

Badgerys Creek Quarry and Brick Making Project | Modification 5 MODIFICATION REPORT

Prepared for CSR Building Products Limited | 8 October 2021







Badgerys Creek Quarry and Brick Making Project

MODIFICATION 5 | MODIFICATION REPORT

Prepared for CSR Building Products Limited 8 October 2021

PR151

| | Prepared by | Reviewed by |
|--------------|---------------------|----------------------------|
| Name | Neville Hattingh | Nelma Arancibia |
| Company | Element Environment | CSR Building Products |
| Position | Director | Senior Development Manager |
| Project Role | Lead Author | Project Manager |
| Signature | Hally | - Carquelie |
| Date | 7 October 2021 | 8 October 2021 |

This report has been prepared in accordance with the scope of services set out in the contract between Element Environment Pty Ltd and the client. The report is for the use of the client and no responsibility will be taken for its use by other parties.

© 2021 Reproduction of this report is prohibited without Element Environments prior written permission.

DOCUMENT CONTROL

| Revision | Date | Description | Prepared by | Reviewed by |
|----------|----------------|------------------------|------------------------|----------------------------------|
| 0 | 7 October 2021 | For CSR review | Element Environment | CSR Building Products Limited |
| 1 | 8 October 2021 | For submission to DPIE | Element Environment | CSR Building Products Limited |

Contents

| 1 | SUMMAI | RY OF APPROVED PROJECT | 2 |
|--------|------------|--|---------------|
| | 1.1 1.2 | Modification 2 Modification 3 and 4 | 2 2 |
| 2 | DESCRI | PTION OF PROPOSED MODIFICATION 5 | 4 |
| | 2.1 2.2 | Importation of excavated natural material Continued storage of finished building products manufactured offsite | 4 4 |
| 3 | PLANNI | NG APPROVAL PATHWAY | 6 |
| 4 | CONSUL | TATION | 7 |
| 5 | ENVIRO | NMENTAL RISKS AND MANAGEMENT MEASURES | 8 |
| | 5.1 5.2 | Key risks associated with the importation of excavated natural material Key risks associated with the continued storage of finished building produc manufactured offsite | 8 cts 8 |
| | 5.3 | Consideration of other risks associated with the modification | 9 |
| 6 | SUGGES | STED CHANGES TO THE PROJECT APPROVAL AND CONCEPT PL/ /AL | AN 13 |
| | 6.1 6.2 | · · · J - · · · · · · · · · · · · · · · · · · | 13 13 |
| 7 | CONCLU | JSION | 14 |
| ATTACH | MENT A | - EPA RESPONSE | 15 |
| ATTACH | IMENT B | REVISED FIGURES FOR PROJECT APPROVAL AND CONCEPT PLA APPROVAL | AN 16 |

Tables

| Table 1 Assessment of impact of proposed modification |
|---|
|---|

1 SUMMARY OF APPROVED PROJECT

On 27 September 2011, project approval was issued under Section 75J of the NSW *Environmental Planning & Assessment Act 1979* (EP&A Act) for the ongoing production of bricks and the expansion of the existing quarrying operations at 235 Martin Road, Badgerys Creek.

In October 2016, CSR Building Products Limited (CSR) acquired Boral Bricks Pty Limited (Boral) brick business along the eastern seaboard of Australia and with it, the Badgerys Creek Brick Making Facility site ('the site'), which is strategically placed in the Badgerys Creek Precinct of the Western Sydney Aerotropolis and borders on the Western Sydney Airport.

To realise the full potential of the Badgerys Creek site and to allow the site to meet the strategic needs of their brick manufacturing businesses, CSR modified the existing Project Approval (PA10_0014) and Concept Plan Approval (CP 10_0033). CSR lodged three modification applications and supporting documentation on 1, 4 and 21 December 2017 under Section 75W of the EP&A Act, hereafter referred to as Modification 2, Modification 3 and Modification 4 respectively.

1.1 Modification 2

The 2011 Project Approval did not allow for the exportation of material extracted on-site. Due to closure of many quarries in the region, reducing the availability of raw materials, CSR needed to be able to export raw material (clay) from the site. This is important for the sustainability of CSR's brick manufacturing business and to ensure an immediate and ongoing supply of raw material to other CSR brick factories.

