



Planning & Environment

Industry Assessments

Contact: Ania Dorocinska

Phone: 9274 6225

Email: ania.dorocinska@planning.nsw.gov.au

Allison Basford
Property Development Manager
CSR Building Products Ltd
Triniti 3, Level 5, 39 Delhi Road
North Ryde NSW 2113

Dear Ms Basford

Badgerys Creek Quarry and Brickworks Modification MP 10_0033 Modification 1 and MP 10_0014 Modification 3

The public exhibition of the Environmental Assessment (EA) for Modification 3 concluded on Monday 13 May 2019.

The Secretary requests that you prepare and submit a report detailing your responses to the issues raised in submissions, at your earliest convenience. The submissions can be viewed on the Department's website www.majorprojects.planning.nsw.gov.au.

In addition, the Department has identified several areas where further assessment or additional information is required (see **Attachment A**).

If you wish to discuss this matter, please contact Ania Dorocinska on 9274 6225.

Yours sincerely

Chris Ritchie
Director
Industry Assessments

18/6/19.

Attachment A

1. Future intent of the area

A number of submissions have raised concerns regarding the proposed development and how it aligns with the future strategic intent of the area. Please provide further justification to how the development is consistent with the future intent.

2. Traffic

The traffic generation from the proposed development would result in a significant increase in traffic movements along Martin Road, traffic volumes for Heavy Rigid Vehicles would increase by 1,008 trips per day during the week and an increase of 534 trips per day on a Saturday.

Please consider the impacts associated with the increase in traffic generation and provide further justification to how this increase can be managed and be considered appropriate for the area.

3. Noise

- a. Provide detail on the design of the noise bunds proposed, including height and location, as well as the timing of bund construction, the Department seeks certainty that bunds will be constructed to ensure adequate noise attenuation.
- b. Provide evidence of consultation undertaken with the four (4) receivers requiring "treatment package type" mitigation. Chapter 5, table 5.2 of the Environmental Assessment does not provide enough evidence to demonstrate that the receivers have been consulted with, particularly as architectural treatments will be required to mitigate road noise.

4. Extension to Project Life

Please clarify that the request for extension to project life is being made solely through Modification 4.

5. Conditional changes

Please provide a list of all conditions sought to be amended within both the Project Approval and Concept Plan Approval. Provide justification for all conditional changes.

6. Mitigation measures

Please provide a consolidated list of mitigation measures.

7. Statement of commitments

Please provide a revised statement of commitments.

8. Stakeholder Engagement

Please provide detailed evidence of the consultation CSR undertook with agencies including meeting dates, attendees and key outcomes, if possible. Information is particularly requested regarding consultation with Western Sydney Airport and Civil Aviation Safety Authority.

9. Agency and public submissions

Please consider and respond to all agency and public submissions received, including instances where submissions for MP 10_0014 Modification 4 also relate to Modification 3.

Department of Planning and Environment
Industry Assessments
GPO Box 39
SYDNEY NSW 2001

By email: ania.dorocinska@planning.nsw.gov.au

Re: Exhibition of Modification Request for CSR Advanced Manufacturing Hub (MP 10_0014 MOD 3) – Badgerys Creek

Thank you for the opportunity to provide a submission on modification 3 for the CSR Advanced Manufacturing Hub, Badgerys Creek. Council provides the following comments.

Planning Considerations

Liverpool Local Environmental Plan 2008

The site is zoned RU1 – Primary Production under the Liverpool Local Environmental Plan 2008 (LLEP). An objective of the RU1 – Primary Production zone is:

To ensure that development does not hinder the development or operation of an airport on Commonwealth land in Badgerys Creek.

The proposed development of manufacturing facilities as part of Modification 3 is not permitted under the LLEP. Council requests that the Department determine whether the manufacturing facilities are permissible under an Environmental Planning Instrument.

Consideration should also be made with the National Airports Safeguarding Framework (NASF) in the assessment of this proposal to ensure the proposed land uses do not have adverse impacts on the Western Sydney Airport.

Land-Use and Infrastructure Implementation Plan – Western Sydney Aerotropolis

The site is identified in the Badgerys Creek precinct of the Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan, with development subject to Modification 3 proposed in the Badgerys Creek precinct alone. Council notes that precinct planning has not yet been completed for this precinct and therefore the potential impacts on the future land uses within the Aerotropolis cannot be quantified at this stage.

As this site is not in an Initial Precinct, a timeframe for the Badgerys Creek precinct planning and rezoning has not yet been established.

Traffic

Intersection of Elizabeth Drive/Martin Road

Modification 3 will result in an additional 544 truck movements per day Monday to Friday. This additional traffic will have significant impacts on the performance of the existing Elizabeth Drive/Martin Road intersection. Intersection performance analysis carried out by the applicant indicates that the intersection would be expected to operate with an unacceptable Level of Services E/F during AM and PM peak hours respectively.

As identified in the applicant's traffic report, these intersection performances will result in unsafe right turn vehicle movements and will require an intersection upgrade to traffic signals.

RMS "In principle" approval to the proposed traffic signals is required prior to the determination of MOD 3. The traffic signals should be fully operational prior to the operation.

The realigned Martin Road and its extension

It is noted that MOD 3 has been submitted to address RMS requirements to remove the "S" bend in the road and its extension southwards through the development site. The submitted information has not addressed this requirement. To avoid conflicts in future the applicant should provide a strategic geometric layout of the proposed Martin Road realignment from Elizabeth Drive through the development site, providing a copy to Council for assessment prior to the determination of this application.

A Construction Traffic Management Plan (CTMP)

A Construction Traffic Management Plan (CTMP) detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council's Traffic and Transport Section for approval prior to the issue of a Construction Certificate.

Transport Infrastructure Funding

The previous conditions imposed on the approved developments require the proponent to

- a) repair Martin Road to the satisfaction of Council; and
- b) prior to the determination, enter into a formal agreement with Council for the:
 - upgrade and widening of Martin Road from the site entrance to the entrance of Australian Native Landscape; and
 - annual road maintenance contributions to be paid to Council, based on the weight of brick products and associated materials transported from and to the site for the life of the project.

A draft agreement shall be finalised with Council prior to determination.

Flooding

The development site is above the 1% AEP flood level and only the stormwater basin for the roof product area is partially inundated in a PMF event. Council does not object to this solution with regards to flood safety and stormwater management.

The following condition of consent is recommended:

A detailed stormwater drainage design, prepared by a qualified practicing civil engineer must be submitted to council prior to issue of a construction certificate. The solution shall be designed in accordance with the *Monier Concrete Tile Factory – Badgerys Creek Stormwater DA Report* dated February 2019 prepared by at&I, and *CSR Advanced Manufacturing Hub Modification 3 Surface Water Assessment* dated February 2019 prepared by Advision, and shall include all engineering details relevant to collection and disposal of stormwater, pipe sizes and grades, details of on-site detention (OSD) systems, and water quality treatment trains. The OSD system shall provide adequate flow attenuation to ensure that the peak post-development discharges from the development do not exceed peak pre-development discharges for the 20%, 5% and 1% Annual Recurrence Interval (ARI) storm events. On-site water quality control measures shall ensure that stormwater runoffs leaving the site comply with Council's water quality standards. Water quality treatment works shall be designed using MUSIC modelling software and the water quality treatment system performance shall be verified using Council's MUSIC link.

Environmental Health

It is uncertain whether the proposed alterations and additions will result in any changes to the existing sewage management systems at the site. Therefore, separate approval may be required under Section 68 of the Local Government Act 1993 for the on-site sewage management system. To mitigate environment and public health impacts, the Applicant is required to demonstrate that the systems' design and capacity is adequate for its intended purpose taking into consideration maximum load requirements, unforeseen incidents and shutdown contingencies.

