



Report and recommendations of the Environmental Protection Authority



Gidgegannup Granite Quarry, Gidgegannup, City of Swan - inquiry under section 46 of the *Environmental Protection Act 1986* to amend Ministerial Statement 861

Hanson Construction Materials Pty Ltd

Report 1572

July 2016

ENVIRONMENTAL PROTECTION AUTHORITY
REPORT AND RECOMMENDATIONS TO THE MINISTER FOR
ENVIRONMENT

**GIDGEGANNUP GRANITE QUARRY, GIDGEGANNUP, CITY OF SWAN -
INQUIRY UNDER SECTION 46 OF THE *ENVIRONMENTAL PROTECTION
ACT 1986* TO AMEND MINISTERIAL STATEMENT 861**

The Minister for Environment has requested that the Environmental Protection Authority (EPA) inquire into and report on the matter of changing the implementation conditions relating to the Gidgegannup Granite Quarry proposal, in order to extend the 'Time Limit of Authorisation' for substantial commencement (condition 3).

The following is the EPA's Report and Recommendations (No. 1572) to the Minister pursuant to section 46(6) of the *Environmental Protection Act 1986*.

Background

The Gidgegannup Granite Quarry proposal is to develop a granite quarry in Gidgegannup which is expected to yield up to 500,000 tonnes of rock per annum.

The EPA assessed the proposal at the level of Public Environmental Review and released its assessment report (Report 1375) on 6 December 2010. The EPA identified the following key environmental factors relevant to the proposal:

- Vegetation, Fauna and Fauna Habitats;
- Air Quality and Noise;
- Surface Water; and
- Visual Amenity.

In applying the Environmental Assessment Guideline (EAG) for *Environmental principles, factors and objectives* (EAG 8, January 2015), these factors are now represented by:

- Flora and Vegetation;
- Terrestrial Fauna;
- Air Quality and Atmospheric Gases;
- Inland Waters Environmental Quality;
- Amenity; and
- Rehabilitation and decommissioning.

The EPA concluded that it is likely that the EPA's objectives would be achieved provided there is satisfactory implementation by the proponent of the recommended conditions.

Subsequent to finalising appeal determinations 96-99 of 2010 (15 March 2011), the Minister for Environment approved the proposal for implementation, subject to the implementation conditions of Ministerial Statement 861 (13 April 2011).

Requested changes to conditions

Condition 3-1 of Ministerial Statement 861 requires the proponent to substantially commence the proposal within five years of the date of issue of the Statement (that is, before 13 April 2016).

The proposal has not yet substantially commenced. The proponent for the proposal, Hanson Construction Materials Pty Ltd, has requested an extension of the Time Limit of Authorisation for substantial commencement for a further five years, to 13 April 2021.

In April 2016, following the Minister's request to the EPA to inquire into conditions, the Minister, with the consent of the proponent, issued Interim Implementation Condition 3, extending the Time Limit of Authorisation for a period of six months, to 8 October 2016. This interim condition remains in effect until a further statement is published under section 45(5) as applied by section 46(8) of the *EP Act* (that is, following the Minister's consideration of this report and consultation with other relevant decision making authorities).

Application of relevant EPA Policies and Guidelines

In inquiring into the change of condition, the EPA has considered relevant published EPA policies and guidelines. Table 3 lists the relevant published policy and guidance documents for each of the key environmental factors identified above and the relevant matters are discussed in this report.

The EPA notes that other published policies and guidelines were also considered but not determined to be relevant.

Inquiry into the requested change to conditions

The EPA recommends imposing a substantial commencement timeframe implementation condition so that the conditions relating to a proposal can be reviewed within a reasonable timeframe to ensure:

- consideration is given to changes in the environment, scientific or technology knowledge arising since the initial assessment; and
- proposals are being implemented using best practice and contemporary methods so that the EPA objectives for the relevant key environmental factors are met.

The EPA has discretion as to how it conducts this inquiry. The currency of the initial assessment and issue of the Ministerial Statement (that is, when it was initially published) is also instructive in determining the extent and nature of the inquiry under s46. Ministerial Statement 861 was initially published on 14 April 2011.

