
 - the date(s) on which the sample was collected;
 - the time(s) at which the sample was collected;
 - the point at which the sample was collected; and
 - the name of the person who collected the sample.

Air Quality Monitoring

Ambient Air Monitoring

- 5.2 ²⁵The Applicant shall undertake ambient air monitoring for the nearest sensitive receptors or specialised land use, to be determined in consultation with the EPA, and employing the sampling and analysis method specified in Table 5.

Table 5. Ambient Air Monitoring Requirements

Monitoring Point(s)	Pollutant	Units of measure	Averaging Period	Frequency	Sampling Method
nearest sensitive receptors (EPA Identification Point 22)	Particulate Matter – PM ₁₀	µgm ⁻³	-	1 day in 6, or continuous	AM-18 or AS 3580.9.8
nearest specialised	Any fluorine	µgm ⁻³	24-hour, weekly,	Continuous	AM-7, AM-8

²⁴ Incorporates EPA General Terms of Approval (M2.1, M2.2 and M2.3)

²⁵ Incorporates EPA General Terms of Approval (P1.1, M4.1 and M5.4.4)

land use ^a (EPA Identification Point 23)	compound (HF)		30-day & 90-day		or AM-9
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a. Specialised land use includes all areas with vegetation sensitive to fluoride, such as grape vines and stone fruit.

Discharge Concentration Monitoring

- 5.3 ²⁶During operation of each stage of the ceramic tile manufacturing facility (stages 1 to 4), the Applicant shall determine the concentration of each pollutant specified in Table 6 below, at the discharge points identified and employing the sampling and analysis method specified. All emission parameters for each discharge point shall be determined concurrently, at the frequency indicated in the table, and using the units of measure specified.

Table 6. Discharge Concentration Monitoring Requirements

Discharge Point(s) ^a	Pollutant	Units of measure	Sampling Method	Frequency
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 18, 19, 20, 21	Velocity	ms ⁻¹	TM-2	Post commissioning and annual
	Volumetric flow rate	m ³ s ⁻¹	TM-2	Post commissioning and annual
	Temperature	°C	TM-2	Post commissioning and annual
	Moisture content in stack gases	%	TM-22	Post commissioning and annual
	Dry gas density	kgm ⁻³	TM-23	Post commissioning and annual
	Molecular weight of stack gases	g.gmole ⁻¹	TM-23	Post commissioning and annual
	Solid particles	mgm ⁻³	TM-15	Post commissioning and annual
14, 15, 16, 17	H ₂ SO ₄ mist, SO ₃ , or both as SO ₃	mgm ⁻³	TM-3	Post commissioning and annual
	Any fluorine compound (HF)	mgm ⁻³	TM-9	Post commissioning and annual
	NO ₂ or NO, or both	mgm ⁻³	TM-11	Post commissioning and annual
	Hazardous substances (Sb, As, Cd, Pb, Hg, Be, Cr, Co, Mn, Ni, Se, Sn, V)	mgm ⁻³	TM-12, TM-13 & TM-14	Post commissioning and annual
	Cadmium	mgm ⁻³	TM-12, TM-13 & TM-14	Post commissioning and annual
	Mercury	mgm ⁻³	TM-12, TM-13 & TM-14	Post commissioning and annual
	Solid particles	mgm ⁻³	TM-15	Post commissioning and annual
	Velocity	ms ⁻¹	TM-2	Post commissioning and annual
	Volumetric flow rate	m ³ s ⁻¹	TM-2	Post commissioning and annual
	Moisture	%	TM-22	Post commissioning and annual
	Dry gas density	kgm ⁻³	TM-23	Post commissioning and annual
	Molecular weight of stack gases	g.gmole ⁻¹	TM-23	Post commissioning and annual
	CO ₂	%	TM-24	Post commissioning and annual
	O ₂	%	TM-25	Post commissioning and annual

a. The numbering system used to identify the discharge points in the above table is the same as that described in Table 1 of condition 4.5.