Based on the available information, Zoic Environmental Pty Ltd concluded that the potential for widespread contamination at the site was low. The consultant recommended that an Unexpected Finds Protocol (UFP) is prepared and that stored materials within the proposed building footprints are inspected and recycled or disposed of at facilities permitted to receive such materials. Soils may be encountered with moderate salinity potential and the contaminated land consultant warned that the geotechnical investigation must inform the detailed design of MOD3 and recommend any measures necessary to protect structures and / or the environment. These recommendations are brought to the attention of the NSW Department of Planning & Environment for their consideration.

Council previously requested for the Modification Application to be supported by a geotechnical or site assessment report (wastewater management report) prepared by a suitably qualified and experienced wastewater engineer or environmental consultant. As the Application is still devoid of this necessary information, it is requested that the proponent addresses this deficiency prior to further consideration of the Application.

Based upon the findings of the Preliminary Site Investigation, it is believed that the land is not contaminated and is suitable for the proposed modification subject to the implementation of the consultant's recommendations. Council's Environmental Health Section is satisfied that the land is suitable for the proposed use without the need for remediation.

Todoroski Air Sciences recommended, to minimise dust generation during construction, that the mitigation measures within Table 7-1 of their report. The consultant indicated that the Reactive Dust Management Program as per the Badgerys Creek Quarry and Brick Making Facility – Air Quality and Greenhouse Gas Management Plan (APP, 2013) was no longer necessary. Furthermore, the consultant recommended for the existing high volume air sampler to be relocated to a position more representative of the surrounding receptor locations, such as to the northern boundary of the site.

A Construction Noise Management Plan was recommended to ensure that appropriate mitigation measures are implemented to manage construction noise. Traffic noise levels during operation were predicted to exceed the assessment criteria by more than 2 dB. Architectural treatments to reduce road noise levels were recommended for receivers qualifying for mitigation. The NSW Road Noise Policy stipulates that for existing residences and other sensitive land uses affected by additional traffic on existing roads generated by land use developments, any increase in the total traffic noise level should be limited to 2 dB.

Pursuant to Section 4.47(2) of the Environmental Planning and Assessment Act 1979 and Regulations, the modification application shall be referred to the NSW Environment Protection Authority for comment. It is requested that the NSW Environment Protection Authority reviews the proposed Modification Application to determine that the facility can be operated in an environmentally satisfactory manner consistent with the Environment Protection Licence (EPL).

Heritage

Council has no objections to the Aboriginal Heritage Assessment for Modification 3.

Council recommends that an Unexpected Finds Procedure be prepared, with all staff inducted accordingly prior to any earth works commencing.

Environment

According to Council's records and the Flora and Fauna Report submitted for the Modification (Ecoplanning, 4/12/2018), the land to be impacted upon by Modification 3 is entirely biocertified. The need for threatened species assessment is therefore switched off.

Therefore, further consideration of ecological matters would not be considered warranted for this Modification.

Cumulative Impacts

It is noted that the site is currently subject to a number of modifications. It is pertinent that any activities carried out in tandem are identified with their cumulative impacts concurrently assessed. Impacts associated with truck movements, air quality, runoff, and noise are most likely to be on-going issues.

If you have any questions please contact Matthew Roberts, Graduate Planner on 8711 7663.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'David Smith', with a stylized flourish at the end.

David Smith

Manager Planning and Transport Strategy

MEMO

Details -	From Lance Collison	T: 9860 1536
E: lance.collison@planning.nsw.gov.au		

Name: To Ania Dorocinska – DPE Industry Assessments

Date/Time: Tuesday 14 May 2019

Project: Western Sydney Aerotropolis

Subject: Re: Exhibition of Modification Request (Modification 3) 235 Martin Road Badgerys Creek

Notes

Item	Details
	Introduction The site is located within the Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan (Stage 1 LUIIP) boundary and straddles the Badgerys Creek Precinct and South Creek Precinct. The Stage 1 LUIIP outlines planning principles and indicative land uses for each precinct in the creation of the aerotropolis. A Section 9.1 Direction, '7.8 Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure Implementation Plan' to the Environmental Planning and Assessment Act 1979 has been issued to provide a statutory framework for the Stage 1 LUIIP and to ensure any speculative or early planning proposals are only supported if they are consistent with it. In the Stage 1 LUIIP, Badgerys Creek Precinct is identified for employment generating uses while South Creek Precinct has been identified for open space, recreation facilities and infrastructure, with minimal residential and employment uses. All proposals within Modification 3 are within the Badgerys Creek Precinct only apart from discharge of surface water into the adjacent creeks.
1	
2	Precinct planning and rezoning required During the exhibition of the Stage 1 LUIIP in late 2018, the proponent lodged a submission suggesting if Badgerys Creek Precinct becomes an initial planning precinct, it will bring forward plans to develop an advanced manufacturing hub and minimise the extraction of clay at the site. Currently Badgerys Creek Precinct is not an initial precinct of the Western Sydney Aerotropolis and there is no timeframe for its precinct planning or rezoning. The items in this planning proposal modification are associated with an advanced manufacturing hub. It is premature to allow approval of these uses and the significant intensification of development on site without completion of precinct planning and rezoning. <u>The Western Sydney Planning Partnership recommends refusal based on this requirement.</u>
3	Non-compliance with LEP As a rezoning has not occurred, the proposal shall be assessed against the RU1 Primary Production zoning of the Liverpool LEP 2008. The proposal does not comply with this zoning. The land uses are not listed and therefore 'prohibited' as per Clause 4.

Notes

Further, the proposed land uses do not satisfy the following objective of the RU1 zone: *“To minimise conflict between land uses within this zone and land uses within adjoining zones.”* The proponent has not demonstrated how these prohibited land uses can comply with this objective.

Airport Ring Road

- 4 TfNSW should be contacted for comment on a future airport ring road. The road may provide an important arterial link for traffic from the Northern Gateway to Aerotropolis Core, these will be major employment precincts. Future Transport 2056 identify that Western Sydney Airport – Badgerys Creek Aerotropolis Inner and Outer Ring Roads are initiatives for investigation (20+ years) timeframe.

Discharge into South Creek and Badgerys Creek

- 5 The modification proposes to discharge surface water into South Creek and Badgerys Creek. INSW are leading the South Creek Sector Review which will look at flood modelling and water flows in these creeks. This work is yet to be completed.

NASF Guidelines

Due to the proximity of the site to the Western Sydney Airport, the National Airports Safeguarding Framework (NASF) should be considered in the assessment. It provides decision makers guidance to manage the compatibility to uses around airports.

- 6 Furthermore, an objective of the RU1 Primary Production zoning in the Liverpool Local Environmental Plan 2008 is,
- *To ensure that development does not hinder the development of an airport on Commonwealth land in Badgerys Creek.*

An assessment of the proposal against each of the NASF Guidelines, can be used to ensure the objectives of the RU1 zone are met is below:

Guideline A: Measures for Managing Impacts of Aircraft Noise

- 7 Not applicable. The proposed land uses are not considered to be noise sensitive.

Guideline B: Managing Building-Generated Windshear and Turbulence

- 8 The site plans provided do not show the distance from the second airport runway to the expansion of the brick making facility, proposed roof manufacturing facility or NATA laboratory. A site context plan to scale should be provided showing the distance of the southern airport runway to the proposed site plan to confirm whether the proposed development is within the rectangular assessment trigger area as per page 6 of the guideline.

Guideline C: Managing Wildlife Strike Risk

- 9
- The proposed buildings are not listed as wildlife attraction risk land uses in Attachment 1 of Guideline C. However, any waste produced, or waste managed on the site will need to avoid wildlife attraction.
 - The applicants Appendix G Surface Water discusses proposed water storage and the discharge of surface water into Badgerys Creek and South Creek and sediment basins. The applicant will need to identify how they will manage wildlife attraction.
 - Whilst landscaping is not proposed within Modification 3, should landscaping occur, any species selected should not attract wildlife or grow to a size which will penetrate the Obstacle Limitation Surface.
 - It is noted that in future Modification 4, the dewatering and backfilling of Pit 1 will occur. Any landscaping including seeding of this area would need to avoid attracting wildlife.