Inquiry findings

In conducting this inquiry the EPA reviewed the information provided by the proponent. The EPA's evaluation of the proponent information is provided in Table 1.

In considering whether it should recommend an extension of the Time Limit of Authorisation for the implementation of the proposal, the EPA also considered whether there is any new relevant information in relation to the assessment of the potential impacts of the proposal.

In the EPA's initial assessment of this proposal, impacts on Terrestrial Fauna was a key environmental factor. The EPA's objective for the environmental factor Terrestrial Fauna is:

to maintain representation, diversity, viability and ecological function at the species, population and assemblage level.

Of particular concern was the potential impact on Carnaby's Black-cockatoo, *Calyptorhynchus latirostris*, which is listed as Endangered under the *Wildlife Conservation Act 1950* (Western Australia) and *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth). The proposal will result in the removal of 31 hectares (ha) of Jarrah Forest; a feeding habitat of the Carnaby's cockatoo. The area proposed for clearing contains no known Carnaby's cockatoo roosting or breeding sites.

Since the initial assessment, further work has been undertaken outlining the extent of the Carnaby's black cockatoo species for the strategic assessment of the Perth and Peel regions (Government of Western Australia (2015) *Perth and Peel Green Growth Plan for 3.5 million*).

The Carnaby's cockatoo species exists as two genetically distinct populations present over a large area of the south-west of Western Australia. The two populations comprise the:

- western population, which migrates between the northern wheatbelt and the Swan Coastal Plain on the west coast, north to the mouth of the Murchison River; and
- eastern population, which moves between the southern wheatbelt and the south coastal region.

The current total population size is estimated to be about 40,000. The Perth and Peel region represents 3.7 per cent of the mapped distribution of the species, supporting approximately 20 per cent of the total species population (approximately 8,000 birds).

The EPA notes that there is around 300,000 ha of Jarrah Forest feeding habitat within the Perth Peel region with further Jarrah Forest feeding habitat outside this area (Government of Western Australia (2015) *Perth and Peel Green Growth Plan for 3.5 million*).

In terms of potential longer-term cumulative impacts from the loss of Jarrah Forest habitat, the EPA notes the information available in the draft Green Growth Plan indicates that only an estimated four per cent of Jarrah Forest

feeding habitat may be intersected by future development in the Perth Peel Region.

Importantly, approximately 48,935 ha of this habitat type is already protected in formal conservation reserves (IUCN I-IV), in addition to the 176,624 ha in land managed by the Department of Parks and Wildlife. This equates to approximately 75 per cent of the Jarrah Forest habitat in conservation reserves or managed by the Department of Parks and Wildlife.

The EPA also notes that condition 11 of Ministerial Statement 861 requires the proponent to protect in perpetuity 48 ha of native vegetation delineated in Figure 3 in Ministerial Statement 861.

In conclusion, the EPA considers that the above additional information supports its initial assessment that the loss of 31 ha of jarrah-marri forest as a result of the Gidgegannup Granite Quarry proposal is unlikely to significantly impact Carnaby's Cockatoo at a species or population level.

In consideration of the information provided by the proponent and relevant EPA policies and guidelines, the EPA considers that:

- there is no significant new or additional information that justifies the reassessment of the issues raised by the proposal;
- there has been no new significant change in the relevant environmental factors since the proposal was assessed by the EPA in Report 1375 (December 2010); and
- no new significant environmental factors have arisen since the EPA's assessment of the proposal.

The EPA is therefore satisfied that the following existing implementation conditions will continue to address the relevant environmental factors, and manage and mitigate the potential impacts of the proposal:

- Condition 6 Fauna Habitat;
- Condition 7 Dieback and Weeds;
- Condition 8 Dust Monitoring and Management;
- Condition 9 Rehabilitation of Quarry Walls;
- Condition 10 Decommissioning and Closure; and
- Condition 11 Conservation of Native Vegetation.

Relevant EPA policies and guidelines

The EPA, in making this recommendation and providing its advice to the Minister, has given due consideration to the relevant published EPA policies and guidelines (see Table 3), noting that other published policies and guidelines were considered but determined not to be relevant.