Although the 2011 Project Approval allowed for the storage of finished brick products in the hard stand storage yard, to the east of the brick factory, this storage area will not be used for the storage of bricks manufactured at the site, until the new brick factory (assessed and approved under Modification 3) has been constructed and is operational. In the interim CSR required additional finished product storage capacity in the greater Sydney region and therefore proposed to make use of this valuable space for the temporary storage of finished building products from other CSR manufacturing facilities e.g. autoclaved aerated concrete panels or roof products.

As the ability to export clay from the Badgerys Creek site and temporarily store finished building products manufactured offsite was required prior to the other activities covered by Modification 3 and 4, CSR lodged a separate modification application (Modification 2) under Section 75W of the EP&A Act for these two activities. CSR obtained planning approval for Modification 2 from the Department of Planning, Industry and Environment (DPIE) on 5 May 2018.

Condition 9 of Schedule 2 of the Modification 2 Project Approval stated: "The Proponent may receive, store and dispatch finished building products at the site until 4 May 2021".

Finished building products were defined in the Modification 2 Project Approval as: "Building products prepared or manufactured off site, as described in EA (Mod 2)".

1.2 Modification 3 and 4

In August 2020 CSR were granted approval for modification applications 3 and 4 to their Project Approval and Concept Plan Approval. These modifications granted approval for:

- Construction and operation of a brick making facility.
- Increase in importation of raw materials for brick production to a maximum of 360,000 tonnes per calendar year.
- Increase in the production of bricks to a maximum of 300,000 tonnes per calendar year.

- Increase in the transportation of bricks to a maximum of 330,000 tonnes per calendar year.
- Amendment to the approved quarry pit layout, design and staging plans.
- Extraction raw material from Pit 3 to a maximum of 420,000 tonnes per calendar year
- Removal of noise bunds.
- Dewatering Pit 1, 2 and 3.
- Upgrades and extension of an existing onsite track for use by virgin excavated natural material (VENM) trucks.
- Importation of VENM to backfill pits.
- Implementation of a new water management strategy.
- Maximum of 400 trucks entering and exiting the site per day Monday Friday (i.e. 800 vehicle movements). 200 truckloads are associated with the brick making facility and 200 truckloads are associated with VENM importation.
- Maximum of 179 trucks entering and exiting the site per day on Saturday (i.e. 358 vehicle movements). 49 truckloads are associated with the brick making facility and 130 truckloads are associated with VENM importation.
- Maximum of 100 trucks entering and existing the site per day on Sunday associated with VENM importation.
- Signalisation of the Martin Road-Elizabeth Drive intersection.

The previous Condition 9 of Schedule 2 of the Modification 2 Project Approval which read: "The Proponent may receive, store and dispatch finished building products at the site until 4 May 2021" was deleted from the consolidated Modification 3 and 4 Project Approval.

'Finished building products', which was previously defined in the Modification 2 Project Approval as: "Building products prepared or manufactured off site, as described in EA (Mod 2)" was redefined in the consolidated Modification 3 and 4 Project Approval to "Building products prepared or manufactured on site, as described in EA (Mod 3 and 4)"

2 DESCRIPTION OF PROPOSED MODIFICATION 5

2.1 Importation of excavated natural material

Modification 4 to the Project Approval applied for and assessed the importation of fill material to backfill the quarry voids to natural ground level to rehabilitate the site and facilitate future redevelopment in accordance with the Western Sydney Aerotropolis Plan. The Modification 4 Environmental Assessment (EA) and the modified Project Approval uses the term virgin excavated natural material (VENM) to refer to fill material that will be imported to backfill the quarry voids.

Condition 35A and 35B of the Project Approval require the progressive rehabilitation of the quarry pits as outlined below:

35A. The Proponent must complete the backfilling of Pits 1 and 2 within 6 years of commencement of Phase 1, or as otherwise agreed by the Secretary.

35B. The Proponent must complete the backfilling of Pit 3 within 2 years of the date of completion of extraction activities in Pit 3, or as otherwise agreed by the Secretary.

With a high demand for clean fill material on a number of major construction projects in the Sydney basin and surrounds, there is unlikely to be sufficient VENM available at the rate required to meet the conditions of approval, to backfill and rehabilitate the quarry voids. Therefore, CSR would like the flexibility to import clean fill that also includes excavated natural material (ENM).

The Project Approval makes reference to VENM throughout but does not specifically exclude the use of ENM, neither does the environmental assessment report that accompanied Modification 4.

From our experience the EPA believes the use of ENM for engineered fill is of low risk as it is strictly controlled by *The excavated natural material order 2014* (ENM order) and *The excavated natural material exemption 2014* (ENM exemption).

