

Cooma Road Quarry

Modification to Development Consent Environmental Assessment

Prepared for Holcim (Australia) Pty Ltd | 10 June 2016



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Date 10 June 2016

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Document Control

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1 Introduction

Cooma Road Quarry at Queanbeyan, NSW, is an authorised hard rock quarry that has been in operation since 1959. Holcim (Australia) Pty Ltd (Holcim) received development consent (Development Consent No. SSD-5109) from the NSW Minister for Planning and Infrastructure for the *Cooma Road Quarry Continued Operations Project*, on 27 September 2013. There have been no modifications to development consent No. SSD-5109.

Cooma Road Quarry is currently operated by Holcim and Holcim is the applicant for this proposal. A portion of the quarry is leased by Holcim (Lots 103, 104, 110, 111 and 124 in Deposited Plan (DP) 754881) and the balance is owned by Holcim (Lot 1 in DP 808393, Lot 2 in DP 1087429 and Lot 4 in DP 582954). Together, these lots are referred to as 'the Quarry' or 'the Site'.

Holcim is a leading international building and construction materials group, located across 70 countries in all continents. Holcim's core divisions are construction materials in Australia, in the supply of aggregate, sand, concrete and concrete pipe products, and its products lead market positions around the world. Holcim employs over 3,500 people and operates 88 quarries in Australia. These quarries supply products to both internal and external customers for the production of asphalt and concrete, for major road and construction projects, and other construction activities by builders and developers.

1.1 Project justification

A greenfield residential subdivision is being developed nearby at Googong, approximately 2.5 kilometres (km) south-east of the Quarry. Virgin excavated natural material (VENM) will be removed as a result of construction and development activities. Holcim are seeking to receive this VENM, and VENM from other sites if it becomes available. The VENM will be used for back filling and progressive rehabilitation of terminal quarry faces in accordance with its development consent and quarry rehabilitation objectives (the proposed modification). The alternative is that the VENM is not reused in a sustainable manner and is landfilled. It will enable the subdivision developers to recycle the VENM and Holcim to reuse a material that may otherwise go to landfill. In addition, impacts, such as increased greenhouse gas emissions from haul truck deliveries to landfill sites much further than the Quarry, will likely be reduced.

Thus, receipt of the VENM at the Quarry is beneficial for developers, Holcim and the environment.

The VENM will be transported to the Quarry within existing production limits, truck movement limits and operating hours approved under Development Consent No. SSD-5109. The material will be accompanied by VENM certification in accordance with NSW Environment Protection Authority (EPA) guidelines.

1.2 Stakeholder consultation

Holcim has discussed the proposed modification with the subdivision developers, Queanbeyan City Council, the EPA and Department of Planning and Environment (DP&E). The EPA has indicated their support for the proposed modification given the beneficial reuse of the material at the Quarry, and have indicated via a letter on 3 March 2015 that an amendment to the Quarry's environmental protection licence (EPL) is not required other than adding a new limit condition regarding VENM receipt at the Quarry. A copy of their letter is provided in Appendix A.

DP&E has advised that the lodgement of a Section 96 (1A) application under the NSW *Environmental Planning & Assessment Act 1979* (EP&A Act) to modify Development Consent No. SSD-5109 is the appropriate approval pathway given the minimal nature of the modification, and the requirement for a minor environmental assessment (EA) to accompany the application.

DP&E has specifically advised:

The EA would need to clearly describe the proposed modification, particularly in terms of proposed transport arrangements. As long as the company proposes to include trucks laden with VENM within the current laden truck limits applying to the quarry and transport routes to access the quarry which are the same, or substantially the same, as those assessed for the quarry's project approval, the Department does not require re-assessment of traffic and road impacts. The Department does not intend to publicly exhibit this application, other than on its website and would consult with the local Council, the EPA and RMS.

Holcim is permitted to import material to the Quarry in accordance with Development Consent No. SSD-5109 up to a maximum production limit of 1.5 million tonnes per annum (Mtpa) (eg including both material quarried from the Site and material imported externally). This includes up to 10,000 tonnes per annum (tpa) of imported recycled concrete for processing on the Site. However, VENM is not included as it is classified as a waste under the EPA's *Waste Classification Guidelines 2009* (see Chapter 2).

1.3 Scope of the application

Holcim is seeking to modify Development Consent No. SSD-5109. The proposed modification will seek approval to allow the importation of VENM to the Quarry, which is estimated to be 50,000 tpa in 2015. The quantity of VENM imported will vary from year to year depending on the requirements at the Quarry, but will remain within the Quarry's production limit. Receipt of VENM will not result in the Quarry exceeding the approved truck movement limits associated with the sale of quarry products and importation of recycled concrete. 50,000 tpa equates to approximately five trucks per day over 300 days of the year (excluding Sundays and public holidays) transporting VENM from the Googong development site to the Quarry.

The Quarry's consent allows for the dispatch of a maximum of 30 laden trucks per hour and maximum average of 24 trucks per hour on any day. Initial supply of VENM will be from the subdivision development, transported in Holcim or contractor owned trucks within approved truck movement limits and operating hours for truck movements. The proposed truck route is Old Cooma Road, over a distance of approximately 2.5 km. This road was assessed as part of the Quarry's continued operations project approval as an occasional transport route. The proposed route is shown in Figure 3.1.