The following relevant EPA process policies and guidelines were considered:

- a) *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2012*;
- b) *Environmental Assessment Guideline 1 (EAG 1) for Defining the key characteristics of a Proposal, 2012*;
- c) *EAG 8 for Environmental principles, factors and objectives, 2015*;
- d) *EAG 9 for the Application of a significance framework in the environmental impact assessment process, 2015*;

- e) EAG 11 for *Recommending environmental conditions*, 2015; and
- f) Environmental Protection Bulletin (EPB No. 11) for *Consultation on Conditions Recommended by the EPA*, 2010.

The following policies and guidelines relevant to environmental factors were considered:

a) Flora and Vegetation

Guidance Statement 51 – Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in WA, 2014

The objective of the policy is to ensure the analysis, interpretation and reporting is of suitable quality and consistent methodology to enable the EPA to judge the impacts of proposal on flora and vegetation, and that the environment, in particular significant flora and vegetation biodiversity, is identified and protected.

Position Statement 2 – Environmental Protection of Native Vegetation in WA, 2000

The objective of the policy is to ensure no known species of plant is caused to become extinct as a consequence of the changes to proposal and the risks to threatened species are considered to be acceptable; no association or community of indigenous plants ceases to exist as a result of the changes to the proposal; and the onsite and offsite impacts of the changes to the proposal are identified and the proponent demonstrates that these impacts can be managed.

Position Statement 3 – Terrestrial Biological Surveys as an Element of Biodiversity Protection, 2002

The objective of this policy is that Proponents shall demonstrate that all reasonable measures have been undertaken to avoid impacts on biodiversity, where some impact on biodiversity cannot be avoided the proponent shall demonstrate that the impact will not result in unacceptable loss.

b) Terrestrial Fauna

Guidance Statement 56 – Terrestrial Fauna Surveys for Environmental Impact Assessment in WA

The purpose of this guideline is to provide direction and information on general standards and protocols for terrestrial fauna surveys.

Position Statement 3 – Terrestrial Biological Surveys as an Element of Biodiversity Protection

The purpose of this policy is to ensure sufficient attention is given to the relevant detail of terrestrial\biological surveys for the purposes of environmental impact assessment, in relation to the scale and the nature of the impact, and the significant or sensitivity of the receiving environment.

Technical Guide on Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment

The purpose of this guidance is to ensure adequate data of a high standard is obtained for environmental impact assessment.

c) Air Quality and Atmospheric Gases

Guidance Statement 3 – Separation Distances between Industrial and Sensitive Land Uses, 2005

This Guidance Statement is intended to provide advice on generic separation distances between specific industry and sensitive land uses to avoid or minimise the potential for land use conflict. The separation distances outlined in Appendix 1 of the Guidance Statement are not intended to be absolute separation distances.

d) Amenity

Environmental Assessment Guideline 13 – Consideration of environmental impacts from noise, 2014

The objective of this guideline is to assist proponents to predict whether their proposal's noise emissions may cause significant environmental impacts and to communicate how the potential impacts of noise are considered by the EPA and may be assessed in the environmental impact assessment (EIA) process.

Guidance Statement 3 – Separation Distances between Industrial and Sensitive Land Uses, 2005

This Guidance Statement is intended to provide advice on generic separation distances between specific industry and sensitive land uses to avoid or minimise the potential for land use conflict and are not intended to be absolute separation distances.

e) Rehabilitation and Decommissioning

Guidance Statement 6 – Rehabilitation of Terrestrial Ecosystems, 2006

The objective of this guideline is to encourage best practice in setting appropriate and effective objectives for rehabilitation and assessing subsequent outcomes.

Environmental Protection Bulletin (EPB 19) for EPA involvement in mine closure, 2013

The purpose of EPB 19 is to outline the roles of the Department of Mines and Petroleum (DMP) and the EPA in mine closure and explain the circumstances when the EPA will assess mine closure. In accordance with EPB 19 the EPA will assess mining projects that are not subject to the *Mining Act 1978*. Examples include pre-1899 title or minerals-to-owner tenure, Hampton locations or State Agreement Act projects.