- 5.4 ²⁷The Applicant shall determine the sampling position for each discharge point identified in condition 5.3 in accordance with the EPA's test method TM-1.
- 5.5 ²⁸The Applicant may seek the approval of the Director-General to alter the frequency of any pollutant concentration or emission parameter determination required under condition 5.3 of this consent. Any request for approval shall only be made provided:

²⁶ Incorporates EPA General Terms of Approval (P1.1, M3.1 and M4.1)

²⁷ Incorporates an EPA General Term of Approval (M3.3)

²⁸ Incorporates an EPA General Term of Approval (M3.2)

- a) concentration/ parameter determination has been undertaken for a period of no less than 12 months (measured from the commencement of operation of stage 4 of the ceramic tile manufacturing facility);
- b) there has been no exceedence of any limit placed on the subject concentration/ parameter by this consent within the 12-month period;
- c) there has been no reasonable complaint received from the public in relation to the subject concentration/ parameter within the preceding 12-month period (refer to condition 6.3 of this consent); and
- d) the request is accompanied by written agreement of the EPA with the proposed alteration to the frequency of parameter determination.

Note: condition 5.5 recognises that on-going monitoring may demonstrate that air quality limits imposed under this consent are consistently met, and the need for rigorous and frequent monitoring may be relaxed.

Performance Monitoring

- 5.6 ²⁹Within 90 days of commencement of operation of each stage of the ceramic tile manufacturing facility (stages 1 to 4), and during a period in which the facility is operating under design loads and normal operating conditions, the Applicant shall undertake a program for point source emission testing on each stack as described under condition 5.3 of this consent and undertake dispersion modelling for all air pollutants identified in condition 5.2 to confirm the air emission performance of the facility. The program shall meet the requirements of the EPA. For stages 2, 3 and 4 of the ceramic tile manufacturing facility, the Applicant shall confirm the results of the predictive air quality assessment undertaken to satisfy condition 1.4 of this consent, and evaluate the effectiveness of any additional mitigation measures applied to satisfy that condition.

A report providing the results of the program and dispersion modelling shall be submitted to the Director-General and the EPA within 28 days of completion of the testing required.

- 5.7 ³⁰In the event that a program undertaken to satisfy condition 5.3 of the consent indicates that the operation of any stage of the ceramic tile manufacturing facility, under normal operating conditions, does not comply with the limits or performance measures specified in the EIS, condition 4.5 of this consent, and the EPA's Impact Assessment Criteria described in *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW*, then the Applicant shall undertake an **Air Quality Mitigation Study** to provide details of remedial measures that the Applicant will implement to reduce air quality impacts to the levels required.

The **Air Quality Mitigation Study** shall include, but not necessarily be limited to the following:

- a) a technical review of all practicable mitigation options shall be carried out and the potential reduction in air quality impacts associated with each mitigation option quantitatively evaluated;
- b) identification of the mitigation option(s), as determined in part a), that will enable the ceramic tile manufacturing facility to meet the air quality limits specified in the consent and the extent of any difficulty in meeting these limits;
- c) a cost/benefit analysis of a range of mitigation options shall be carried out; and
- d) using the results of condition 5.3 and this condition, emissions concentration limits (point sources only) and management practices (point and diffuse sources) shall be specified for the most cost effective mitigation option that will ensure compliance with the conditions of this consent.

²⁹ Incorporates EPA General Terms of Approval (M1.1 and M1.2)

³⁰ Incorporates EPA General Terms of Approval (M1.3 and U3.1 to U3.6)

Results of the Air Quality Mitigation Study and a timetable for implementation of the recommendations from the Study shall be submitted to the Director-General for approval within 60 days of completion of the Study, or as otherwise agreed with the Director-General, and be accompanied by evidence that the EPA is satisfied that the remedial measures are acceptable.

Note: Air quality impacts associated with the ceramic tile manufacturing facility have been assessed to be a key issue in relation to environmental planning and assessment. A stringent feed-forward/ feedback mechanism (conditions 1.4, 5.6 and 5.7 of this consent) has been required to confirm the air emissions performance of the ceramic tile manufacturing facility at each stage (feedback), and to use established monitoring data to demonstrate acceptable air emissions performance prior to the progression to each subsequent stage of the facility (feed-forward). This concept is illustrated in Attachment A.