Notes	
10	Guideline D: Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation Not applicable.
11	Guideline E: Managing the Risk of Distractions to Pilots from Lighting in the vicinity of Airports Two kilns exhaust stacks are proposed. The guideline discusses refinery flare plumes as a potential distraction to pilots. The Environmental Assessment (EA) notes a Form 1247 was submitted to the Civil Aviation Safety Authority (CASA) requesting a plume rise assessment. It is not clear from the information submitted in support of the application whether CASA assessed the impact of lighting from the proposed development. NASF Guideline E generally requires lighting within 6km of an aerodrome to comply with the provisions of regulation 94 of Civil Aviation Regulations 1988. It is also mentioned in the EA that all external lighting associated with the project complies with <i>Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting</i>. NASF Guideline E makes no reference to this Australian Standard.
12	Guideline F: Managing Protected Airspace Intrusion The EA suggest that outputs from the (Obstacle Limitation Surface) OLS tool confirmed that structures could be erected on the site between 58.9 m and 79.2 m above existing ground level. The EA states that the highest proposed structures are the two 41 m kiln stacks and the proposed modification will not impact on the WSA OLS. This will satisfy Guideline F.
13	Guideline G: Protecting Aviation Facilities — Communications, Navigation and Surveillance (CNS) Not applicable as no CNS facilities have been identified at this time.
14	Guideline H: Protecting Strategically Important Helicopter Landing Sites Not applicable.
15	Guideline I: Public Safety Areas (PSAs) Not applicable, as site is outside any potential PSA.
• Actions:	
That Industry Assessments:	
A	• Note Western Sydney Planning Partnership recommendation to refuse the proposal as it is premature to allow approval of these uses and the significant intensification of development on site without completion of precinct planning and rezoning.
B	• Note Stage 1 LUIIP didn't envisage uses of this nature. However, in response to submissions received during consultation, further consideration soon will be given to whether it is appropriate to accommodate these uses within the Aerotropolis.
C	• Note further information, as outlined in this memo, be provided to Industry Assessments prior to determination of this modification.
D	• Provide Western Sydney Planning Partnership a copy of the determination letter.



Western City & Aerotropolis Authority

Ms Melanie Hollis
Senior Planning Officer
Resource Assessments | Planning Services
Department of Planning and Environment
Level 30, 320 Pitt Street

By email: melanie.hollis@planning.nsw.gov.au

Dear Ms Hollis

Introduction

I refer to your invitation for the Western City and Aerotropolis Authority (**WCAA**) to comment on CSR Building Products Limited's (**CSR**) modification applications for its Badgerys Creek Quarry and Brick Making facility (MP 10_0014 MOD 4 & MP 10_0033 MOD 3) (**Proposed Modifications**).

The subject site at 235 Martin Road, Badgerys Creek (**Site**) is at the northern border of the Aerotropolis Core, which is a critical initial development area within the Western City Aerotropolis.

Proposed Modifications

The Proposed Modifications seek significant additions to, and intensification of, the existing operations at the Site, including:

- increased brick production;
- a new 45,275 m² roof tile production facility;
- increase in importation of raw materials from 20,000 tonnes per annum to 339,000 tonnes per annum;
- increase in production from 252,000 tonnes per annum to 432,000 tonnes per annum; and
- establishment of a grid-connected 4.4 megawatt solar farm.

With CSR's requested extended project life of 30 years from approval, the Proposed Modifications represent an extended and intensified industrial use of land adjacent to the intended land use of Aerotropolis Core.

Together with the introduction of new uses to the existing development, in particular, the roof tile facility and the solar farm, the additions and intensifications require a substantial quantitative increase in truck movements from 120 to 544 per day on weekdays, and from 40 to 158 per day on Saturdays. These increases represent a fundamental increase to existing

traffic and traffic-related impacts in the local area, and in areas around the Site, and in the absence of further road development will be of detriment to the precinct.

Assessment of the Proposed Modifications

WCAA understands that CSR has lodged the Proposed Modifications under repealed section 75W of the *Environmental Planning and Assessment Act 1979* pursuant to savings and transitional regulations.

WCAA understands that relevant provisions require the Minister to be satisfied that the proposed concept plan modifications which enable modification of CSR's project approval meet a 'minimal environmental impact', or 'substantially the same' threshold.

If the Minister is satisfied that one of these thresholds applies, such that the Proposed Modifications to CSR's concept plan and project approval can potentially be approved, WCAA considers the Department should assess the following in the context of the *Western Sydney Aerotropolis Stage 1 Land Use and Infrastructure Implementation Plan* and other key policy documentation:

- whether the Proposed Modifications are consistent with the proposed land uses and vision for the Aerotropolis;
- the consistency of the intensified industrial use at the Site in the context of proposed high and advanced technology land uses in the Aerotropolis Core and in future precincts within the Aerotropolis;
- the impact of the significant increase in truck movements not only on current sensitive receivers, but also on future transport and infrastructure planning across the Aerotropolis; and
- the future viability of the transport and haulage routes required to support the intensified operations the subject of the Proposed Modifications for the proposed 30 year period, given the priorities set out for the development of the Aerotropolis.

WCAA considers that the points above are critical in ensuring that any decision in relation to the Proposed Modification demonstrates the promotion of the orderly and economic use and development of land in the Aerotropolis.

If you have any questions in relation to this submission, please contact Troy Harvey, Executive Director – Planning & Development, WCAA at Troy.Harvey@wcaa.sydney in the first instance.

Yours sincerely



Sam Sangster
Chief Executive Officer
16 May 2019

cc. Dr Sarah Hill, CEO, Greater Sydney Commission.



13 May 2019

Roads and Maritime Reference: SYD10/00362/03
Department of Planning and Environment Ref: MP 10_0014 MOD 3

Industry Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Attention: Ania Dorocinska

Dear Sir/Madam,

**EXHIBITION OF MODIFICATION REQUEST FOR CSR ADVANCED MANUFACTURING HUB,
BADGERYS CREEK**

I refer to the email dated 8 April 2019 regarding the abovementioned Application which was referred to Roads and Maritime Services (Roads and Maritime) for comment in accordance with State Environmental Planning Policy (Infrastructure) 2007.

Roads and Maritime Services (Roads and Maritime) has reviewed the traffic assessment which includes the proposed upgrade of the intersection of Elizabeth Drive and Martin Road intersection undertaken by Transport and Urban Planning PTY LTD. Roads and Maritime has no objections to the signalisation of this intersection, however to provide in principle approval the following documents are required to be sent to Roads and Maritime (these comments should be addressed prior to the determination of the application):

1. Separate concept civil design plans depicting the ultimate and interim design are to be provided.
2. Concept Traffic Control Signal (TCS) plans depicting the ultimate and interim design are to be provided. The proposed Traffic Control Signal (TCS) at the intersection of Elizabeth Drive and Martin Road is to be designed to meet Roads and Maritime requirements. The concept TCS plan is to be drawn by a suitably qualified person and endorsed by a suitably qualified practitioner be in accordance with Austroads Guide to Road Design in association with relevant Roads and Maritime supplements (available on www.rms.nsw.gov.au).

Thank you for the opportunity to provide comment on the subject application. Should you have any questions or further enquiries in relation to this matter, Laura van Putten would be pleased to take your call on 8849 2480 or e: development.sydney@rms.nsw.gov.au.

Yours sincerely,

Pahee Rathan
**Senior Land Use Assessment Coordinator
North West Precinct**



DOC19/425210

Pamela Morales
Acting Team Leader – Industry Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Ania Dorocinska

Dear Ms Morales

**Exhibition of Modification Request for CSR Advanced Manufacturing Hub
(MP 10_0014 MOD 3) – Badgerys Creek**

The EPA has reviewed the Environmental Assessment (EA) for CSR Advanced Manufacturing Hub (MP 10_0014 MOD 3) at 235 Martin Road, Badgerys Creek.