CSR propose to modify the Project Approval and Concept Plan Approval under Section 4.55 1A of the EP&A Act to change the word 'VENM' throughout the Project Approval and Concept Plan Approval to 'Fill', and then define 'Fill' in the definitions section as VENM and/or ENM.

2.2 Continued storage of finished building products manufactured offsite

During the recent construction lockdown due to COVID 19 and the likely ongoing restrictions to construction, CSR's building products companies continue to manufacture to keep factories running and people employed. However, CSR is struggling with storage space at their manufacturing sites as dispatching came to a complete halt and is unlikely to return to normal for some time.

Therefore, to meet CSR's requirement for additional finished product storage capacity in the greater Sydney region they propose to continue to make use of the hard stand storage yard, to the east of the brick factory, for the temporary storage of finished building products from other CSR manufacturing facilities.

As outlined in Section 1.2. the previous Condition 9 of Schedule 2 of the Modification 2 Project Approval which read: "The Proponent may receive, store and dispatch finished building products at the site until 4 May 2021" was deleted from the consolidated Modification 3 and 4 Project Approval.

'Finished building products', which was previously defined in the Modification 2 Project Approval as: "Building products prepared or manufactured off site, as described in EA (Mod 2)" was redefined in the consolidated Modification 3 and 4 Project Approval to "Building products prepared or manufactured on site, as described in EA (Mod 3 and 4)".

Therefore, the Project Approval requires modification to allow for the importation, temporary storage and exportation of finished building products manufactured offsite.

3 PLANNING APPROVAL PATHWAY

As outlined above, Project Application PA10_0014 was approved under Section 75J, Part 3A of the EP&A Act on 27 September 2011.

Part 3A (Major Infrastructure and Other Projects) of the EP&A Act was repealed by the NSW *Environmental Planning and Assessment Amendment Act 2011* (Part 3A Repeal Act) in October 2011.

Under the Part 3A Repeal Act, projects deemed to be transitional Part 3A projects continued to be subject to Part 3A of the EP&A Act. The definition of transitional projects includes certain projects that were the subject of an existing approval under Part 3A. These transitional arrangements closed on 1 March 2018. This means that all future modifications to Part 3A projects after this date are to be assessed under the State significant development (SSD) and State significant infrastructure (SSI) pathways under Part 4 of the EPA Act. The regime requires a transfer from a transitional Part 3A project to SSD or SSI (as relevant). The mechanism for transferring a transitional Part 3A project to SSD or SSI is set out in clause 6 of Schedule 2 of the EP&A Regulation, involving an order of the Minister (published in a Gazette) declaring the project to be SSD or SSI. Relevantly, a project ceases to be a transitional Part 3A project on the making of the declaration. The Project was gazetted as SSD for the purposes of future modifications on 13 August 2021.

Therefore, modification applications to the Project Approval are to be made under Section 4.55 of the EP&A Act. Section 4.55(1A) allows modifications with minor environmental impact, where:

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 [refer Section 5]
- 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 [refer Section 2]
- c. it has notified the application in accordance with- [refer Section 4]
 - 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 any period prescribed by the regulations or provided by the development control plan, as the case may be.

As described in Section 4, DPIE concurred the modification should be submitted and assessed under Section 4.55(1A) as it will have minor environmental impact and will be substantially the same development for which consent was granted.

4 Consultation

CSR met with DPIE on 12 May 2021 to discuss the proposal to import ENM, in addition to VENM to backfill the existing quarry voids. DPIE confirmed that the appropriate planning approval pathway would be a Section 4.55 1A modification to allow flexibility to import VENM and/or ENM to the site.

DPIE requested that prior to lodging the modification that CSR consults with and allows the EPA the opportunity to comment on the proposal to import ENM in addition to VENM to backfill the quarry voids and the approach to managing the importation of ENM through a revised Fill Management Plan that covers ENM and VENM management protocols (as outlined in Section 5 below).

CSR wrote to the EPA on 25 June 2021 describing the proposed modification and seeking comments. The EPA provided a response in writing on 9 July 2021 (Attachment A) stating:

- They have consulted with DPIE and will provide a formal agency response when referred through the planning process.
- Their response would also include draft conditions that it would intend to apply to the Environment Protection Licence (No. 684) associated with ENM importation and management.
- They would require CSR to demonstrate within an updated Fill Management Plan, how it would prevent the acceptance of materials that don't meet the requirements of the ENM resource recovery order and exemption 2014 and how it would manage any rejected materials.