Receipt of VENM at the Quarry will generally be used for back filling and rehabilitation. The proposed modification would have minimal bearing on the need for longer term stockpiling as the material will be positioned near required areas, such as quarry benches, over short time periods before the material is used for its intended purposes. Any soil and sediment runoff from the material during high wind or rainfall will be effectively captured by the Quarry's surface water management system, which includes a sediment basin at the base of the quarry pit.

The application does not require a modification to:

- the annual peak production rate;
- the approved area of extraction, approved quarrying methods or other operating parameters; or
- any plant on the Site.

1.4 Environmental assessment

An environmental impact statement (EIS) was prepared in 2012 by Umwelt (Australia) Pty Ltd (Umwelt) to support the development application for continued operations, which will be referred to as the 2012 EIS in this document. The 2012 EIS included an analysis of the potential impacts of the continued operations of the Quarry on a range of environmental factors.

The potential environmental impacts of the proposed modification are generally assessed in this EA. These are:

- surface water;
- groundwater;
- ecology;
- Aboriginal archaeology;
- historic heritage;
- air quality and greenhouse gases;
- noise and vibration;
- traffic and transport;
- visual amenity;
- waste;
- rehabilitation;
- natural hazards (eg bushfire); and
- social.

In particular, the quantitative noise, traffic and transport, and air quality assessments undertaken for the 2012 EIS are considered relevant to the proposed modification, and have been relied upon as relevant sources of background information. These assessments (and any potential impacts identified in them) have been compared against the proposed modification to assess the potential impacts of VENM receipt at the Quarry, and the Quarry's continued environmental compliance under the proposed modification.

1.5 Environmental planning and assessment process

The proposal requires a modification to the Quarry's development consent from the Minister for Planning or his delegate.

The proposed modification is to be assessed by DP&E under Section 96 of the EP&A Act and a recommendation made to the Minister, or his delegate, as to whether the modification should be approved, approved with conditions, or refused. Section 96 of the EP&A Act allows development consent to be modified provided it is substantially the same development as the development for which consent was originally granted.

The planning and assessment process for the proposal was discussed with DP&E on 5 March 2015 during a meeting at DP&E's offices. DP&E confirmed at the meeting that a proposed modification under Section 96 of the EP&A Act to the development consent is appropriate as the approval pathway.

Further information on the planning and assessment process is provided in Chapter 2.

1.6 Structure of the environmental assessment

This EA generally describes the Site and surrounding area, Quarry operations, provides details of the proposal, and undertakes an assessment of the proposal under the heads of consideration given in Section 79C of the EP&A Act including the relevant planning controls. The EA is structured as follows:

- Chapter 1 – Introduction and background. This chapter introduces the proposal, the proponent and the scope of the EA.
- Chapter 2 – Planning and legislation. This chapter discusses the relevant legislation, planning instruments, planning processes relevant to the application to modify the development consent and an evaluation of the proposed modification against Section 79C(1) of the EP&A Act.
- Chapter 3 – Environmental assessment. This chapter describes the existing quarry operations and compares it against the proposed modification, and outlines any potential environmental impacts and mitigation measures for the proposed modification.
- Chapter 4 – Conclusion. This chapter provides a conclusion and recommendation for the proposed modification.

2 Planning and legislation

2.1 Development consent

Cooma Road Quarry currently operates pursuant to Development Consent No. SSD-5109 which was granted under Part 4 of the EP&A Act by the NSW Minister for Planning and Infrastructure on 27 September 2013.

2.1.1 Environment protection licence

Cooma Road Quarry holds EPL 1453 under the provisions of the POEO Act. The EPL is administered by the EPA and licences the extraction of between 500,000 tpa and 2,000,000 tpa of quarry material.

An amendment to the Site's EPL 1453 will be required to reflect proposed VENM receipt under this EA. This is discussed in Section 2.2.1(ii) below.

2.2 Applicable legislation

2.2.1 NSW legislation

i Environmental Planning and Assessment Act 1979

A meeting with DP&E was held on 5 March 2015 to discuss the preferred approval pathway for the proposed modification. Officers from DP&E indicated that an application to modify the development consent pursuant to Section 96(1A) of the EP&A Act is the appropriate approval pathway for the proposed modification.

In addition, DP&E has advised that the proposed modification needs to be supported by a EA (see Section 1.2).

Consents under Part 4 of the EP&A Act may be modified under Section 96 of the EP&A Act. The proposed modification will involve an application under Section 96(1A) of the EP&A Act which states:

(1A) Modifications involving minimal environmental impact

A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if:

- (a) it is satisfied that the proposed modification is of minimal environmental impact, and
- (b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and
- (c) it has notified the application in accordance with:
 - (i) the regulations, if the regulations so require, or

- (ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and
- (d) it has considered any submissions made concerning the proposed modification within the period prescribed by the regulations or provided by the development control plan, as the case may be.

Modification applications under Section 96 are required by Section 96(3) to take into consideration the relevant matters referred to in Section 79C(1) of the EP&A Act which include:

- (a) the provisions of:
 - (i) any environmental planning instrument, and
 - ...
 - (iii) any development control plan, and
 - ...
 - (iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and
 - ...
 that apply to the land to which the development application relates,
- (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
- (c) the suitability of the site for the development,
- (d) any submissions made in accordance with this Act or the regulations,
- (e) the public interest.