The proposal is for:

- Upgrades to the brick making facility, including the removal and replacement of manufacturing equipment;
- Construction of noise bunds and barriers;
- Development of a NATA accredited testing laboratory;
- Construction and operation of a roof manufacturing facility; and
- Improved approaches to water management on site.

The EPA notes that Boral CSR Bricks Pty Limited currently holds an Environment Protection Licence (EPL No. 684) under section 48 of the *Protection of the Environment Operations Act 1997* (POEO Act) authorising Ceramic Works, Extractive Activities and Mining for Minerals at 235 Martin Road, Badgerys Creek (the Premises). In reviewing the application and information provided, the EPA is of the view that if the modification is approved the current licence must be varied. The holder of the licence will need to make a separate application to the EPA to have the licence varied.

Under section 6 of the POEO Act the EPA would be the Appropriate Regulatory Authority (ARA) during the construction and operation of the modified development (if approved).

The EA has generally provided the information required by the Secretary's Environmental Assessment Requirements (SEARs), however, the EPA seeks further information/clarification on some items as outlined below. Additional comments and recommendations from the EPA are also provided:

Environment Protection Licence

1. The EPA requests clarification of proposed variation(s) to EPL 684 in terms of the scheduled activities concrete works and crushing, grinding or separating.

The EPA requests that the proponent considers and confirms whether the modification, specifically the operation of a roof products manufacturing facility, would trigger 'Concrete Works' as a scheduled activity. Alternatively, the proponent should confirm whether it would seek to apply for a new licence for the roof manufacturing facility.

Further, the EPA requests that the proponent considers and confirms whether the brick manufacturing process, where the as-mined clay material is crushed from <500 mm to <2mm through a crushing process triggers the scheduled activity of 'Crushing, grinding or separating'.

Under Section 48 of the *Protection of the Environment Operations Act 1997* (POEO Act), an Environment Protection Licence (EPL) is required for premises-based activities listed in Schedule 1 of the Act.

The premises current EPL No. 684 provides for the following scheduled activities:

- Ceramics production: 0 – 15,000 T produced;
- Land-based extractive activity: 0 – 30,000 T extracted, processed or stored;
- Mining for minerals: 0 – 30,000 T produced.

The Environmental Assessment (EA) states that *"The modification will not trigger additional scheduled activities under the POEO Act. However, variation/s to the EPL may be required as a result of the modification."*

The requirement to vary the EPL will be confirmed by CSR via liaison with the EPA following the receipt of the notice of Project Approval".

The EPA notes that the modification proposal includes the construction and operation of a roof products manufacturing facility, replacing a facility that currently operates at 10 Grand Avenue, Rosehill NSW. The EA states that the new facility will produce up to 132,000 tonnes of roof products per calendar year, which equates to approximately 24 million tiles. The EA also provides details of the roof tile manufacturing process including *"The tile body is a mixture of fine and coarse body sand, cement, flyash and water. The raw materials are batched up by weight, fed into a mixture to create a tile concrete mix....."*

The existing CSR Building Products Limited premises at Rosehill holds EPL No. 2007 for Concrete Works: > 25,000.00-50,000.00 m³ annual production capacity.

Noise

The EPA is satisfied that the Noise Impact Assessment (NIA) has generally assessed the potential impacts from the existing operations as well as the MOD 3 proposal. However, the EPA requires the proponent provide further clarification on the noise bunds and proposed noise limits for consent, as outlined below.

As the ARA during the construction and operation phases of the proposed modification, the EPA will regulate noise through the licence and associated limit conditions.

Noise Bunds

1. The EPA recommends that the height and location of noise bunds be confirmed before project approval is granted.

The EPA does not support flexibility to modify noise bund design after consent and therefore recommends the proponent commit to the construction of bunds as outlined in Section 5.3.3 of the Noise Impact Assessment (NIA).

Any reconfiguration of the noise bunds would require additional review of the noise impact assessment to confirm that the Project Noise Trigger Level can be achieved.

2. The EPA requests that the staging of the construction of bunds be clarified.
3. The EPA requests the proponent confirm if the material for construction of the noise bunds is to be imported to the site, is overburden or material already on site.

The proponent should confirm the staging/timing of noise bunds, including the 8m bund (formerly proposed 10m) and the two additional bunds/barriers (5.5m high and 2m high) recommended as mitigation measures to ensure bunds are in place to mitigate against noise at closest sensitive receivers prior to commencement of other activities.

The NIA assumes that noise bunds are in place however, the EA does not stipulate the staging of the activities and whether the noise bunds will be constructed from material won on site from pre-stripping for pit development. The later would then mean that noise from some pit excavations are not mitigated by the completed noise bunds

The EPA is unclear whether all proposed bunds would be constructed from overburden and whether the noise impact from the construction of the bunds, given that the detailed design has not been completed, have been fully assessed.

Noise Limits

4. The proponent should confirm whether it seeks to modify the Construction Noise criteria in the current consent, and if so, propose new criteria for consideration.

The current construction noise criteria on the existing consent (Table 2 – Construction Noise Criteria dB(A)) relate only to construction of Bunds 3C, 4A and 4B. These limits do not reflect other construction activities associated with the proposed project. The construction noise limits on the consent require amending to reflect the activities proposed in the modification, including construction of the proposed new and modified bunds.

5. The EPA recommends that the project approval, if granted, includes a condition to limit construction to standard hours only.
6. The EPA seeks clarification of the proponent's intention to amend operational noise limits.

The current operational noise criteria on the existing consent (Table 3 – Operational Noise Criteria dB(A)) are not significantly different from the Project Noise Trigger Levels in the Table 5-4 of the NIA.

The NIA operational noise assessment assumes that the proposed 8m noise bund is constructed. The project noise level has been assessed for all sensitive receivers for Day, Evening Night and

Shoulder. These values do not correspond to the operational noise criteria in the consent. The EPA therefore requests the proponent confirms whether it seeks to amend the consent's operational noise limits.

The EPA supports the Project Noise Trigger Levels in the Table 5-4 of the NIA as modified operational noise criteria for the proposed modification, if approved.

7. The EPA recommends project approval conditions require implementation of the mitigation measures for road traffic noise (described in Section 6.3.6 in the NIA) along Martin Road

Air

8. The EPA recommends that the Air Quality Impact Assessment (AQIA) be reassessed to include cumulative impacts from WSA, likely future receptors and a further assessment of the brick and tile making facilities/processes.

The reassessed AQIA must address the following matters:

- i. a cumulative assessment with consideration of any other significant bulk earth work activities associated with the Western Sydney Airport.
- ii. include an assessment at any likely future receptors.
- iii. consider a reasonable worst-case scenario accounting for emissions based on proposed peak daily importation rates.
- iv. Additional information on emission performance of the Brick making facilities. This includes:
 - Benchmark the proposed plant and equipment against reasonable and feasible best practice emission controls;
 - Demonstration that point source emissions will comply with Group 6 prescribed concentrations contained in the Regulation, as advised in Section 3.5 of the *Approved Methods for Modelling and Assessment of Air Pollutants in NSW*;
 - Provision of supporting test data, and or manufactures specifications that describes the proposed emission performance of plant and equipment.
- v. The AQIA must include:
 - Detailed process description describing the roof product manufacturing facility, and associated emission discharge points (including any pollution controls associated with the manufacturing facility);
 - A more robust justification for the assessed emissions and pollutants for the roof product manufacturing facility and how emission estimates are representative of the proposed plant and equipment (noting that monitoring data for the existing operations should be readily available);
 - Demonstrate compliance with the Regulation for point source discharges, as per the recommendation for the brick manufacturing discharge points;
 - A revised assessment of air quality impacts should emission estimates need to be revised given the above considerations.
- vi. The AQIA must include assessment against all impact assessment criteria for hydrogen fluoride (HF).