In the case of the Gidgegannup Quarry, the EPA notes that the quarry is on freehold land and is not subject to the *Mining Act 1978*.

Guidelines for Preparing Mine Closure Plans, 2015

The aim of the guidelines is to ensure that for every mine in Western Australia a planning process is in place so that the mine can be closed, decommissioned and rehabilitated to meet DMP and EPA's objectives for rehabilitation and closure.

f) Offsets

WA Environmental Offset Guidelines, 2014

The purpose of this guideline is to clarify the determination and application of environmental offsets in Western Australia.

Environmental Protection Bulletin No.1 – Environmental Offsets, 2014

The purpose of this guideline is to clarify how the EPA will consider offsets through the environmental impact assessment process.

Since the EPA initially assessed this proposal, *Environmental Protection Bulletin No.1 (EPB No.1, August 2014)* has been introduced in relation to offsets.

EPB No. 1 indicates that when assessing a change to a proposal, the new offsets policy will apply to the change, and the EPA will consider whether offsets should be required to the existing proposal, that is, the EPA will consider the application of the offset policy to existing proposals on a case by case basis. The EPA considers that, given there is no change to the footprint of the proposal, additional offsets requirements are not necessary, and therefore condition 11 is consistent with EPB No.1 and remains sufficient to counterbalance the impacts this proposal will have on terrestrial fauna.

WA Environmental Offsets Policy, 2011

The objective of this policy is to ensure that environmental offsets are applied in specified circumstances in a transparent manner to engender certainty and predictability while acknowledging that there are some environmental values that are not readily replaceable and it serves as an overarching framework to underpin environmental offset assessment and decision making in Western Australia.

EPA conclusions and recommendations

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment:

1. Condition 3 of Ministerial Statement 861 may be amended to allow for the timeframe for substantial commencement of the Gidgegannup Granite Quarry proposal to be extended by a further five years, to 13 April 2021.
2. If the Minister agrees with this recommendation, after consulting relevant decision making authorities, the Minister issues a statement of decision to change condition 3 of Statement 861 in the manner provided for in the attached recommended Statement.

Table 1 – EPA evaluation of the proponent’s information

Factor in EPA Report 1375	New Factor (EAG 8)	EPA Report, and Proponent’s response to change to condition relevant to environmental factors	EPA Evaluation
Vegetation	Flora and Vegetation	<p><i>EPA Report 1375</i> “The clearing of 31 ha of jarrah-marri forest is not expected to cause significant loss of this vegetation type as it is well represented outside the project area “.</p> <p><i>Proponent response relating to change to condition</i> The proponent considers that, since Ministerial Statement 861 was granted, there has been no significant environmental change to this key environmental factor at a local or regional level. The proponent also considered that the extension of timeframe for implementation would allow the proponent to satisfy conditions prior to commencement of the proposal, that is, Dieback and Weeds (condition 7-2 and 7-6); and Conservation of Native Vegetation (condition 11-1).</p>	<p>The EPA concurs with the proponent’s response that there has been no significant changes to this key environmental factor, and is satisfied that existing implementation condition 7 (Dieback and Weeds) and condition 11 (Conservation of Native Vegetation) will continue to address the relevant environmental factors, and manage and mitigate the potential impacts of the proposal.</p>
Fauna and Fauna Habitats	Terrestrial Fauna	<p><i>EPA Report 1375</i> “In regard to significant fauna and the loss of fauna habitats, the EPA notes that these habitats are well represented outside the project area in reserves such as John Forrest National Park and the Darling Range Regional Park. Overall implementation of this project is unlikely to significantly affect populations of fauna species including threatened Cockatoo species. The proponent’s commitment of conserving 48.35 ha of land in perpetuity within the project area should provide protection for habitats that support these and other fauna species”.</p> <p><i>Proponent response relating to change to condition</i> The proponent considered that the extension of timeframe for implementation would allow the proponent to satisfy relevant conditions prior to commencement of the proposal, that is, Fauna Habitat (condition 6-1).</p>	<p>The EPA considers that there has been no significant changes to this key environmental factor, and is satisfied that existing implementation condition 6 (Fauna Habitat) and 11 (Conservation of Native Vegetation) will continue to address the relevant environmental factor, and manage and mitigate the potential fauna impacts of the proposal.</p>