Matters a(i), (iii) and (iv) have been addressed in the following sections of this chapter. Matters (b) to (e) are addressed in Chapters 3 and 4.

ii [NSW Protection of the Environment Operations Act 1997](#)

Holcim holds EPL 1453 for the Quarry under the provisions of the POEO Act.

The POEO Act requires that scheduled premises, which are defined in Schedule 1 of the Act, obtain and operate under an EPL. Cooma Road Quarry is defined as a scheduled premise and has an EPL administered by EPA. The licence authorises the carrying out of extracting, processing or storing and extractive activities of between 500,000 and 2,000,000 tpa.

VENM is not currently received at the Quarry. VENM is defined in Schedule 1, Clause 50 of the POEO Act, and includes VENM generated as part of land development activities. VENM is considered to be waste material under the POEO Act and the EPA *Waste Classification Guidelines 2009*.

However, Clause 39 of Schedule 1 of the POEO Act does not require persons who only receive VENM at a site to use on the land to hold an EPL, as it is considered safe for reuse. Under the proposed modification, VENM will be received at the Quarry to reuse for back filling and rehabilitation activities, which is considered beneficial and in alignment with State level strategies to reuse and recycle waste. As such, the proposed modification is in line with the intention of Clause 39, Schedule 1 of the POEO Act.

The Quarry's Development Consent condition under Schedule 3, Condition 30 states the following:

Prior to importing onto the site any recycled concrete or any other material that may be classified as a waste under the EPA Waste Classification Guidelines 2009 (or its latest version), the Applicant must obtain a 'resource recovery exemption' under the POEO Act and provide evidence of this exemption to the Department.

Note: This condition does not apply to routine deliveries to the site.

Clarification on the above has been sought with the EPA through the consultation process in preparation for this EA. The EPA has advised that a resource recovery exemption under the POEO Act is not required by virtue of Clause 39, Schedule 1 of the POEO Act (see Appendix A).

Thus, the EPL will only require a new limit condition amendment to allow the Quarry to import VENM along with concrete waste (which is already approved under the development consent).

iii [NSW Threatened Species Conservation Act 1995](#)

The NSW *Threatened Species Conservation Act 1995* (TSC Act) aims to protect biological diversity of NSW and lists threatened or endangered flora and fauna species and ecological communities. The potential ecological impacts from the continued operations of the Quarry were detailed in the appendices to the 2012 EIS.

The Site is a highly disturbed site characteristic of quarries, and the proposal does not increase the approved area of disturbance of the Quarry. As such, it is highly unlikely that any threatened or endangered flora and fauna species will be impacted by the proposed modification.

iv [NSW National Parks and Wildlife Act 1974](#)

The NSW *National Parks and Wildlife Act 1974* (NPW Act) provides for nature conservation in NSW including the conservation of places, objects and features of significance to Aboriginal people. A person must not harm or desecrate an Aboriginal object or place without an Aboriginal heritage impact under Section 90 of the NPW Act. Potential impacts to Aboriginal heritage objects from the continued operations of the quarry were detailed in the appendices to the 2012 EIS.

The proposal does not increase the approved area of disturbance of the Quarry. As such, there will be no additional impacts to places, objects and features of significance to Aboriginal people as a result of the proposal.

v [NSW Native Vegetation Act 2003](#)

The NSW *Native Vegetation Act 2003* (NV Act) provides for the management of native vegetation in NSW. Generally approval to clear native vegetation in NSW is required under the NV Act. The proposal does not increase the approved area of disturbance of the Quarry and native vegetation clearing is not required. As such, further consent under the NV Act is unlikely to be required.

The NSW *Water Management Act 2000* (WM Act) provides for the management of water sources in NSW. Under the WM Act, a controlled activity approval is required if the activity is located in, on or under waterfront land, which is defined as being within 40 m of a river or stream bank.

A controlled activity approval (under the WM Act) will not be required for the proposed modification.

2.2.2 Commonwealth Environmental Protection and Biodiversity Conservation Act 1999

The Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) aims to protect matters deemed to be of national environmental significance (NES), specifically:

- world heritage properties;
- places listed on the National Heritage Register;
- Ramsar wetlands of international significance;
- threatened flora and fauna species and ecological communities;
- migratory species;
- Commonwealth marine areas; and
- nuclear actions (including uranium mining).

If an action (or project) will, or is likely to, have a significant impact on any of the matters of NES, it is deemed to be a Controlled Action and requires approval from the Commonwealth Environment Minister or the Minister's delegate.

The proposed modification will not have an impact on any matters of NES and accordingly, approval from the Commonwealth is not required under the EPBC Act.

2.3 Applicable environmental planning instruments

2.3.1 Queanbeyan Local Environmental Plan 2012

The Quarry is located in the Queanbeyan Local Government Area (LGA). At the time of the development application in 2012, Cooma Road Quarry was on land zoned 1(a) Rural A under Queanbeyan Local Environmental Plan (LEP) 1998 where extractive industries were not permissible. However, the Quarry was permissible under the provisions of other environmental planning instruments, namely State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (Mining SEPP).

Queanbeyan LEP 2012 is now in force for the majority of land within the Queanbeyan LGA, including the Site. Under Queanbeyan LEP 2012, the Quarry is on land zoned RU2 Rural Landscape. Extractive industries are prohibited in the RU2 zone. However, this does not have any effect on the permissibility of the Quarry given the applicability of the Mining SEPP. Equally, Queanbeyan Development Control Plan 2012 is not applicable to the Site.