Given that the proponent is seeking modification to Project Approval, then the proponent should provide additional information prior to project determination. The EPA has determined that it requires

additional information to make an adequate assessment and recommend conditions for approval. The EPA advises that:

- The assessment has not considered potential cumulative impacts with other bulk earthwork activities associated with other developments in the area (Western Sydney Airport).
- The assessment does not advise on future sensitive receptors, noting that the location is likely to be subject to significant development in the future.
- The assessment has potentially underpredicted peak daily emissions associated with the proposed increase in importation of raw material and hence potentially underpredicted peak short-term (24 hour) ground level concentrations.
- Existing EPL conditions associated with brick making facilities will need to be amended should project approval be granted. Given the proponent is proposing to replace existing manufacturing equipment then point source discharges (i.e. kilns) will need to comply with (as minimum) Group 6 limits prescribed in the *Protection of the Environment Operations (Clean Air) Regulation 2010*. The AQIA has not adequately demonstrated that the point source emissions associated with the brick making facilities will comply with (as minimum) Group 6 limits. As such the EPA is not in a position to recommend amendments to EPL conditions at this stage. Additionally, the assessment does not benchmark proposed plant and equipment against reasonable and feasible best practice controls, specifically noting that other kilns have installed or are in the process of installing scrubbers for mitigating fluoride emissions.
- The AQIA lacks detailed robust information on the assessment of emissions from the roof product manufacturing facilities. As such the EPA is not in a position to adequately interpret assessed emissions and hence recommend appropriate EPL conditions for the new facility.
- The AQIA has not assessed against all relevant impact assessment criteria for hydrogen fluoride (HF) contained in the *Approved Methods for Modelling and Assessment of Air Pollutants in NSW*.

Water Management and Discharge Points

9. The EPA recommends that the project approval, if granted, retains the condition that the proponent must ensure that all surface water discharges from the site comply with the limits (both volume and quantity) set in any EPL applicable to the site.

The current EPL does not permit the discharge of water off-site and contains the following condition:

Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

The proponent has indicated it will apply to the EPA to incorporate discharge points and discharges from nominated sediment basins. The EPA will consider any application and supporting information before varying the EPL.

Waste

10. The EPA recommends no change in conditions relating to waste on the current approval.

MP10-0014 conditions 38 and 39 state:

The Proponent must:

(a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council;

(b) minimise the waste generated by the project;

(c) ensure that the waste generated by the project is appropriately stored, handled, and disposed of; and

(d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.

Except as expressly permitted in an EPL and/or the conditions of this approval, the Proponent must not receive waste on the site for storage, treatment, processing, reprocessing or disposal.

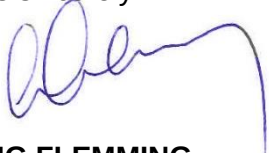
Contamination

11. The EPA recommends that project approval conditions require the proponent to develop an Unexpected Finds Protocol (UFP) that provides guidance in the event of encountering contaminated materials during excavation activities.

Representatives from the EPA are available to meet with consent authority and/or the proponent to discuss the comments and recommended conditions of consent.

If you have any questions or require further clarification, please contact Larissa Borysko on 02 9995 6843 or via email at Larissa.Borysko@epa.nsw.gov.au

Yours sincerely



24/5/2019

CRAIG FLEMMING
Unit Head Sydney Industry
Environment Protection Authority



Office of
Environment
& Heritage

DOC19/337344
MP10_0014 MOD 3

Ms Pamela Morales
Industry Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Ania Dorocinska

Dear Ms Morales

OEH comments on Modification Application – CSR Advanced Manufacturing Hub – 235 Martin Road Badgerys Creek (MP10_0014 MOD 3)

Thank you for your letter of 8 April 2019 received by the Office of Environment and Heritage (OEH) requesting comments on modification application for the above modification request.

OEH appreciates the Department providing it with an extension in which to provide its response. OEH has reviewed the MOD 3 proposal and provides recommendations and comments in Attachment A.

If you have any queries regarding this matter, please contact Janne Grose on 8837 6017 or janne.grose@environment.nsw.gov.au

Yours sincerely

S. Harrison 23/05/19

SUSAN HARRISON
Senior Team Leader - Planning
Greater Sydney
Communities and Greater Sydney Division

Attachment A

OEH comments on Modification Application – CSR Advanced Manufacturing Hub – 235 Martin Road Badgerys Creek (MP10_0014 MOD 3)

Office of Environment and Heritage (OEH) has reviewed the Modification request and the following relevant reports including:

- Environmental Assessment – March 2019
- Surface Water Assessment – February 2019
- Stormwater DA Report – February 2019
- Flora and Fauna report – 4 December 2018
- Bushfire Assessment – 28 February 2019

and provides the following comments below.

Biodiversity

OEH notes the proposed reconstruction and extension of the brick making facility will be undertaken on existing hardstand /disturbed areas and within the approved project boundary. The proposed roof products manufacturing facility is to be on land not previously assessed in the original EA but it is located within biodiversity certified land in accordance with the Order to confer biodiversity certification on the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 and therefore impacts on biodiversity associated with Modification 3 do not require assessment by the consent authority (see Section 4.3.6, page 76 and Section 8 page 113).

Badgerys Creek, Badgerys Creek tributary and South Creek

The EA for MOD 3 refers to the rehabilitation of the riparian corridors along Badgerys Creek and its tributary which extend into the lower eastern portion of the site as part of MP10-0014 and it indicates this includes planting and weed control (see Section 2.4.7, page 21). The EA for MP10-0014 indicates:

- the project includes a rehabilitation program consisting of fencing, planting and weed control along approximately 900m of the eastern side of Badgerys Creek and along both sides of Badgerys Creek Tributary (for a length of approximately 280 m) with a fenced area of 50m from the top bank (see Section 4.3.4)
- the riparian areas would be rehabilitated to emulate the local community at a density that would naturally occur (see Section 4.3.4)
- the eastern side of South Creek would also be fenced to prevent stock access (see Section 4.3.4)
- a 50 m buffer around Badgerys Creek and South Creek would be maintained and rehabilitated as part of the proposal (see Section 17.3.1).

OEH notes the Rehabilitation Plan attached to the EA for MP10-0014 (Appendix D) implies the rehabilitation works would commence in 2010/2011 (see Section 8). It indicates for South Creek this includes fencing the riparian corridor to allow natural regeneration and undertaking weed control. The project approval for MP10-0014 requires:

- a minimum setback width of 60 metres (measured from top of bank) between extraction areas and both Badgerys Creek and Badgerys Creek tributary (see Condition 18)
- the rehabilitation of the site, including planting and weed control along Badgerys Creek and Badgerys Creek (Condition 34).
- the progressive rehabilitation of the site as soon as reasonably practicable following disturbance (Condition 35).

OEH notes the final landform plan (rehabilitation plan – Year 30) in the EA for MOD 3 does not show a rehabilitated corridor along Badgerys Creek, Badgerys Creek tributary or along South Creek (see Figure 3.9, page 36).

The Department should seek clarification as to whether any rehabilitation of the riparian corridors along Badgerys Creek, Badgerys Creek tributary and South Creek has commenced as Nearmap appears to show it has not commenced since project approval of MP10-0014 on 27 September 2011. It is also noted that Bushfire Assessment for MOD 3 states “CSR intend to continue the grazing lease

within the paddocks eastward down to South Creek" (page 8) which implies the South Creek riparian corridor has not yet been fenced to prevent stock access to allow natural regeneration. If rehabilitation of the riparian corridors has not commenced, the Department should require the proponent to clarify when the riparian corridors are to be rehabilitated. The Staging Plans in the EA should be amended to reflect the intent of rehabilitating the riparian corridors.

Flooding

The proposed development site is located between South Creek and Badgerys Creek. The modelling results shows that the proposed facilities of the site would not be impacted by the PMF flood level, except a small portion of the roof products manufacturing plant located adjacent to South Creek on the eastern side of the development site.