5 ENVIRONMENTAL RISKS AND MANAGEMENT MEASURES

5.1 Key risks associated with the importation of excavated natural material

The primary risk associated with the importation of any fill material to the site is that the material includes contaminants that don't comply with the requirements of the relevant resource recovery orders and exemptions.

As outline above, the importation of ENM to the site and placement of ENM on the site is strictly controlled by the ENM order and the ENM exemption. CSR will ensure full compliance with the ENM order and exemption.

CSR needs to prepare a VENM Management Plan in accordance with Condition 39A of the Project Approval. CSR will prepare the VENM Management Plan (to be renamed to Fill Management Plan) to clearly outline the management measures/controls that they will put in place to ensure that the ENM received on site meets the requirements of the ENM order and that it is placed on site in accordance with the ENM exemption.

The receival and placement of ENM on the site will not result in any greater environmental risks than the approved project as:

- Trucks transporting ENM to the site will follow the same haul routes as is identified for VENM importation in Modification 4 and the Project Approval.
- The truck movements associated with the importation of both VENM and ENM will not exceed the truck movements in the Project Approval.
- The operating hours during which ENM will be imported will be the same as for VENM importation as outlined in Modification 4 and the Project Approval.
- ENM will be emplaced in the same locations as the emplacement of VENM identified in Modification 4 and the Project Approval.

Therefore, there should be no greater environmental risk associated with using VENM and/or ENM as engineered fill material at the site.

5.2 Key risks associated with the continued storage of finished building products manufactured offsite

As outlined in Section 1.1 and Section 2.2, the importation, temporary storage and exportation of finished building products manufactured offsite was approved under Modification 2 but removed through modifications 3 and 4.

The proposal to import, temporarily store and export finished building products manufactured offsite will cease when brick production recommences.

All activities associated with the finished building products delivery, unloading, storage, loading and dispatch would be conducted within the approved 'truck arrival and dispatch (finished building products)' operating hours outlined in Table 1 of Schedule 3 of the Project Approval.

CSR would carefully manage the total number of truck movements per day, associated with the delivery and dispatch of finished building products manufactured offsite, to ensure they do not exceed the approved daily truck movement limits specified in Table 2 of Schedule 3 of the Project Approval.

5.3 Consideration of other risks associated with the modification

The original EA and subsequent approved modifications assessed a number of environmental issues. The potential impacts of the proposed modification in relation to the environmental issues identified in the original EA and subsequent modifications are considered in Table 1.

| Environmental issue | Consideration | Potential impact |
|------------------------|---|--|
| Noise and vibration | The proposal to import ENM (in addition to VENM) and temporarily store finished building products manufactured offsite within the brick storage area will not: involve any new noise or vibration generating activities that weren't assessed in the original EA or subsequent modification EAs; result in a change in the position of either point or line noise sources assessed in the original EA or subsequent modification EAs; increase the approved truck movements outlined in Condition 12 of Schedule 2 of the Project Approval; or operate outside of the approved operating hours outlined in Condition 1 of Schedule 3 of the Project Approval. There is no change in the noise criteria for the site as the proposed modification does not seek to alter the noise criteria stipulated in conditions 5 and 6 of Schedule 3 of the Project Approval. Therefore, the proposed modification will not result in any additional operational or road traffic noise impacts. The Noise Management Plan will be implemented to minimise noise impacts from the proposed modification. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| Air quality | Air quality impacts associated with the importation of ENM (in addition to VENM) and the delivery, temporary storage and dispatch of finished building products manufactured offsite, include dust and vehicular emissions. The proposed modification does not increase the volume of imported fill material, the disturbance footprint associated with the backfilling of quarry voids, or the location and distance of haul roads. The proposed modification does not increase the size of the | No impact greater than assessed in the original EA and subsequent modification EAs. |
| | brick storage area to the east of the brick factory, nor does it exceed the transportation limits of the Project Approval or introduce any new types of air pollutants. Therefore, no additional air quality impacts greater than those reported in the original EA or subsequent modification EAs are predicted. There is no change in the air quality performance criteria for the site as the proposed modification does not seek to alter the air quality criteria stipulated in Condition 9 of Schedule 3 of the Project Approval. | |
| | Therefore, the proposed modification will not result in any additional air quality impacts and does not substantially alter the development for which Project Approval was granted. The Air Quality Management Plan will be implemented to | |
| Surface water | minimise air quality impacts from the proposed modification. The proposed modification does not increase the disturbance footprint associated with the approved project. The proposed modification will not require changes to the sites surface water management, nor would it require changes to water access or increase the area of impermeable surfaces (hardstand) on the site. The proposed importation of ENM for engineered fill is unlikely to pose any greater risk to surface water quality than the importation of VENM, as it is strictly controlled by the | No impact greater than assessed in the original EA and subsequent modification EAs. |