Fluoride Monitoring

- 5.8 ³¹Prior to the commencement of operation, the Applicant shall prepare and implement a Fluoride Monitoring Program to monitor and assess the impacts of the emission and deposition of fluoride (particulate and gaseous) on the surrounding environment, particularly vegetation. The Program shall meet the requirements of the EPA, should there be any. The Program shall include, but not necessarily be limited to:
- a) locations at which monitoring of vegetation will be undertaken, including a map showing their locations in relation to the ceramic tile manufacturing facility;
 - b) monitoring of the fluoride levels in the following vegetation:
 - i) native vegetation (understorey and overstorey) within 3 kilometres of the site;
 - ii) cultivated vegetation within 10 kilometres of the site. The Applicant shall also undertake a visual assessment of foliar damage during the growing season at vineyards located within 10 kilometres of the site; and
 - iii) pasture grasses and forage crops from commercial grazing properties within 3 kilometres of the site.
 - c) procedures for monitoring and inspection of vegetation for indicators of a sub-lethal dose of fluoride or significant damage to vegetation (refer to condition 8.1);
 - d) details of at least one background survey of vegetation health that has been undertaken prior to the commencement of operation of the ceramic tile manufacturing facility. The methodology for the background survey shall be approved by the EPA prior to undertaking the survey; and
 - e) a periodic schedule for the inspection of vegetation at the monitoring locations, at a frequency of at least every three months.

The Fluoride Monitoring Program shall be submitted for the approval of the Director-General prior to the commencement of operation of Stage 1 of the ceramic tile manufacturing facility, and shall be accompanied by written evidence of the EPA's satisfaction with the Program.

Note: Hydrogen Fluoride is known to cause severe damage to vegetation and to animals that may ingest the vegetation. Periodic inspection of local vegetation is an indirect means of monitoring the ceramic tile manufacturing facility's performance with respect to air quality. Vegetation monitoring may also identify if fluoride deposition occurs outside the area predicted in the EIS, and thereby act as a trigger for any necessary remedial action.

Meteorological Monitoring

- 5.9 ³²In the event that the Applicant is unable to obtain data from a meteorological station that is representative of the conditions at the site, the Applicant shall prepare and

³¹ Incorporates EPA General Terms of Approval (M5.1 to M5.3 and M5.4.1 to M5.4.3)

³² Incorporates an EPA General Term of Approval (M5.4.5)

implement a Meteorological Monitoring Program to monitor meteorological conditions in the vicinity of the site. The Program shall meet the sampling requirements listed in Table 7 below.

Table 7. Meteorological Monitoring Requirements

Parameter	Units of measure	Averaging Period	Sampling Method	Frequency
Wind Speed @ 10 m	ms ⁻¹	1 hour	Continuously	AM-2 & AM-4
Wind Direction @ 10m	degrees (°)	1 hour	Continuously	AM-2 & AM-4
Sigma Theta @ 10m	degrees (°)	1 hour	Continuously	AM-2 & AM-4
Ambient Temperature @ 5m	°C	1 hour	Continuously	AM-4
Rainfall	mm	Daily	Continuously	AM-4
Siting				AM-1 & AM-4
Measurement				AM-2 & AM-4

Noise Monitoring

5.10 ³³Within 90 days of commissioning of each stage of the ceramic tile manufacturing facility (stages 1 to 4), and during a period in which the facility is operating under design loads and normal operating conditions, the Applicant shall undertake a program to confirm the noise emission performance of the facility. The program shall meet the requirements of the EPA, 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 4.14 of this consent;
- b) a comparison of the results of the noise monitoring required under a) above, and the predicted noise impacts detailed in the documents listed under condition 1.2b) to e) inclusive (that is, the EIS and additional information documents); and
- c) details of any entries in the Complaints Register (condition 6.3 of this consent) relating to noise impacts.

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

5.11 ³⁴In the event that a program undertaken to satisfy condition 5.10 of the consent indicates that the operation of any stage of the ceramic tile manufacturing facility, under normal operating conditions, will lead to greater noise impacts than permitted under conditions 4.14 and 4.17 of this consent, then the Applicant 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 EPA is satisfied that the remedial measures are acceptable.