2.3.2 State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

The Mining SEPP aims to provide for the proper management and development of mineral, petroleum and extractive material resources for the social and economic welfare of the state. The policy establishes appropriate planning controls to encourage ecological sustainable development.

Clause 7(3) of the Mining SEPP states:

Development for any of the following purposes may be carried out with development consent:

- (a) extractive industry on land on which development for the purposes of agriculture or industry may be carried out (with or without development consent).

Agriculture is a permissible land use (with development consent) under the RU2 zone in the Queanbeyan LEP 2012. Accordingly, pursuant to Clause 7(3) of the Mining SEPP, extractive industries are permissible with development consent.

The proposed modification is consistent with the aims and controls of this policy.

2.3.3 State Environmental Planning Policy No 33 – Hazardous and Offensive Development

State Environmental Planning Policy No 33 – Hazardous and Offensive Development (SEPP 33) applies to development for the purposes of a potentially hazardous or offensive industry. The NSW Department of Planning and Infrastructure issued *Hazardous and Offensive Development Application Guidelines - Applying SEPP 33* in January 2011. The proposal has been assessed against these guidelines.

The proposal is for a modification to an existing quarry of a minor environmental nature (VENM receipt for beneficial reuse) and thus is not considered a hazardous industry, and will not have adverse noise impacts and therefore is also not an offensive industry.

3 Existing operations and proposed modification

3.1 Existing operations

The existing operations at the Quarry were considered in the 2012 EIS for the Quarry's continued operations. Development Consent No. SSD-5109 provided for the following:

- extraction of remaining resources within the pre-existing approved quarry pit;
- extension of extraction boundary by approximately 3.5 hectares (ha) to the north;
- increasing the maximum production limit to 1.5 Mtpa;
- receipt of quarry materials from other sites for crushing and screening as required for sale, with the total production limit of 1.5 Mtpa (including for both material quarried from the site and imported materials);
- relocation of workshop, truck parking and temporary stockpiles;
- addition of a mobile pug mill; and
- recycling of clean concrete at the site for re-use as a product.

The granting of Development Consent No. SSD-5109 means that the Quarry is able to continue extraction and operations of the remaining rock resources within the pre-existing approved extraction area for approximately 20 more years (from the time of the 2012 EIS). This supports current and planned growth of nearby centres at Queanbeyan and Canberra given the Quarry's close proximity to these areas.

The progression and timing of extraction is market driven and therefore variable over the Quarry's operational life. As such, the Quarry is rehabilitating progressively where possible in accordance with the 2012 EIS and the Development Consent No. SSD-5109.

Imported materials including aggregates and crushed rock products are transported in heavy vehicles from other Holcim quarries and external suppliers in the region. The quantity imported is dependent on production levels at the Quarry and market demand.

The Quarry's approved hours of operation are 6 am to 10 pm Monday to Friday and 6 am to 6 pm Saturday with these exceptions:

- primary crushing and truck dispatch – 6 am to 6 pm Monday to Saturday;
- return truck movements – 6 am to 8 pm Monday to Saturday;
- blasting 9 am to 3 pm Monday to Friday; and
- other operations such as limited secondary crushing and stockpiling: 6 am to 10 pm Monday to Saturday.

Maintenance activities which are inaudible to sensitive residential receivers nearby are allowed at any time. The Quarry does not operate on Sundays or public holidays.

The primary land uses around the Quarry include agriculture, environment protection, rural residential and residential uses. The rural residential area of Googong is approximately 0.5 km east of the Quarry, and the residential area of Jerrabomberra is approximately 1 km west of the Quarry. Other towns in the area include Karabar and Tralee.

The Quarry employs up to 26 employees during times of peak production, as well as contractors on a needs basis. Car parking for staff and visitors is provided in a designated car parking area within the Site.

A number of improvements were made to the Quarry’s water management system as part of the 2012 EIS commitments. These include the addition of water dams, additional monitoring (of water transfers, usage and dam levels), and installation of catchment drains around the workshop area. These improvements were made to improve the Quarry’s surface water management performance.

The Quarry’s environmental and planning compliance is managed under a number of Site specific management plans approved by the Secretary of DP&E, including:

- environmental management strategy;
- transport management plan;
- noise management plan;
- blast management plan;
- air quality management plan; and
- heritage management plan.

The Quarry’s draft water management plan and rehabilitation management plan have been submitted to the Secretary and are awaiting approval.

The key aspects of the Quarry’s operations are summarised in Table 3.1.

Table 3.1 Project summary

Component	Approved development
Development life	20 years (ie until 31 October 2035)
Quarry production	1.5 Mtpa of hard rock and blended products
Estimated resource	Approximately 16.5 Mt of hard rock
Extraction methods	Conventional drill-and-blast and free-dig methods
Processing	Crushing and screening using the on-site primary and secondary crusher Blending of extracted and imported products using a mobile pug mill
Water supply	Water is used for the processing plant, dust suppression and truck washing Up to 94 megalitres per year (ML/year) would be required to meet the predicted water demands of the increased production rate Water is sourced from captured surface water inflows and additional water storages upslope of the quarry
Product transport	Road transportation of product – up to 334 daily truck movements (in and out)