the importation of VENM, as it is strictly controlled by the

Table 1 Assessment of impact of proposed modification

| Environmental issue | Consideration | Potential impact |
|------------------------|---|--|
| | ENM order and exemption and will also be carefully managed in accordance with the Fill Management Plan. | mpact |
| | The building products that are proposed to be temporarily stored within the existing storage yard, will be finished products such as autoclaved aerated concrete panels or masonry roof products e.g. tiles. These products are similar to bricks that are approved to be stored in the storage yard and will not release pollutants that will contaminate stormwater runoff from the site. | |
| | The proposed modification does not seek to introduce water discharge limits of any Environment Protection Licence. Consequently, the proposed modification would not result in any additional impacts on surface water runoff quantity or quality and does not substantially alter the development for which Project Approval was granted. | |
| | The Soil and Water Management Plan will be implemented on site, to minimise surface water quality impacts from the proposed modification. | |
| Traffic | CSR will carefully manage the total number of truckloads per day, associated with the proposed modification, to ensure they do not exceed the approved daily truckload limit. The proposed modification will also not alter the approved days and hours of truck arrival and dispatch. Therefore, the proposed modification will not alter the intersection performance or carrying capacity of the approaching roads and does not introduce any new heavy vehicles as assessed in the EAs. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| | The requirements of the Traffic Management Plan will be adhered to during the proposed modification operations. | |
| Aboriginal heritage | The proposed modification does not increase the disturbance footprint associated with the approved project. The proposed modification will take place within the approved site boundary and will not impact known Aboriginal heritage items or sites. The proposed modification will not impact on any Aboriginal heritage values or land not previously assessed as part of the approved project. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| | Site operations, will be managed in accordance with the Aboriginal Heritage Management Plan. | |
| Bushfire | Liverpool City Council's Bushfire Prone Land Map (Sheet 8) and the bushfire prone land maps in the 'Eco Logical Australia. October 2020 Draft Bushfire Management Plan: Aerotropolis Core, Badgerys Creek and Wianamatta-South Creek Precincts. Prepared for Western Sydney Planning Partnership', identifies parts of CSR's property bordering along both South Creek and Badgerys Creek as containing bushfire prone land ('Vegetation Category 1' and 'Vegetation Buffer'). No new development is proposed in proximity to bushfire prone land associated with either South Creek or Badgerys Creek that is not included in the Project Approval. The proposed modification will not impact on any land not previously assessed as part of the approved project. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| Visual | The proposed modification does not increase the disturbance footprint associated with the approved backfilling of the quarry voids or finished product storage. The proposed modification does not increase the height of the landscape or built structures or require any changes to existing buildings, or infrastructure on site. A height restriction hasn't been applied in the Project Approval or the original EA to the height of stacked finished products in the storage yard. Finished building products manufactured offsite, stored in the storage yard, will also | No impact greater than assessed in the original EA and subsequent modification EAs. |