Auditing

5.12 Within three years of the commencement of Stage 1 of the operation of the ceramic tile manufacturing facility, and every three years thereafter or as otherwise required by the Director-General, the Applicant shall commission an independent person or team to undertake an Environmental Audit of the ceramic tile manufacturing facility. The

³³ Incorporates EPA General Terms of Approval (M6.1 and M6.2)

³⁴ Incorporates an EPA General Term of Approval (M6.2)

independent person or team shall be approved by the Director-General, prior to the commencement of the Audit. An **Environmental Audit Report** shall be submitted for comment to the Director-General, the EPA and Council, within one month of the completion of the Audit. The Audit shall:

- a) be carried out in accordance with *ISO 14010 - Guidelines and General Principles for Environmental Auditing* and *ISO 14011 - Procedures for Environmental Auditing*;
- b) assess compliance with the requirements of this consent, and other licences and approvals that apply to the ceramic tile manufacturing facility;
- c) assess the ceramic tile manufacturing facility against the predictions made and conclusions drawn in the EIS; and
- d) review the effectiveness of the environmental management of the ceramic tile manufacturing facility, including any environmental impact mitigation works.

The Director-General may, having considered any submission made by the EPA and/or Council in response to the Environmental Audit Report, require the Applicant to undertake works to address the findings or recommendations presented in the Report. Any such works shall be completed within such time as the Director-General may agree.

6. COMMUNITY INFORMATION AND INVOLVEMENT

- 6.1 Subject to confidentiality, the Applicant shall make all documents required under this consent available for public inspection upon request. This shall include provision of all documents at the site for inspection by visitors, and in an appropriate electronic format on the Applicant's internet site, should one exist.

Complaints Procedure

- 6.2 ³⁵Prior to the commencement of construction of Stage 1 of the ceramic tile manufacturing facility, the Applicant shall ensure that the following are available for community complaints:

- a) a telephone number on which complaints about operations on 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, should the Applicant have email capabilities.

The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public. These details shall also be provided on the Applicant's internet site, should one exist.

- 6.3 ³⁶The Applicant shall record details of all complaints received through the means listed under condition 6.2 of this consent 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 Applicant in relation to the complaint, including any follow-up contact with the complainant; and
- f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken.

³⁵ Incorporates an EPA General Term of Approval

³⁶ Incorporates an EPA General Term of Approval

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

7. ENVIRONMENTAL MANAGEMENT

Construction Environmental Management Plan (CEMP)

7.1 The Applicant shall prepare and implement a **Construction Environmental Management Plan (CEMP)** to outline environmental management practices and procedures to be followed during the construction of the ceramic tile manufacturing facility. The Plan shall include, but not necessarily be limited to:

- a) a description of all activities to be undertaken on the site during construction of the ceramic tile manufacturing facility, including an indication of stages of construction, where relevant;
- b) statutory and other obligations that the Applicant is required to fulfil during construction, including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
- c) specific consideration of measures to address any requirements of the Department, Council and the EPA during construction;
- d) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;
- e) a description of the roles and responsibilities for all relevant employees involved in the construction of the ceramic tile manufacturing facility; and
- f) the Management Plans listed under condition 7.2 of this consent.

The CEMP shall be submitted for the approval of the Director-General prior to the commencement of construction of stage 1 of the ceramic tile manufacturing facility. Notwithstanding, where construction work is to be undertaken in stages, the Applicant may, subject to the agreement of the Director-General, stage the submission of the CEMP consistent with the staging of activities relating to that work. Construction of each stage shall not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the CEMP to the Council and the EPA as soon as practicable.

7.2 As part of the CEMP for the ceramic tile manufacturing facility, required under condition 7.1 of this consent, the Applicant shall prepare and implement the following Management Plans:

- a) a **Fire Safety Study** covering all operations at the site to demonstrate BCA compliance. The study must cover all aspects detailed in the Department's publication *Hazardous Industry Planning Advisory Paper No. 2 - Fire Safety Guidelines* and the New South Wales Government's *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems*. The Study shall include a strict maintenance schedule for essential services and other safety measures. The Study shall be submitted for the approval of the Commissioner of the NSW Fire Brigades prior to inclusion in the CEMP.
- b) a **Hazard and Operability Study** of the ceramic tile manufacturing facility chaired by an independent, qualified person or team. The independent person or team shall be approved by the Director-General. The Study shall be carried out in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 8 - HAZOP Guidelines*.