Table 3.1 Project summary

Component	Approved development
Infrastructure	Continued use of existing infrastructure (primary and secondary crushing plant, workshop, fuel storage area, administration buildings, weighbridge, wheel wash, truck parking and associated services) Addition of a mobile pug mill Relocation of existing workshop, truck parking and temporary stockpiles is approved but has not occurred
Hours of operation	6 am–10 pm Monday to Friday and 6 am–6 pm Saturday, with the following exceptions: <ul style="list-style-type: none"> • primary crushing and dispatch 6 am–6 pm Monday to Saturday; • blasting 9 am–3 pm Monday to Friday; • limited secondary crushing and stockpiling between 6 pm and 10 pm Monday to Friday; and • return truck movements 6 am–8 pm Monday to Saturday no operations on Sundays or public holidays.
Rehabilitation	Progressive rehabilitation of operational areas including revegetation of stepped benches in open cut void and overburden emplacements
Capital investment value	\$3.5 million

Source: DP&E (2013).

A view across the extraction area with infrastructure area in the background is provided in Photograph 3.1.



Photograph 3.1 View north-east across the quarry with processing area in the top left of photograph (27/11/14)

3.1.1 Noise management

The potential noise impacts from the continued operations at the Quarry were assessed in the noise and blasting assessment that accompanied the 2012 EIS.

The assessment found that future Quarry operations would comply with required noise criteria provided it implements the mitigation measures identified as part of the assessment. The mitigation measures are generalised as:

- noise attenuation of primary crushing plant;
- management of number of loaders and road haulage trucks operating in exposed locations at any one point in time;
- management of stockpile layout;
- avoiding use of secondary crushing plant in adverse weather conditions during evenings; and
- construction of earth berm near infrastructure area.

These mitigation measures have been incorporated into the noise management plan. The Quarry will continue to be managed under the noise management plan and blast management plan.

3.1.2 Traffic and transport management

The potential traffic and transport impacts from the continued operations at the Quarry were assessed in the traffic impact assessment that accompanied the 2012 EIS.

The assessment found that future Quarry operations and associated truck transport movements would only comprise a minor portion of total traffic on the wider road network, and the upgrade on Old Cooma Road at the Quarry access road which provides direct access to the Quarry, is expected to provide a good to very good level of service.

Schedule 2, Condition 13 of SSD-5109 provides that:

For the life of the development, the Applicant shall not dispatch:

- (a) more than 30 laden trucks per hour; and
- (b) more than an average of 24 trucks per hour on any day.

A road traffic noise audit of the Quarry was undertaken in 2014 (Rudds 2014) where a truck dispatch log from the Quarry in May 2014 was reviewed. The dispatch data shows that the Quarry was compliant with the above development consent condition.

The Quarry's transport movement will continue to be managed under the transport management plan.

Any truck movements as a result of the proposed modification will be accommodated within the approved conditions listed above. Restrictions on other truck movements will be made during times when VENM is imported, so that when combined, the total number of trucks dispatched per hour and average number of trucks dispatched over a 24 hour period does not exceed approved consent conditions.

3.1.3 Air quality management

The potential air quality impacts from the continued operations at the Quarry were assessed in the air quality impact assessment that accompanied the 2012 EIS.

The assessment found that future Quarry operations would not cause any adverse air quality impacts to nearby sensitive residential receivers, with predicted dust concentrations and deposition levels well below applicable air quality criteria.

The Quarry will continue to be managed under the air quality management plan.

3.2 Proposed modification

Holcim wishes to receive VENM as part of its imported material allowance under its approved production limit. The majority of VENM will come from construction and development activities at a nearby residential subdivision project at Googong. Approximately 50,000 tpa of VENM will be transported to the Quarry in 2015 for Quarry back filling and rehabilitation activities. This amount will vary in future years, and will be maintained within the Quarry's production limits being 1.5 Mtpa (eg including both material quarried from the Site and material imported externally).

The VENM receipt benefits the Quarry and developers as well as the environment, as the material would otherwise end in landfill. The nearest landfill is at Mugga Lane Resource Management Facility, ACT, approximately 17 km away. This alternative, compared to the proposed modification, results in extra greenhouse gas emissions from increased truck transport distances, and landfilling.

The residential subdivision development at Googong is expected to continue for at least another 15 years, which generally aligns with the lifespan of the Quarry. The proposed modification thus enables the mutually beneficial relationship well into the future.

The VENM will be certified in accordance with the requirements of the NSW *Protection of the Environment Operations Act 1997* (POEO Act), for which Holcim will be responsible (see Chapter 2). The material will be transported in Holcim or contractor owned trucks from Googong to the Quarry using Old Cooma Road over a distance of approximately 2.5 km. The trucks will access the Quarry using the quarry access road which is constructed to the required design standard for heavy vehicle use. The proposed transport route is shown in Figure 3.1.

The estimated amount of imported VENM at the Quarry will be 50,000 tpa in 2015 during approved operating hours for truck movements and within approved truck movement limits under its development consent. As the amount of imported VENM is to be accommodated within the Quarry's approved production limit of 1.5 Mtpa, no change to this limit is required.

The Quarry's EPL will need a minor amendment to allow for VENM receipt (see Chapter 2).