| Environmental issue | Consideration | Potential impact |
|------------------------|---|--|
| | typically be stacked to a similar height as bricks. No highly reflective finished building products will be temporarily stored in the storage yard. Consequently, the proposed modification would not result in | |
| | any additional visual impacts to the approved project and does not substantially alter the development for which Project Approval was granted. | |
| | Site operations, will be managed in accordance with the Visual Impact Management Plan. | |
| Biodiversity | The proposed modification does not increase the vegetation or ground disturbance footprint associated with approved VENM importation and emplacement or finished product storage. The proposed modification does not alter the number of truck movements within or to and from the site and therefore would not increase the potential for fauna vehicle strikes. Consequently, the proposed modification would not result in any additional biodiversity impacts. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| Historic heritage | The proposed modification will not impact known historic heritage areas within the site or result in new ground disturbance. Consequently, the proposed modification would not result in any additional impacts on historic heritage. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| Groundwater | The proposed modification does not involve any changes to the approved quarrying activities including extent and depth of excavations. The proposed modification does not involve the importation of material to backfill quarry voids that contains pollutants that could impact on groundwater quality. Therefore, the proposed modification is unlikely to result in a change to the groundwater impacts assessed as part of the approved project. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| Socio-economic | The proposed modification does not alter the number of truck movements (transportation limits) of the approved project or result in any additional environmental, social or economic impacts than those identified and thoroughly assessed in the EAs. Consequently, the proposed modification would not result in any additional social or economic impacts and does not substantially alter the development for which Project Approval was granted. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| Waste | The temporary storage of finished building products would typically not generate waste, other than if product is damaged during unloading or loading. The proposed importation of ENM (in addition to VENM) for engineered fill is strictly controlled by the ENM order and exemption and will also be carefully managed in accordance with the Fill Management Plan. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| Rehabilitation | As no change is proposed to extraction areas or overburden stockpiles and the proposed modification does not increase the vegetation or ground disturbance footprint associated with approved quarrying, overburden emplacement, engineered backfilling of quarry voids, raw material stockpiling or finished product storage, the proposed modification will not require any changes to the rehabilitation approach described in the original EA and subsequent modification EAs. Allowing the importation of ENM in addition to VENM to backfill the quarry voids, will help meet one of the | No impact greater than assessed in the original EA and subsequent modification EAs. |

| Environmental issue | Consideration | Potential impact |
|-------------------------|---|--|
| | rehabilitation objectives of Condition 34 of Schedule 3 of the Project Approval, which involves returning the pits to natural ground level while being geotechnically stable. All rehabilitation will be undertaken in accordance with the Rehabilitation Management Plan for the site. | |
| Land contamination | The proposed modification does not increase the disturbance footprint associated with approved quarrying, overburden emplacement, backfilling of quarry voids, raw material stockpiling or finished product storage. All activities associated with the proposed modification will take place within the approved project boundary. The proposed modification will not impact on any land not previously assessed as part of the approved project. Therefore, the likelihood of encountering contamination when undertaking activities associated with the proposed modification is low. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| Hazards | The proposed modification does not introduce new hazards to the site that have not previously been considered in the original EA. The ENM proposed to be imported for use as engineered fill, nor the finished building products approved to be temporarily stored on site are considered to be dangerous goods. The proposed importation of ENM (in addition to VENM) for engineered fill is strictly controlled by the ENM order and exemption and will also be carefully managed in accordance with the Fill Management Plan, therefore minimizing the risk of hazardous material being accidentally imported to the site and used as engineered fill. Consequently, the proposed modification is not considered a hazardous activity and does not substantially alter the development for which Project Approval was granted. | No impact greater than assessed in the original EA and subsequent modification EAs. |
| Greenhouse emissions | The proposed modification will not change the approved site development plan or lengthen the on-site finished product receival or dispatch routes or the haul roads for importing fill. The proposed modification will not increase any of the approved extraction, production, receival or dispatch limits and will therefore not result in a change in greenhouse gas emissions from the site. The proposed modification does not alter the number of truck movements (transportation limits) of the Project Approval and therefore would not increase the amount of diesel usage assessed in the EAs. Consequently, the proposed modification will not result in a change in greenhouse gas emissions from the approved project. | No impact greater than assessed in the original EA and subsequent modification EAs. |

6 SUGGESTED CHANGES TO THE PROJECT APPROVAL AND CONCEPT PLAN APPROVAL

To allow for the importation of ENM in addition to VENM to backfill the quarry voids and to allow the temporary receival, storage and dispatch of finished building products manufactured offsite, the following changes to the Project Approval and Concept Plan Approval are recommended.

6.1 Project Approval

- Include 'ENM' in the definitions.
- Include 'Fill' in the definitions and define it as VENM and/or ENM.
- Replace the abbreviation 'VENM' with the word 'Fill' in all cases where 'VENM' is used except the first bullet in Condition 39A(b) which should read: "the procedures for monitoring Fill imported to the site to ensure that it meets relevant quality specifications for VENM or ENM";
- Delete Statement of Commitments 'Waste' No. 68 in Appendix 6 which reads:

68. The existing WMP will be updated to include the importation and handling of VENM.

Reason: The VENM Management Plan deals with VENM and the existing WMP will deal with other general waste material associated with the site operations.