Note: Condition 7.2 b) of this consent does not necessary require the HAZOP chair to be independent of the Applicant. Rather, it requires the HAZOP chair to be independent of the design process for ceramic tile manufacturing facility the subject of this consent.

- c) a **Construction Safety Study** for the ceramic tile manufacturing facility, prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 7 - Construction Safety Study Guidelines*.
- d) a **Noise Management Plan** to details measures to minimise noise emissions during construction of the ceramic tile manufacturing facility. The Plan shall include, but not necessarily be limited to:
 - i) identification of all equipment and/or processes that may emit noise during construction;
 - ii) specification of the noise criteria as it applies to the particular activity and measures to be implemented to ensure compliance with these criteria;
 - iii) procedures for the monitoring of noise emissions;
 - iv) protocols for the minimisation of noise emissions; and
 - v) description of procedures to be undertaken if any non-compliance is detected.
- e) ³⁷an **Erosion and Sedimentation Control Management Plan** to detail measures to minimise erosion and the discharge of sediment and other pollutants to land and/ or water during construction of the ceramic tile manufacturing facility. The Plan shall address the requirements of the EPA and Council, should there be any. The Plan shall be generally consistent with that outlined in the EIS and include, but not necessarily be limited to:
 - i) results of investigations into soils associated with the site, in particular the stability of the soil and its susceptibility to erosion;
 - ii) details of erosion, sediment and pollution control measures and practices to be implemented during construction of the ceramic tile manufacturing facility;
 - iii) demonstration that erosion and sediment control measures will conform with, or exceed, the relevant requirements and guidelines provided in the Department of Housing's publications *Soil and Water Management for Urban Development* and *Managing Urban Stormwater – Soils and Construction*, DLWC's publication *Urban Erosion and Sedimentation Handbook*, and the EPA's publication *Pollution Control Manual for Urban Stormwater*;
 - iv) design specifications for diversionary works, banks and sediment detention basins;
 - v) an erosion monitoring program during construction of the ceramic tile manufacturing facility;
 - vi) description of procedures to ensure that the measures implemented to control sediment and erosion on site, are maintained at or above design capacity at all times; and
 - vii) measures to address erosion, should it occur, and to rehabilitate / stabilise disturbed areas of the site.

Operation Environmental Management Plan (OEMP)

7.3 The Applicant shall prepare and implement an **Operation Environmental Management Plan (OEMP)** to detail an environmental management framework, practices and procedures to be followed during the operation of the ceramic tile manufacturing facility. The plan shall include, but not necessarily be limited to:

- a) identification of all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the ceramic tile manufacturing facility, including all consents, licences, approvals and consultations;
- b) a description of the roles and responsibilities for all relevant employees involved in the operation of the ceramic tile manufacturing facility;
- c) overall environmental policies and principles to be applied to the operation of the ceramic tile manufacturing facility;

³⁷ Incorporates an EPA General Term of Approval (O3.1)

- d) standards and performance measures to be applied to the ceramic tile manufacturing facility, and a means by which environmental performance can be periodically reviewed and improved;
- e) management policies to ensure that environmental performance goals are met and to comply with the conditions of this consent;
- f) the Management Plans listed under condition 7.4 of this consent; and
- g) the environmental monitoring requirements outlined under conditions 5.1 to 5.11 of this consent, inclusive.

The OEMP shall be submitted for the approval of the Director-General no later than one month prior to the commencement of operation of Stage 1 of the ceramic tile manufacturing facility, or within such period otherwise agreed by the Director-General. Operation shall not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the OEMP to the EPA and Council as soon as practicable.