3.3 Potential impacts

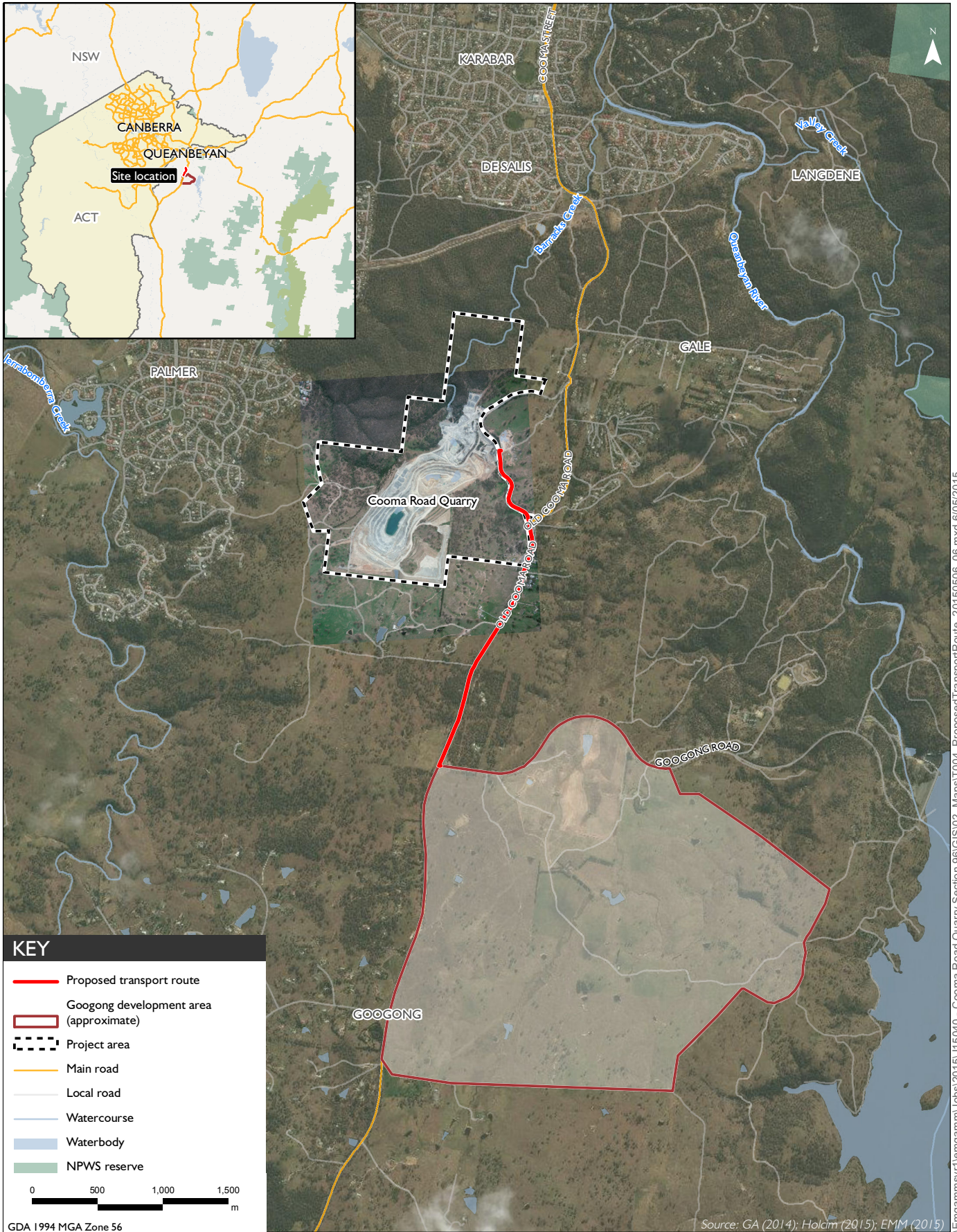
The proposed modification has been compared against existing operations relying upon the extensive technical assessments undertaken for the 2012 EIS. This is summarised below in Table 3.2.

Table 3.2 Potential impacts of the proposed modification

Environmental consideration	Impact assessment	Mitigation measures
Surface water/groundwater	VENM may be stockpiled for short periods on quarry benches in preparation for back filling or rehabilitation work. Any surface water runoff from VENM will be captured by the Site's water management system. The proposal will not have an adverse impact on the Quarry's surface water quality or any groundwater impacts.	VENM is to be certified and received from the Googong development site and stored on quarry benches where backfilling or rehabilitation works are to take place.
Ecology	VENM may be stockpiled for short periods on quarry benches which are existing disturbed surface areas, in preparation for back filling or rehabilitation work. No ground disturbance or clearing is required. The proposal will not have an adverse impact on any of the Quarry's flora and fauna.	The Quarry's environmental management strategy and rehabilitation management plan will continue to operate under the proposed modification.
Aboriginal archaeology/historic heritage	VENM may be stockpiled for short periods on quarry benches which are existing disturbed surface areas, in preparation for back filling or rehabilitation work. No ground disturbance or clearing is required. The proposal will not have an adverse impact on any of Quarry's identified Aboriginal archaeology or historic heritage sites/items.	The Quarry's environmental management strategy and heritage management plan will continue to operate under the proposed modification.
Air quality and greenhouse gases	The proposal reduces potential air quality and greenhouse gas impacts in the area by recycling and reusing VENM for beneficial purposes at the Site, when compared to the alternative which would see increased greenhouse gas emissions from longer truck transport haulage of VENM to landfill sites further away. The proposal will not have an adverse impact on the Quarry's air quality or greenhouse gas emissions.	The Quarry's environmental management strategy and air quality management plan will continue to operate under the proposed modification. VENM receipt will be maintained within the Quarry's approved production limit of 1.5 Mtpa (for both materials produced onsite and imported).
Noise and vibration	There are no increases to truck movements or additional machinery/plant under the proposal. The proposal will not have an adverse impact on the Quarry's noise and vibration emissions.	The Quarry's environmental management strategy, noise management plan and blast management plan will continue to operate under the proposed modification.