- Appendix 3 figures 1, 2, 3 and 4: Replace the abbreviation 'VENM' with the word 'Fill' (see attached revised figures to replace those in Appendix 3).
- Appendix 4 Figure 1: Replace the abbreviation 'VENM' with the word 'Fill' (see attached revised figure to replace those in Appendix 4).
- Change the definition of Finished Building Products to: "Building products prepared or manufactured off site, as described in EA (Mod 2) and Building products prepared or manufactured on site, as described in EA (Mod 3 and 4)".
- Include as Condition 9 of Schedule 2 under 'Limits of Approval': "Finished building products manufactured offsite, may be received, stored and dispatched at the site until brick production recommences.

6.2 Concept Plan Approval

- Page 1 states: "Blue type represents August 2020 modification (Modification 1 and 3)" this should be changed to read: "Blue type represents August 2020 modification (Modification 3 and 4)"
- Appendix 2 Project Layout Plan: Replace the abbreviation 'VENM' with the word 'Fill' (see attached revised figure to replace those in Appendix 2).

7 CONCLUSION

The receival and placement of ENM on the site is strictly controlled by the ENM order and exemption. The importation of clean fill in the form of ENM can be carefully managed to prevent any contaminated material being brought to site (as is the case with VENM). The importation of ENM in addition to VENM will not result in any additional or greater environmental impacts than those already identified and fully assessed under Modification 4.

Therefore, there is no reason from an environmental impact or legislative perspective why ENM can't also be received at the site for use as engineered fill.

The temporary receival, storage and dispatch of finished building products manufactured offsite is required to meet CSR's additional finished product storage capacity in the greater Sydney region and will continue until brick production recommences. This activity will be conducted in accordance with the approved operating hours and transportation limits.

Following the review and evaluation of the potential impacts of the proposed modification against key environmental issues identified in the original EA and subsequent modification EAs, it is concluded that the proposed modification would result in minimal environmental impact and not substantially alter the development for which Project Approval was granted.

The existing environmental management plans will be reviewed by CSR following approval of the modification and amended as necessary.

The modification is therefore considered to be in the public interest and is recommended for approval.

Attachment A – EPA Response



DOC21/563301-2

Neville Hattingh Director Element Environment PO Box 1563 WARRIEWOOD NSW 2102 Email: neville@elementenvironment.com.au

Badgerys Creek Quarry and Brick Making Project – proposed importation of Excavated Natural Material

Dear Neville

Thank you for your e-mail and attached letter dated 25 June 2021 regarding a proposal to import Excavated Natural Material (ENM) in addition to Virgin Excavated Natural Material (VENM) to backfill quarry voids for the Badgerys Creek Quarry and Brickmaking Project.

The EPA understands CSR Building Products Limited (CSR) has discussed the proposal with the Department of Planning, Industry and Environment (DPIE) and will be submitting a Section 4.55 (1A) modification to project approval 10_0014 to include the use of ENM (Mod 5). The EPA has consulted DPIE and will provide a formal agency response when referred through the planning process.

In general, the EPA will require CSR to demonstrate how the materials proposed to be used in backfilling meet the ENM resource recovery order and exemption 2014 including, for example, through testing and appropriate application to land. Compliance with the ENM resource recovery order and exemption 2014 is critical, noting s144 of the Protection of the Environment Operations Act 1997 may apply where materials are accepted and applied to land, but which don't meet the order and exemption requirements.

As stated in your letter, the EPA understands CSR would prepare an updated plan (Fill Management Plan) to outline the management measures and controls that will be put into place to ensure that the ENM (as well as VEMN) received on site meets the appropriate requirements. The EPA would require CSR to further demonstrate how it would prevent the acceptance of materials that don't meet the requirements and how it would manage any rejected materials.

The EPA's response would also include draft conditions that it would intend to apply to the Environment Protection Licence (No. 684), if approved, including but not necessarily limited to: identifying ENM, EPA notification, stockpiling ENM and provision of ENM reports including supporting laboratory certification. During filling, the EPA would also conduct spot checks and inspections to ensure compliance with the licence and the relevant order and exemption.