7.4 As part of the OEMP for the ceramic tile manufacturing facility, required under condition 7.3 of this consent, the Applicant shall prepare and implement the following Management Plans:

- a) an **Air Quality Management Plan** to outline measures to minimise and manage any impacts from the operation of the ceramic tile manufacturing facility on local air quality. The Plan shall address the requirements of the EPA, should there be any. 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 as result of the operation of the ceramic tile manufacturing facility, including identification of the major components and quantities of these emissions;
 - ii) monitoring of particulate and gaseous emissions from the ceramic tile manufacturing facility, in accordance with any requirements of the EPA;
 - iii) procedures for the minimisation of particulate and gaseous emissions from the ceramic tile manufacturing facility, and the reduction of these emissions over time, where appropriate;
 - iv) protocols for regular maintenance of process equipment to minimise the potential for dust emissions;
 - v) description of procedures to be undertaken if any non-compliance is detected; and
 - vi) mechanisms to consider and address cumulative air quality impacts in the context of development in the Rutherford industrial area.
- b) ³⁸a **Water Management Plan** to outline measures to control and manage surface water (including erosion and sedimentation), stormwater and process water associated with the operation of the ceramic tile manufacturing facility. The Plan shall be consistent with that outlined in the EIS and shall address the requirements of the EPA and Council, should there be any. The Plan shall include, but not necessarily be limited to:

surface water, erosion and sedimentation management

- i) measures to be implemented to minimise the potential for erosion from the site during the operation of the ceramic tile manufacturing facility and measures to maintain all erosion mitigating works at, or above design capacity;
- ii) demonstration that erosion and sedimentation control measures will conform with, or exceed, the relevant requirements and guidelines provided in DLWC's publication *Urban Erosion and Sedimentation Handbook*, the EPA's publication *Pollution Control Manual for Urban Stormwater*, and the Department of Housing's publication *Soil and Water Management for Urban Development*; and

³⁸ Incorporates an EPA General Term of Approval (O4.1)

- iii) measures to rehabilitate erosion-affected areas and areas the subject of excavation, including tree, shrub and/ or cover crop species and implementation.

stormwater management

- i) details of the stormwater infrastructure to be installed;
- ii) demonstration that the stormwater control infrastructure will conform with, or exceed all relevant requirements and guidelines contained within the stormwater management plan for the catchment, should one exist, or with the EPA's publication *Managing Urban Stormwater: Council Handbook* should a stormwater management plan for the catchment not exist;
- iii) description of the procedures for planting and maintaining vegetation along stormwater channels and detention systems, to minimise the potential for erosion; and
- iv) description of the procedures for the installation and maintenance of the stormwater control infrastructure, including stormwater pollution control devices.

process water management

- i) details of how site water consumption will be minimised through water reuse and recycling;
 - ii) details of all process water treatment systems for the ceramic tile manufacturing facility, including discharge points, procedures for maintenance of the systems and water quality monitoring regimes, where relevant; and
 - iii) a program to monitor consumption of water at the site.
- c) an **Alternate Water Supply Strategy** with an aim to investigate and pursue options for the use of alternative sources of water, such as treated effluent from sewage treatment plants, as an alternative to the use of potable water to supply the facility.

Note: Options for the use of alternative water sources considered as part of the Alternate Water Supply Strategy may be the subject of a separate approvals process.
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- d) a **Transport Code of Conduct** to outline management of traffic conflicts associated with the operation of the ceramic tile manufacturing facility. The Code shall meet the requirements of Council and the RTA, should there be any. The Code shall include, but not necessarily be limited to:
- i) details of any restriction to traffic routes;
 - ii) minimum requirements for vehicle maintenance to address noise and exhaust emissions;
 - iii) speed limits to be observed along routes to and from the sites and within the site; and
 - iv) behaviour requirements for vehicle drivers to and from the site and within the site.
- e) an **Emergency Plan** for the ceramic tile manufacturing facility. The Plan shall be prepared in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 1 - Industry Emergency Planning Guidelines*.
- f) a **Safety Management System**, covering all operations at the ceramic tile manufacturing facility and associated transport activities involving any 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. The System shall be developed in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 9 - Safety Management*.
- g) a **Landscape Management Plan** to outline measures to ensure appropriate development and maintenance of landscaping on the site. The Plan shall meet

the requirements of Council, should there be any. The Plan shall include, but not necessarily be limited to:

- i) details of all landscaping to be undertaken on the site;
- ii) details of existing and proposed utilities, as they relate to the development;
- iii) maximisation of flora species endemic to the locality in landscaping the site;
- iv) details of the car parking area and measures to prevent vehicle encroachment onto landscaped areas; and
- v) a program to ensure that all landscaped areas on the site are maintained in a tidy, healthy state.