Table 3.2 Potential impacts of the proposed modification

Environmental consideration	Impact assessment	Mitigation measures
Traffic and transport	<p>VENM laden trucks from the Googong development site will use Old Cooma Road south of the Quarry, which is a transport route assessed as part of the 2012 EIS.</p> <p>The proposal will not have an adverse impact on the Quarry's traffic and transport movements.</p>	<p>The total truck transport movements (both inbound and outbound) as a result of VENM importation from the Googong development site will be within approved truck transport movement limits and approved operating hours for truck movements.</p>
Visual amenity	<p>VENM may be stored for short durations on quarry benches which are existing disturbed areas.</p> <p>The proposal will not have an adverse impact on the visual amenity of the locality.</p>	<p>VENM is to be received from the Googong development site and stored on quarry benches where back filling or rehabilitation works are to take place.</p>
Waste	<p>The proposal will help reduce waste generated offsite by the subdivision development at Googong by reusing potential waste (VENM) for a beneficial purpose at the Quarry.</p> <p>The proposal will not have an adverse impact on the Quarry's waste generation rates as VENM will be reused on site.</p>	<p>VENM is to be received from the Googong development site and stored on quarry benches where back filling or rehabilitation works are to take place.</p> <p>The amount of imported VENM is to be within the Quarry's approved production limits (for imported material allowance).</p>
Rehabilitation	<p>The proposal will assist the Quarry achieving rehabilitation objectives by importing material to assist with backfilling of terminal benches.</p>	<p>VENM is to be received from the Googong development site and used for back filling or rehabilitation purposes.</p>
Natural hazards	<p>VENM may be stored for short durations on quarry benches which are existing disturbed areas.</p> <p>The proposal will not cause any natural hazards (eg bushfire) at the Quarry.</p>	<p>The Quarry's environmental management strategy will continue to operate as well as the rehabilitation management plan under which weed and bushfire risks are managed at the Site.</p>
Social	<p>The proposal will see beneficial reuse of material which would otherwise likely end in landfill. The transport distance is minor (2.5 km) and importation will be maintained within the Quarry's approved production limits, truck transport movements, transport route and operating hours.</p> <p>The alternative is that the material is landfilled at sites further from the Quarry, contributing to increased greenhouse gas emissions to the local and wider area due to further distance trucks need to travel and landfilling.</p>	<p>The Quarry will continue to operate under its environmental management plans and update them as required to improve the Site's environmental performance.</p>



Proposed transport route

Cooma Road Quarry – Modification to Development Consent

Figure 3.1

4 Conclusion

The proposed modification to the Quarry's development consent (Development Consent No. SSD-5109) is sought so that VENM can be reused in a sustainable manner which benefits the Quarry, developers and the environment. The alternative is that the material would otherwise likely end in a landfill site further from the Quarry.

The proposal is considered a minor modification to the Quarry's development consent, and no changes to the Quarry's approved operating conditions are required. The importation of VENM will be accommodated within the Site's approved truck transport movement and production limits, and transported within approved operating hours and transport route for truck movements.

The proposed modification does not increase the environmental impacts of the Quarry operations in total compared with those of existing operations. It has been demonstrated through this proposal's qualitative assessments that the modifications to the consent do not result in adverse impacts to Quarry operations or the environment. Holcim has engaged the relevant stakeholders in relation to any proposed changes to existing operations, and the proposal is seen as being beneficial, particularly by the EPA.

DP&E has advised that they would assess the proposed modification by way of a minor environmental assessment under Section 96(1A) of the EP&A Act.

In determining the application to modify the Site's development consent, DP&E is required to consider the matters listed under Section 79C(1) of the EP&A Act, which is provided in Table 4.1.

Table 4.1 Consideration under Section 79C(1) of the EP&A Act

Consideration	Response
The provisions of any environmental planning instrument, proposed instrument that has been subject to public consultation	The relevant provisions of the applicable planning instruments (ie Mining SEPP, SEPP 33) are considered in this EA. The proposal is generally consistent with the provisions of these environmental planning instruments.
The provisions of any development control plan or planning agreement or draft planning agreement under Section 93F	There are no development control plans considered applicable to this proposal. No planning agreements or draft planning agreements apply.
The provisions of the EP&A Regulation	There are no specific provisions under the EP&A Regulation which are applicable to this proposal. Potential environmental impacts, as described and assessed within this EA, are able to be accurately predicted with a high level of certainty. Impacts have been assessed in accordance with government policies and procedures. Assessments have utilised recent technical studies and monitoring results.
The provisions of any coastal zone management plan	There are no coastal zone management plans applicable to this proposal.