The modelling results indicate that the development site is likely to be isolated for about six hours during PMF event since Elizabeth Drive, the evacuation route from the site, will be disconnected at its intersections with South Creek and Badgerys Creek under 20% AEP Event. The essential services (such as water, power and sewerage) are likely to be interrupted during major flooding and PMF events when around 150 people (workers and customers) will be on site based on the statistics of the manufacturing and sales activities.

The interruption of essential services during major flooding and PMF events may restrict the options for a shelter-in-place strategy proposed by the proponent due to potential health risks of the people trapped at the site. The shelter-in-place option may be possible through localised provision of essential services at the development site when the services from utilities will be interrupted during major flooding events. The proponent will need to check with utility managers about the continuity of the essential services during major and PMF flood events prior to exploring the options for localised provision of services.

The proponent will need to discuss the above details (i.e. opportunities and limitations) for localised shelter-in-place option(s) and the development of an alternative route for evacuation from the site with SES. The SES resources would likely be stretched to undertake emergency management operations during major flooding events without an appropriate evacuation plan at the development site.

Aboriginal Cultural Heritage

The CSR Advanced Manufacturing Hub is located between Badgerys Creek and South Creek. This landscape is very important for Aboriginal cultural heritage.

It would have been preferable if one Aboriginal Cultural Heritage Assessment Report (ACHAR) had been prepared which covered both MOD 3 and MOD 4 proposals rather than providing two separate ACHARs for the two modifications given that the survey assessment assessed the whole site. One ACHAR would make the assessment of significance easier to understand by considering the landform between Badgerys Creek and South Creek. The totality of the Ring tree (BCBW 18 Tree), Clay heat retainer hearth (BCBW18 AS 02), High Density Subsurface Artefact Scatter (BCBW18 AS 03) and Isolated Surface Artefact (BCBW18 IF 01) etc. should have been assessed in one ACHAR for consistency rather than splitting between MOD 3 and MOD 4.

OEH notes there are discrepancies and inaccuracies between the Aboriginal heritage information which is provided in the EAs for MOD 3 and MOD 4 and the ACHAR for MOD 3 and 4 proposals. Insufficient information is provided to assess the potential impacts on the Aboriginal cultural heritage values, for example in relation to the Clay heat retainer hearth:

- The EAs for MOD 3 and 4 note a subsurface site (BCBW18 AS 02) containing a heat retaining hearth was discovered within the MOD 3 and 4 study area. It is noted that only a portion of BCBW18 AS 02 is located within the study area for MOD 3 (ACHAR, page 29).
- The EAs for MOD 3 and 4 note there will be partial impact and loss of value (see pages 121 and 133 of EAs). Further details are required on what "partial loss" means including a detailed scaled map which shows the extent of loss as:
 - the Archaeological Technical Report (ATR) included in the ACHAR for MOD 3 states "CSR has indicated a preference towards conserving portions of BCBW18 AS 02 (AHIMS ID

- 45-5-5164) for artefact reburial” (section 10.2, page 82) and Section 10.2.1 of the ACHAR notes CSR has indicated a preference towards conserving the hearth feature within BCBW18 AS 02 (AHIMS ID 45-5-5164) within a 10m exclusion zone (page 39)
- Section 10.2.1 of the ACHAR notes a portion of BCBW18 AS 02 will be impacted by the proposed works but as the portion of the site which will be impacted is of very low artefact density, it is unlikely that significant archaeological material remains within the impact area (page 39).
 - Section 11.1 of ACHAR notes the majority of BCBW18 AS 02 will not be impacted by the proposed works. The most significant portion of BCBW18 AS 02 is the hearth feature, which will not be impacted by the proposed work and will be protected by a 10m buffer under the MOD4 works (page 42).
 - The ATR notes the site features a clay heat retainer hearth, which is extremely rare within the regional context. The intact nature of the deposit presents an opportunity to use the obtained carbon dates to contribute towards a regional sequence of artefact assemblages. Due to the high research potential and rarity of the site, BCBW18 AS 02 (AHIMS ID 45-5-5164) is of high scientific significance but the remainder of the site is of low significance and potential (section 9.2.2, page 80).
- Further details need to be provided on the clay heat retainer hearth (BCBW18 AS 02) which the EA notes is extremely rare in the region (section 9.2.4, page 121). A Plan drawing of the hearth feature has been provided (see Figure 8.12 in the Archaeological Technical Report, page 70). This figure is not adequate for OEH to be able to determine the significance of the hearth.
 - The MOD 3 EA notes the hearth will be protected from impact (page 122) but it also states, “the hearth will be reburied after it has been investigated and a 10m exclusion area will be placed around the site with fencing or similar” (section 9.3 page 122). The proponent needs to demonstrate to the Department that impacts on the hearth will be avoided. Based on this it would appear the hearth is to be permanently protected by the fenced buffer. OEH does not consider a 10m buffer is suitable to protect the hearth given that the hearth is of high scientific significance (section 9.2.4, page 120). Further details need to be provided on how the hearth is proposed to be conserved, protected and managed in the short term and in perpetuity and whether all the relevant the registered Aboriginal parties have been consulted on this.

Aboriginal Cultural Heritage Management Plan

OEH is very concerned about how the significant cultural heritage values will be protected and managed. The EAs for MOD 3 and MOD 4 note the Aboriginal Cultural Heritage Management Plan (ACHMP) will be updated with the findings of the MOD 3 and MOD 4 ACHAR (see Sections 9.3, page 123 of MOD 3 EA and Section 11.3, page 134 of MOD 4 EA). The ACHMP needs to address how the clay heat retainer hearth will be conserved, protected and managed in the short term and in perpetuity.

(END OF SUBMISSION)



Australian Government
Civil Aviation Safety Authority

STAKEHOLDER ENGAGEMENT DIVISION

CASA Ref: GI19/328

9 May 2019

Ms Pamela Morales
Acting Team Leader
Industry Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Email: pamela.morales@planning.nsw.gov.au

Dear Ms Morales

Thank you for your letter of 8 April 2019 requesting input from the Civil Aviation Safety Authority (CASA) on a modification request for CSR Advanced Manufacturing Hub at Badgerys Creek.

CASA has reviewed the modifications and I am advised that no modifications to the stacks and their emissions were identified. Therefore, CASA's previous advice with regard to the Obstacle Limitation Surface (OLS) remains valid. There is no infringement of the OLS at a critical velocity of 4.3m/sec and CASA considers that there will be an acceptable level of safety. No additional mitigations would be required.

Although CASA's comments are summarised in the CSR Advanced Manufacturing Hub_Mod 4 EA Main Text (March 2019, page 72), the proponent's response to CASA's comments could not be identified in the referenced Chapter 12 or Appendix K.

With regard to the establishment of the grid connected 4.4 megawatt solar farm, CASA is not aware of any glare reflectivity analysis report being prepared and submitted for review and/or discussion.

For more information or to discuss this matter further, please email anaa.corro@casa.gov.au.

I trust this information is of assistance.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Fay Charafeddine', with a long horizontal flourish extending to the right.

Fay Charafeddine
Acting Section Manager
Government and Corporate Relations

File ref. no: BFS19/1165
Doc. ref. no: D19/29484
Contact: Qualified Firefighter Nathan Everett

01 May 2019

Department of Planning and Environment
C/- Ania Dorocinska
GPO Box 39
Sydney NSW 2001

E: ania.dorocinska@planning.nsw.gov.au

Dear Ms Dorocinska,

**Notice of Exhibition
CSR Badgerys Creek Brick Making Facility (MOD 3)
235 Martin Road, Badgerys Creek (Liverpool LGA)**

I refer to the submission of the Notice of Exhibition (the Notice) dated 08 April 2019 for the above development to Fire & Rescue NSW (FRNSW) for review and comment.

It is understood that the Notice is in regard to the modification of an existing brick manufacturing facility and construction of a new roof products manufacturing facility at Badgerys Creek. An Environmental Assessment report (the Report) including a number of accompanying appendices has been prepared in support of the application.