7.5 Within three years of the commencement of operation, and at least every three years thereafter, the Applicant shall undertake a formal review of the Operation Environmental Management Plan (OEMP) required under condition 7.3 of this consent. The review shall ensure that the OEMP is up-to-date and all changes to procedures and practices since the previous review have been fully incorporated into the OEMP. The Applicant shall notify the Director-General, Council and the EPA of the completion of each review, and shall supply a copy of the updated OEMP to those parties on request. The Applicant shall also make any revised OEMP available for public inspection on request.

8. ENVIRONMENTAL REPORTING

Incident Reporting

8.1 ³⁹The Applicant shall notify the EPA and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Applicant shall provide written details of the incident to the EPA and the Director-General within seven days of the date on which the incident occurred.

Such an incident includes, but is not limited to, significant damage to vegetation that is identified through the means listed under condition 6.2 or through the monitoring required under condition 5.8 of this consent.

8.2 The Applicant shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with condition 8.1, within such period as the Director-General may agree.

Note: Condition 8.2 of this consent does not limit or preclude the EPA from requiring any action to address the cause or impact of any incident, in the context of the EPA's statutory role in relation to the ceramic tile manufacturing facility.

Annual Performance Reporting

8.3 ⁴⁰The Applicant shall submit an **Annual Return** to the EPA in relation to the ceramic tile manufacturing facility, as defined and required by any licence issued under the *Protection of the Environment Operations Act 1997*. In the Return, the Applicant shall:

- a) report on the annual monitoring undertaken (where the activity has resulted in pollutant discharges);
- b) provide a summary of complaints relating to the ceramic tile manufacturing facility;
- c) report on compliance with licence conditions; and
- d) provide a calculation of licence fees (administrative fees and, where relevant, load-based fees) that are payable. If load-based fees apply, the Applicant shall be required to submit load-based fee calculation worksheets with the Return.

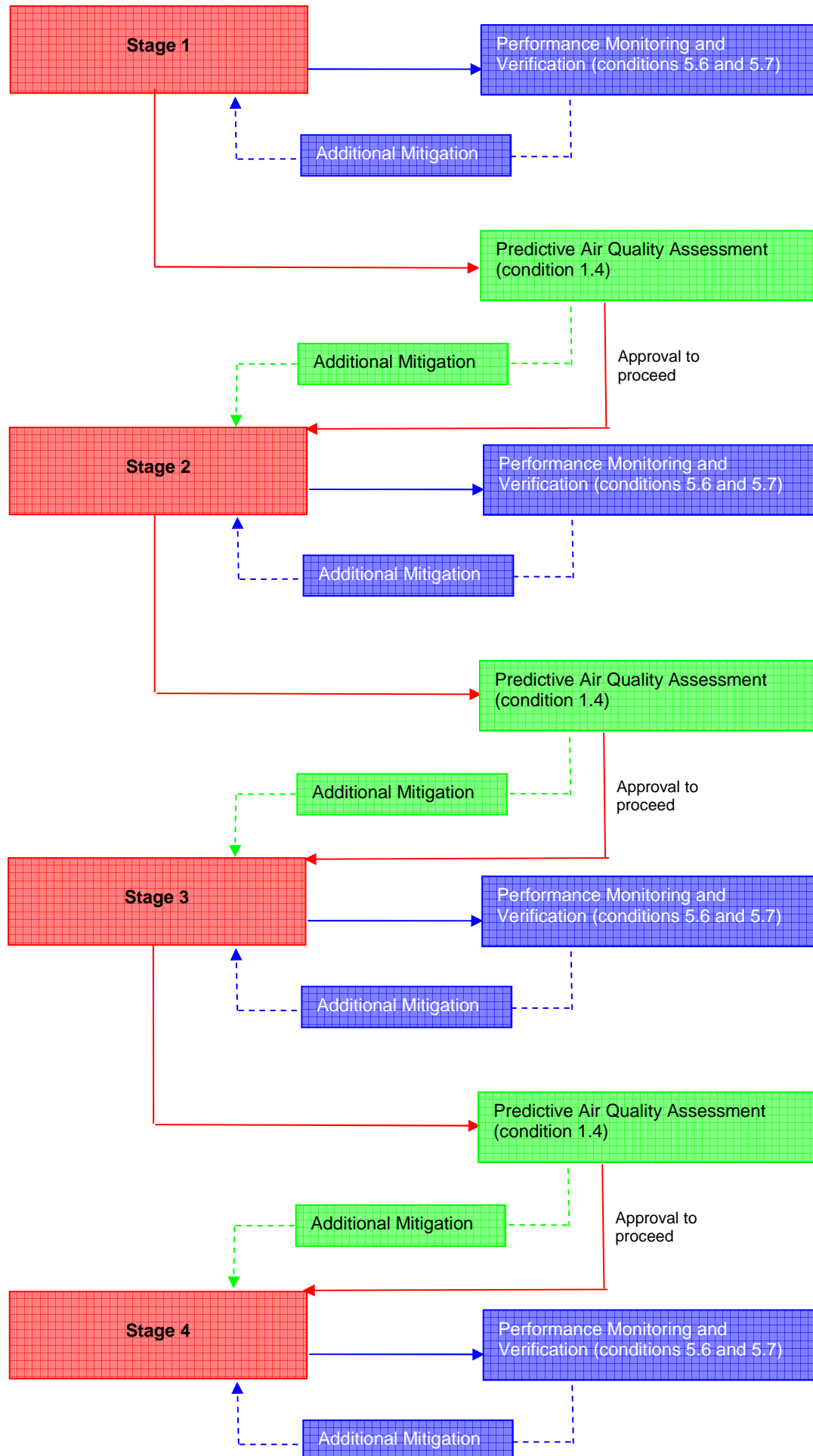
³⁹ Incorporates an EPA General Term of Approval (O5.1)