If you have any questions about this letter, please contact Larissa Borysko on 02 9995 6843 or via email at Larissa.borysko@epa.nsw.gov.au

Yours sincerely

9 July 2021

HAMISH CAMPBELL Unit Head – Regulatory Operations Regulatory Operations Metropolitan West Attachment B – Revised Figures for Project Approval and Concept Plan Approval

Figure 1 Overview of Preferred Project

CSR ADVANCED MANUFACTURING HUB

Modification 3 and 4





Australian Native Landscapes

Legend

| LI L |
|--|

- **2** Dam 2
- Dairy
- Administration office
- **6** Gate house
- 6 Truck parking
- Brick production storage area
- Brick making facility
- Overnight truck parking
- Discharge point
- Pontoon entry point (approximate location)
- Possible Martin Road underpass
- **SB1** Sediment basin 1
- sB2 Sediment basin 2
- **SB4** Sediment basin 4
- **SB5** Sediment basin 5
- **SB6** Sediment basin 6
- ---- Landscaped earth bund
- Landscaping including screen planting
- ----- Riparian buffer
- Fill haul route
- WSA water main
- Constructed Martin Road extension
- Mining lease boundary
- New brick making facility features
- New sediment basins
- Site boundary
- Waterbodies
- Western Sydney Airport (WSA)

Figure 2 Preferred Project: Phase 1 - Years 1 to 6 (End 2021 to end 2027)

CSR ADVANCED MANUFACTURING HUB

Modification 3 and 4





Australian Native Landscapes

Legend

- 1 Dam 1
- 2 Dam 2
- 3 Dairy
- Administration office
- **6** Gate house
- 6 Truck parking
- Brick production storage area
- Brick making facility
- Overnight truck parking
- Discharge point
- Pontoon entry point (approximate location)
- **SB1** Sediment basin 1
- **SB2** Sediment basin 2
- **SB3** Sediment basin 3
- **SB4** Sediment basin 4
- **SB5** Sediment basin 5
- **sB6** Sediment basin 6
- ---- Landscaped earth bund
- Landscaping including screen planting
- ····· Riparian buffer
- Fill haul route
- WSA water main
- Martin Road extension corridor
- Mining lease boundary
- Pit dewatering and backfill
- Pit extraction
- New brick making facility features
- New sediment basins
- Site boundary
- Waterbodies
- Western Sydney Airport (WSA)

Figure 3 Preferred Project: Phase 2 - Years 7 to 10 (End of 2027 to end of 2031)

CSR ADVANCED MANUFACTURING HUB

Modification 3 and 4





- Administration office
- **6** Gate house
- Truck parking
- Brick production storage area
- Brick making facility
- Overnight truck parking
- Pontoon entry point (approximate location)
- Discharge point
- Possible Martin Road underpass
- **SB1** Sediment basin 1
- **sB2** Sediment basin 2
- **SB5** Sediment basin 5
- **sB6** Sediment basin 6
- ---- Landscaped earth bund
- -- Landscaping including screen planting
- Riparian buffer
- WSA water main
- Fill haul route
- Constructed Martin Road extension
- Mining lease boundary
- New brick making facility features
- New sediment basins
- Pit dewatering and backfill
- Pit extraction
- Site boundary
- Waterbodies
- Western Sydney Airport (WSA)

Figure 4 Preferred Project: Phase 3 - Years 11 - 13 (End of 2031 to end 2034)

CSR ADVANCED MANUFACTURING HUB

Modification 3 and 4





Australian Native Landscapes

Legend

- **1** Dam 1
- **2** Dam 2
- Dairy
- 4 Administration office
- **6** Gate house
- **6** Truck parking
- Brick production storage area
- Brick making facility
- Overnight truck parking
- Discharge points
- Possible Martin Road underpass
- **SB1** Sediment basin 1
- **SB2** Sediment basin 2
- **SB5** Sediment basin 5
- **SB6** Sediment basin 6
- Landscaped earth bund
- ---- Landscaping including screen planting
- ····· Riparian buffer
- Fill haul route
- Completed pit backfill
- Constructed Martin Road extension
- Mining lease boundary
- New brick making facility features
- New sediment basins
- Pit dewatering and backfill
- Site boundary
 - Waterbodies
- Western Sydney Airport (WSA)

Figure 2 Alternate Project: Phase 2 - Years 7 to 10 (End of 2027 to end of 2031)

CSR ADVANCED MANUFACTURING HUB

Modification 3 and 4





Australian Native Landscapes . . Legend Landscaped earth bund --- Landscaping including screen planting

- Riparian buffer ----
- Fill haul route

Size (Ha)

51.97

95.16

4.54

200

- Brick making, extraction and pit backfill
- Constructed Martin Road extension
- Land available for development
- ••• Probable maximum flood (PMF)
- Site boundary
- Western Sydney Airport (WSA)



SYDNEY NEWCASTLE CENTRAL COAST MACKAY elementenvironment.com.au