Factor in EPA Report 1375	New Factor (EAG 8)	EPA Report, and Proponent's response to change to condition relevant to environmental factors	EPA Evaluation
Air Quality and Noise	Air Quality and Atmospheric Gases; Amenity	<p><i>EPA Report 1375</i> Dispersion modelling of predicted peak dust PM10 (24hr) levels for air quality indicate that this standard should be achieved at all nearby residential properties.</p> <p>Noise emissions from construction and operational activities would be regulated under the Environmental Protection (Noise) Regulations 1997.</p> <p><i>Proponent response relating to change to condition</i> The proposed variation of condition 3-1 would not have any impact on this key environmental factor.</p>	The EPA considers that its initial assessment of these factors in EPA Report 1375 has not changed; there has been no significant changes to these key environmental factors, and that existing implementation condition 8 (Dust Monitoring and Management) will continue to address the relevant environmental factor, and manage and mitigate the potential dust impacts.
Surface Water	Inland Waters Environmental Quality	<p><i>EPA Report 1375</i> Discharge of surface water from a proposal to the environment would require licensing under Part V of the <i>Environmental Protection Act 1986</i>.</p> <p><i>Proponent response relating to change to condition</i> The proposed variation of condition 3-1 would not have any impact on this key environmental factor.</p>	The EPA considers that its initial assessment of this factor in EPA Report 1375 has not changed; there have been no significant changes to this key environmental factor, and that surface water impacts can be managed through licensing provisions under Part V of the <i>Environmental Protection Act 1986</i> .
Visual Amenity	Amenity; Rehabilitation and decommissioning	<p><i>EPA Report 1375</i> The EPA recommended a condition (condition 9) that requires the proponent to commence the rehabilitation of non-active benches that are visible to residential areas to the north-west and north of the project area. The condition would require rehabilitation to commence no later than 12 months after the benches are required for active mining. It is also recommended that the proponent develop a final Decommissioning and rehabilitation plan.</p> <p>Condition 10 was imposed to require a Final Decommissioning Plan to ensure that the site is suitable for future land uses.</p>	The EPA notes that "Rehabilitation and decommissioning" was originally assessed under the "Visual Amenity" factor. The EPA considers that its initial assessment of these factors in EPA Report 1375 has not changed and there has been no significant changes to the Amenity key environmental factor, or Integrating Factor of Rehabilitation and decommissioning. Existing condition 9 will continue to manage and mitigate the issue of Visual Amenity and

Factor in EPA Report 1375	New Factor (EAG 8)	EPA Report, and Proponent's response to change to condition relevant to environmental factors	EPA Evaluation
		<p><i>Proponent response relating to change to condition</i> The proposed variation of condition 3-1 would not have any impact on conditions 9 and 10.</p>	<p>condition 10 will address the future long term decommissioning and closure of the site.</p> <p>Condition 10, Decommissioning and Closure will need to be consistent with the intent of the Mine Closure Guidelines 2015.</p>

Table 2 – s46 Assessment of proposed changes to implementation conditions

Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
Conditions 1 and 2	No proposed change	N/A
Condition 3	Amend condition to allow additional 5 years of authorisation for substantial commencement	<p>This is a standard condition that requires the implementation of the proposal to substantially commence within five years of the date of authorisation. The change to this condition is to allow an additional five years for the implementation of the proposal to substantially commence taking in to consideration that all other conditions on Statement 861 are still able to achieve the EPA's objectives.</p> <p>3 Time Limit for Proposal Implementation</p> <p>3-1 The proponent shall not commence implementation of the proposal after 13 April 2021, and any commencement prior to this date must be substantial.</p> <p>3-2 Any commencement of implementation of the proposal, on or before 13 April 2021, must be demonstrated as substantial by providing the CEO* with written evidence, on or before 13 April 2021.</p> <p>*"CEO" means the Chief Executive Officer of the Department of the Public Service which is responsible for the administration of section 48 of the <i>Environmental Protection Act 1986</i>, or his delegate.</p>
Conditions 4 to 11	No proposed change	N/A