⁴⁰ Incorporates an EPA General Term of Approval

- 8.4 The Applicant shall, throughout the life of the ceramic tile manufacturing facility, prepare and submit for the approval of the Director-General, an **Annual Environmental Management Report** (AEMR). The AEMR shall review the performance of the ceramic tile manufacturing facility against the Operation Environmental Management Plan (refer to condition 7.3 of this consent), the conditions of this consent and other licences and approvals relating to the ceramic tile manufacturing facility. The AEMR shall include, but not necessarily be limited to:
- a) details of compliance with the conditions of this consent;
 - b) a copy of the Complaints Register (refer to condition 6.3 of this consent) for the preceding twelve month period (exclusive of personal details), and details of how these complaints were addressed and resolved;
 - c) a comparison of the environmental impacts and performance of the ceramic tile manufacturing facility against the environmental impacts and performance predicted in the EIS and the additional information listed under condition 1.2;
 - d) results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person;
 - e) a list of all occasions in the preceding twelve-month period when environmental performance goals for the ceramic tile manufacturing facility have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident;
 - f) identification of trends in monitoring data over the life of the ceramic tile manufacturing facility to date;
 - g) a list of variations obtained to approvals applicable to the ceramic tile manufacturing facility and to the site during the preceding twelve-month period; and;
 - h) environmental management targets and strategies for the following twelve-month period, taking into account identified trends in monitoring results.
- 8.5 The Applicant shall submit a copy of the AEMR to the Director-General, the EPA and Council every year, with
- a) the first AEMR to be submitted within twelve months of commencement of operation of the ceramic tile manufacturing facility; and
 - b) the second and subsequent AEMRs to be submitted concurrently with the EPA's Annual Return.
- 8.6 The Director-General may require the Applicant to address certain matters in relation to the environmental performance of the ceramic tile manufacturing facility, in response to review of the Annual Environmental Report and any comments received from the EPA and/or Council. Any action required to be undertaken shall be completed within such period as the Director-General may agree.

Note: The AEMR does not aim to satisfy any requirement of the EPA with regard to any Annual Return (refer to condition 8.3 of this consent), required under any licence issued for the ceramic tile manufacturing facility under the *Protection of the Environment Operations Act 1997*. It is noted, however, that the Applicant may consult with the Directors-General of the Department of Planning and the Environment Protection Authority with the aim of combining the reporting requirements of the AEMR and the Annual Return. These reporting requirements shall only be combined with the agreement of both Directors-General.

ATTACHMENT A – AIR QUALITY FEED-FORWARD/ FEEDBACK MECHANISM



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