Table 4.1 Consideration under Section 79C(1) of the EP&A Act

Consideration	Response
The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	<p>The likely impacts (ie social, traffic and transport, bushfire, rehabilitation, Aboriginal heritage, noise, air quality, surface water and soil, groundwater, waste and visual amenity) of the proposal are considered in Chapter 3.</p> <p>A comparison of technical assessments undertaken as part of the 2012 EIS and the proposed modification clearly indicates that, with the provision of appropriate and implementable mitigation measures, the proposal will not have any environmental impacts, including impacts on threatened species or vegetation communities, Aboriginal heritage sites or places, and air quality and noise impacts on surrounding receivers.</p>
The suitability of the site for the development	<p>The suitability of the site for the proposal is considered in this EA.</p> <p>The proposal (ie the quarry) is permissible under the Mining SEPP, with permission from DP&E.</p>
Any submissions made in accordance with the EP&A Act	<p>Holcim can provide a response to any requests resultant from issues raised during the stakeholder consultation process.</p>
The public interest	<p>The public’s interests (ie relevant government codes and policies, particularly those which have been properly prepared and exhibited) are considered in this EA.</p> <p>The proposal is generally consistent with the provisions of the codes and policies considered in this EA.</p> <p>In addition, the proposal will see beneficial reuse of VENM resulting from development activities over a long term period, which would otherwise likely end in landfill.</p>

Having considered all relevant matters, the proposed modification is considered to be in the public interest and is recommended for approval.

Abbreviations

ACT	Australian Capital Territory
DA	Development application
DCP	Development Control Plan
DP&E	Department of Planning and Environment
EIS	Environmental impact statement
EMM	EMGA Mitchell McLennan Pty Limited
EPA	NSW Environmental Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence
km	Kilometres
LGA	Local government area
M	Million
m	Metres
Mining SEPP	State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007
MNES	Matters of national environmental significance
ML	Megalitres
Mtpa	Million tonnes per annum
NP&W Act	<i>The NSW National Parks and Wildlife Act 1974</i>
NSW	New South Wales
NV Act	<i>The NSW Native Vegetation Act 2003</i>
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
SEPP	State Environmental Planning Policies
SEPP 33	<i>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development</i>
t	Tonnes
tpa	Tonnes per annum
TSC Act	<i>Threatened Species Conservation Act 1995</i>

References

Rudds Consulting Engineers Pty Ltd (Rudds) 2014, *Road Traffic Noise Assessment Report, Cooma Road Quarry*, Report Number: R146469AC R0 14-07-22. Report prepared for Holcim (Australia) Pty Ltd. July.

Umwelt (Australia) Pty Ltd (Umwelt) 2012, *Cooma Road Quarry Continued Operations Project, Environmental Impact Statement*. Report prepared for Holcim (Australia) Pty Ltd. October.

Appendix A

Letter from Environment Protection Authority



Our reference: DOC15/64847-01
Contact: Stefan Press, (02) 6229 7002

Mr Ian Shenton
Planning & Environment Manager – NSW/ACT
Holcim (Australia) Pty Ltd
Tower B, Level 8
799 Pacific Highway
CHATSWOOD NSW 2067

3 March 2015

Dear Mr Shenton

**RE: Proposed Importation of Virgin Excavated Natural Material –
Holcim Cooma Road Quarry – Environment Protection Licence 1453**

I refer to your letter dated 24 February 2015 in relation to the proposed importation of virgin excavated natural material (VENM) at Holcim (Australia) Pty Ltd's Cooma Road Quarry in Queanbeyan which is the subject of Environment Protection Licence No. 1453.

The Environment Protection Authority (EPA) understands that Holcim is proposing to import 50,000 tonnes of VENM into the Quarry for rehabilitation purposes. The proposed source of this VENM is the nearby Googong Township development site, which is a green field residential development.

As you are aware, VENM is defined in Schedule 1 (Clause 50) of the *Protection of the Environment Operations Act 1997* (POEO Act). VENM is considered to be a 'waste' under the POEO Act. This includes where VENM is generated as part of land development works and due to being surplus to need requires offsite disposal or reuse. As Holcim is proposing to source VENM from the Googong Township development, the EPA would consider the material to be waste under the POEO Act.

It is however recognised that VENM is a waste that can be reused for beneficial purposes including where it is applied to land for rehabilitation purposes. To facilitate such lawful reuse of VENM waste, Clause 39 (Waste disposal – application to land) of Schedule 1 of the POEO has been constructed in a manner so as not to require a person who receives only VENM at a site for the purposes of applying it to land to hold an environment protection licence. Given the low risk that the application of VENM to land poses to both the environment and the public, the EPA has chosen to enshrine this provision directly within the POEO Act as opposed to the use of the "resource recovery exemption" framework which has been used to exempt other waste types from regulatory provisions, where they can be safely reused.

Therefore, Holcim does not require specific amendment of the Licence to allow for the importation of VENM at the Cooma Road Quarry. To ensure clarity, the EPA proposes however, to add a new Limit condition in the Licence which details and clarifies that VENM can be received at the Cooma Road Quarry along with concrete waste (as provided for by the existing development consent).

It is important to note that the proposed importation of VENM may also require modification or clarification of the development consent for the Quarry. The EPA recommends that Holcim consult with the relevant consent authority(s) to ascertain if any specific approvals are needed. We note that Holcim has indicated it intends to seek advice from the Department of Planning and Infrastructure in this regard.

I trust that this information of assistance and should you wish to discuss this matter, please contact Stefan Press on (02) 6229 7002.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'J. Thompson', with a long horizontal stroke extending to the right.

JULIAN THOMPSON
Unit Head – South East Region
Environment Protection Authority

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