Table 3 - EPA Policies and Guidelines relevant to the process

Process/ Factor	Policies and guidelines considered relevant
Change to conditions	<ul style="list-style-type: none"> • Environmental Impact Assessment (Part IV Division 1 and 2) Administrative Procedures 2012 • Environmental Assessment Guideline 1 (EAG 1) Defining the Key Characteristics of a proposal, 2012 • EAG 8 for Environmental principles, factors and objectives, 2015 • EAG 9 for Application of a significance framework in the environmental impact assessment process, 2015 • EAG 11 for Recommending environmental conditions, 2015 • Consultation on Conditions Recommended by the EPA (Environmental Protection Bulletin No.11), 2012
Terrestrial Fauna	<ul style="list-style-type: none"> • Guidance Statement No. 56 – Terrestrial Fauna Surveys for Environmental Impact Assessment in WA, 2004 • Position Statement No. 3 – Terrestrial biological surveys as an Element of Biodiversity Protection, 2002 • Technical Guide on Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment, 2010
Flora and Vegetation	<ul style="list-style-type: none"> • Guidance Statement 51 – Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in WA, 2014 • Position Statement 2 – Environmental Protection of Native Vegetation in WA, 2000 • Position Statement 3 – Terrestrial Biological Surveys as an Element of Biodiversity Protection, 2002
Air Quality and Atmospheric gases	<ul style="list-style-type: none"> • Guidance Statement 3 – Separation Distances between Industrial and Sensitive Land Uses, 2005
Amenity	<ul style="list-style-type: none"> • Environmental Assessment Guideline 13 – Consideration of environmental impacts from noise, 2014 • Guidance Statement 3 – Separation Distances between Industrial and Sensitive Land Uses, 2005
Rehabilitation and Decommissioning	<ul style="list-style-type: none"> • Guidance Statement 6 – Rehabilitation of Terrestrial Ecosystems, 2006 • Environmental Protection Bulletin (EPB 19) for EPA involvement in mine closure, 2013 • Guidelines for Preparing Mine Closure Plans, 2015
Offsets	<ul style="list-style-type: none"> • WA Environmental Offset Guidelines, 2014 • Environmental Protection Bulletin No.1 – Environmental Offsets, 2014 • WA Environmental Offsets Policy, 2011

Statement No. xxx

RECOMMENDED ENVIRONMENTAL CONDITIONS

STATEMENT TO CHANGE THE IMPLEMENTATION CONDITIONS APPLYING TO A PROPOSAL

(Section 46 of the *Environmental Protection Act 1986*)

GIDGEGANNUP GRANITE QUARRY, GIDGEGANNUP, CITY OF SWAN

Proposal: The proposal is to develop a granite quarry in Gidgegannup, which is expected to yield up to 500,000 tonnes of rock per annum. The proposal is further documented in Statement 861.

Proponent: Hanson Construction Materials Pty Ltd
Australian Company Number 009 679 734

Proponent Address: 35 Great Eastern Highway
RIVERVALE WA 6103

Report of the Environmental Protection Authority: 1572

Preceding Statement/s Relating to this Proposal: 861

Pursuant to section 45 of the *Environmental Protection Act 1986*, as applied by s46(8), it has been agreed that the implementation conditions set out in Ministerial Statement No. 861, be changed as specified in this Statement.

1. Condition 3 changed

Condition 3 of Ministerial Statement 861 is deleted and replaced with:

3 Time Limit for Proposal Implementation

3-1 The proponent shall not commence implementation of the proposal after 13 April 2021, and any commencement prior to this date must be substantial.

3-2 Any commencement of implementation of the proposal, on or before 13 April 2021, must be demonstrated as substantial by providing the CEO* with written evidence, on or before 13 April 2021.

*"CEO" means the Chief Executive Officer of the Department of the Public Service which is responsible for the administration of section 48 of the Environmental Protection Act 1986, or his delegate.

Albert Jacob MLA

MINISTER FOR ENVIRONMENT; HERITAGE