Details of the submitted report are:

- Environmental Assessment, CSR Advanced Manufacturing Hub – Modification 3, prepared by Element Environment, dated 29 March 2019, Revision 2

It has been the experience of FRNSW that large manufacturing facilities pose unique challenges to firefighters when responding to and managing an incident. Factors such as potentially high fuel loads, facility layout, and design of fire safety systems have a significant impact on the ability to conduct firefighting operations safely and effectively. Consultation with organisations such as FRNSW throughout the development process enables the design and implementation of more effective fire safety solutions that help to mitigate the impact of incidents when they occur.

The following notes and comments are provided following a review of relevant parts of the Report and appendices.

- It is understood that a *State Environmental Planning Policy No. 33 (Hazardous and Offensive Development)* (SEPP 33) assessment has been undertaken and the development has not be deemed to be either hazardous or offensive.
- It is noted that a 'future battery store' is proposed as part of the modifications to the existing brick manufacturing facility. FRNSW have identified a number of hazards and risks associated with battery storage that would require consideration prior to development.
- No BCA assessment was included with the Report.

The following recommendations are provided following a review of relevant parts of the Report and appendices.

- Consultation with FRNSW be undertaken by way of the Fire Engineering Brief Questionnaire (FEBQ) process prior to the issue of the relevant construction certificate.
- Further information be provided to FRNSW regarding the proposed battery storage.
- While there is currently no requirement for a FSS, FRNSW may request one be undertaken at a later stage should information be provided such that it is deemed that the development poses unique challenges to the response to and management of an incident.

For further information please contact the Fire Safety Infrastructure Liaison Unit, referencing FRNSW file number BFS19/1165. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Yours sincerely,



Superintendent Mick Henly
Manager Infrastructure Liaison Unit
Community Safety Directorate

From: [Kirk Osborne](#)
To: [Ania Dorocinska](#)
Cc: [Sally Reynolds](#); [Planning and Safeguarding](#)
Subject: RE: MP 10_0014 Mod 3 CSR Site
Date: Thursday, 30 May 2019 1:22:18 PM
Attachments: [image027.jpg](#)
[image003.jpg](#)
[image005.png](#)
[image007.jpg](#)
[image010.jpg](#)
[image012.jpg](#)
[image015.jpg](#)
[image020.png](#)
[image022.jpg](#)
[image024.jpg](#)
[image026.jpg](#)

Ania

Further to my comments below, WSA notes that a plume rise assessment was prepared and submitted to CASA for review. CASA has advised that there plume rise velocities were acceptable and would not require management measures or design changes. WSA has no additional comment in relation to plume rise and turbulence.

WSA notes that a Water Management Plan was prepared and approved as part of the original project approval. The WMP should be amended as required to reflect the proposed changes to approved project to ensure appropriate water quality standards.

Air quality management measures should be amended to reflect the proposed modified project. This should include a dust management/mitigation program to manage potential off-site impacts from dust and particulate matter arising from the proposed operation.

If you have any questions please give me a call.

Regards

Kirk Osborne
Lead Town Planner | Airport Planning

+61 424 081 638
kosborne@wsaco.com.au
PO Box 397 Liverpool NSW 1871



From: Ania Dorocinska <Ania.Dorocinska@planning.nsw.gov.au>
Sent: Wednesday, 29 May 2019 10:43 AM
To: Kirk Osborne <kosborne@wsaco.com.au>
Cc: Sally Reynolds <sreynolds@wsaco.com.au>
Subject: RE: MP 10_0014 Mod 3 CSR Site

Hi Kirk, can you please provide an update to whether you can provide your final submission by COB today?
Thank you.

Kind regards,

Ania Dorocinska
Senior Environmental Assessment Officer
Industry Assessments

320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 9274 6225 E ania.dorocinska@planning.nsw.gov.au

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From: Kirk Osborne <kosborne@wsaco.com.au>
Sent: Wednesday, 22 May 2019 3:38 PM
To: Ania Dorocinska <Ania.Dorocinska@planning.nsw.gov.au>
Cc: Sally Reynolds <sreynolds@wsaco.com.au>
Subject: RE: MP 10_0014 Mod 3 CSR Site

Hi Ania

Apologies I am off sick at the moment and wont be in the office until next week.

I have not finished reviewing the documents, but so far have not been able to confirm within WSA who CSR met with, so if they could provide more details of meeting date, attendees, notes etc that would be good.

In terms of lighting it is unclear exactly what lighting is proposed on the site. Given the immediate proximity of the site to the airport, any lighting must not cause confusion or distraction to pilots. Additional information is required in relation to this (CSR should refer to the National Airports Safeguarding Framework – Guideline E which can found at this link - https://www.infrastructure.gov.au/aviation/environmental/airport_safeguarding/nasf/nasf_principles_guidelines.aspx

I will provide some further comment by early next week.

Regards

Kirk Osborne
Lead Town Planner | Airport Planning

+61 424 081 638
kosborne@wsaco.com.au
PO Box 397 Liverpool NSW 1871



From: Ania Dorocinska <Ania.Dorocinska@planning.nsw.gov.au>
Sent: Wednesday, 22 May 2019 3:21 PM
To: Kirk Osborne <kosborne@wsaco.com.au>
Subject: RE: MP 10_0014 Mod 3 CSR Site

Hi Kirk,

I have been inundated with emails, have you provided a response to this MOD?

Kind regards,

Ania Dorocinska
Senior Environmental Assessment Officer
Industry Assessments

320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 9274 6225 E ania.dorocinska@planning.nsw.gov.au

From: [Airport Developments](#)
To: [Luisa Maguire](#); [Ania Dorocinska](#)
Cc: [Airspace Protection](#)
Subject: AIRSERVICES RESPONSE: WS-MA-001 P2 - Dev, Brick Making Project, 235 Martin Rd, Badgerys Creek [SEC=UNCLASSIFIED]
Date: Thursday, 16 May 2019 2:48:59 PM
Attachments: [image002.png](#)

Hi Ania and Luisa

I refer to your request for an Airservices assessment of the property development for CSR Advanced Manufacturing Hub at 235 Martin Rd, Badgerys Creek.

Airspace Procedures

With respect to procedures designed by Airservices in accordance with ICAO PANS-OPS and Document 9905, at a maximum height of 105m (345ft) AHD, the property development will not affect any sector or circling altitude, nor any instrument approach or departure procedure at Bankstown, Camden and Richmond Airport or Westmead Hospital heliport.

Note that procedures not designed by Airservices at Bankstown, Camden, Richmond Airport and Westmead Hospital heliport were not considered in this assessment

When developed, the instrument procedures for the proposed Western Sydney Airport will use the above supplied information.

Communications/Navigation/Surveillance (CNS) Facilities

This property development, to a maximum height of 105m (345ft) AHD, will not adversely impact the performance of Precision/Non-Precision Navigational Aids, HF/VHF Communications, A-SMGCS, Radar, PRM, ADS-B, WAM or Satellite/Links.

Vertical Obstacle Notification

As soon as construction commences, the proponent must complete the Vertical Obstacle Notification Form for tall structures and submit the completed form to VOD@airservicesaustralia.com. For further information regarding the reporting of tall structures, please contact (02) 6268 5622, email VOD@airservicesaustralia.com or refer to the web link below:

<http://www.airservicesaustralia.com/services/aeronautical-information-and-management-services/part-175/>

Kind regards,

William Zhao

Advisor Airport Development

Tower Road, Melbourne Airport, Tullamarine VIC 3043

t **03 9339 2504**

e airport.developments@airservicesaustralia.com



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From: [Nicholas Hon](#)
To: [Ania Dorocinska](#)
Cc: [Doris Yau](#)
Subject: RE: CORRECTION Exhibition of Modification Request for CSR Advanced Manufacturing Hub (MP 10_0014 MOD 3)
Date: Tuesday, 23 April 2019 4:19:26 PM
Attachments: [image004.png](#)
[image003.png](#)

Hi Ania,

Thanks for forwarding this for our review.

In reviewing the exhibited EIS, it is considered that the Applicant preliminary risk screening in EIS Section 15.6 is in accordance with the Department's *Applying SEPP 33* guideline. From this screening, it is noted that the dangerous goods quantities associated with the project as modified is below the relevant screening threshold quantities. As such, the project as modified is not potentially hazardous under SEPP 33, and a PHA is not required to be included with the application.

Notwithstanding, it is recommended that the following conditions be included in the modification consent to ensure continual safety of the project as modified:

1. The Applicant must ensure that the quantities of dangerous goods on-site and transported to and from the site remains below the screening threshold quantities listed in the Department's *Applying SEPP 33* guideline at all times.
2. The Applicant must store all chemicals, fuels and oils used on-site in accordance with:
 - a. the requirements of all relevant Australian Standards; and
 - b. the NSW EPA's 'Storing and Handling of Liquids: Environmental Protection – Participants Handbook' if the chemicals are liquids.

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

Thanks.

Regards,

Nicholas Hon

Technical Specialist (Hazards)
Hazards Team | Industry Assessments
320 Pitt Street | Sydney NSW 2000
T 02 9274 6344

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From: Doris Yau
Sent: Monday, 8 April 2019 3:33 PM
To: Nicholas Hon <Nicholas.Hon@planning.nsw.gov.au>
Subject: FW: CORRECTION Exhibition of Modification Request for CSR Advanced Manufacturing

From: [Cornelia Duba](#)
To: [CPE_CPE_Information_Planning_Mailbox](#)
Cc: [Mariane Liddle](#); [Jason Lu](#); [Dale Wilson](#)
Subject: NSW Planning & Environment Badgerys Creek Quarry and Brick Making Project Modification 4 and Badgerys Creek Quarry and Brick Making Project Concept Plan Modification 3
Attachments: [image005.jpg](#)
[image0011.jpg](#)
[image00710.jpg](#)
[image024.jpg](#)
[image023.dwg](#)
[image078.jpg](#)
[image070.jpg](#)
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[image014.jpg](#)
[image015.jpg](#)
[image016.jpg](#)
[image039.jpg](#)
[Endeavour Energy MCH0044 Easements and Property Tenure1.pdf](#)
[Endeavour Energy General Restrictions for Overhead Power Lines June 2018 .pdf](#)
[Dial_and_what_do_we_know_about_20160502.pdf](#)
[Work_near_overhead-power-lines-code-of-practice.pdf](#)
[Endeavour Energy Drawing No. 98510 \(14 feet minimum clearances near str. .pdf](#)
[Work_near_underground_assets_guide.pdf](#)
[Endeavour Energy FactSheet.pdf](#)
[FactSheet_Building_Construction-web.pdf](#)

The Secretary

NSW Planning & Environment

ATTENTION: Director – Resource Assessments

Dear Sir or Madam

I refer to the Department's below email of 11 April 2019 regarding Badgerys Creek Quarry and Brick Making Project Modification 4 (MP 10_0014 MOD 4) and Badgerys Creek Quarry and Brick Making Project Concept Plan Modification 3 (MP 10_0033 MOD 3) at 235 Martin Road, Badgerys Creek (Lots 1 & 2 DP1035249, Lot 1 DP373863, Lot 1 DP 981161, Part Lots 54, 55, 56, 57, 58 & 59 DP 549457). Submissions need to be made to the Department by 9 May 2019.

As shown in the below site plan from Endeavour Energy's G/Net master facility model (and the extract from Google Maps Street View) there are:

- No easements over the site benefitting Endeavour Energy (active easements are indicated by red hatching).
- Low voltage and 11,000 volt / 11 kilovolt (kV) high voltage overhead power lines traversing the site including pole mounted substation no. 1173 and high voltage customer substation no. 7457.
- Whilst the conductor is not shown, there is also an 'Extended Service Line/customer owned' on the site – which may already have been redundant assets and removed from the site.

Please note the location, extent and type of any electricity infrastructure, boundaries etc. shown on the plan is indicative only. Generally (depending on the scale and/or features selected), low voltage (normally not exceeding 1,000 volts) is indicated by blue lines and high voltage (normally exceeding 1,000 volts but for Endeavour Energy's network not exceeding 132,000 volts / 132 kV) by red lines (these lines can appear as solid or dashed and where there are multiple lines / cables only the higher voltage may be shown). This plan only shows the Endeavour Energy network and does not show electricity infrastructure belonging to other authorities or customers owned electrical equipment beyond the customer connection point / point of supply to the property. This plan is not a 'Dial Before You Dig' plan under the provisions of Part 5E 'Protection of underground electricity power lines' of the *Electricity Supply Act 1995* (NSW).

The existing facility is supplied via high voltage customer substation no. 12555. As a high voltage customer the 'High Voltage Operational and Maintenance Protocol' between Endeavour Energy and the customer regarding the provision of high voltage supply to the site will specify a 'Load of Customers Installation' which is adequate for the then / Customer's current requirements. The Protocol generally also states the following:

'Should any further increase in loads be required, contact should be made with Endeavour Energy's Network Connections Branch, who will inform you of the requirements in this regard'.

The Protocol also identifies where Endeavour Energy's responsibility terminates (normally at the pole or pillar on the road verge from which supply is taken) in respect of:

- ownership of high voltage equipment;
- switching operations; and
- maintenance of equipment.

However, high voltage customer connections must be a single customer site. Multiple occupant developments such as subdivisions, shopping centres, factory units, distribution centres, etc. are not entitled to high voltage connections.

Endeavour Energy has noted the following in the Environmental Assessment:

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In regards to the Endeavour Energy owned low voltage and 11 kV high voltage overhead power lines traversing the site which are not covered by any easements, they are protected assets and deemed to be lawful for all purposes under Section 53 'Protection of certain electricity works' of the *Electricity Supply Act 1995* (NSW). Essentially this means the owner or occupier of the land cannot take any action in relation to the presence in, on or over the land of electricity works ie. the service mains cannot be removed to rectify the encroachment. These protected assets are managed on the same basis as if an easement was in existence – please refer to the below point 'Easement Management / Network Access'.

As shown in the following extract of the attached copy of Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights', Table 1 'Minimum easement widths', the notional easement width required by for low voltage overhead power lines is 9 metres wide ie. 4.5 to both sides of the centre line of the poles / wires.

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ABC = Aerial Bundled Cables CTT = Covered Conductor Thick

Whilst a 9 metre wide easement may be excessive in some situations, alternatively, as a minimum the easement width should allow for any buildings, structures, etc. to comply with the minimum safe distances / clearances for voltages up to and including 132,000 volts (132kV) as specified in:

- Australian/New Zealand Standard AS/NZS 7000 – 2016: 'Overhead line design'; and
- Service and Installation Rules of NSW which can accessed via the following link to the NSW Planning & Environment website:
<https://www.energy.nsw.gov.au/energy-supply-industry/pipelines-electricity-gas-networks/network-connections/rules>.

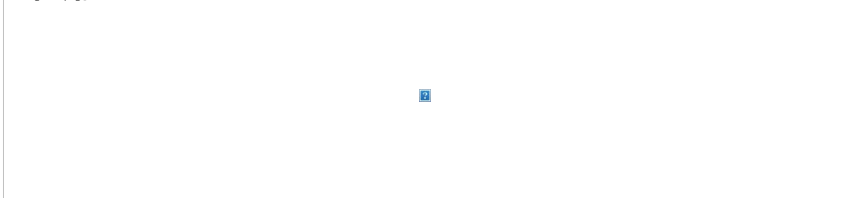
These distances must be maintained regardless of the Council's allowable building setbacks etc. under its development controls and irrespective of the ownership of the overhead power lines or any facilities being 'mothballed'. As a guide please find attached a copy of Endeavour Energy Drawing 'Overhead Lines Minimum Clearances Near Structures'.

Subject to the foregoing and the following recommendations and comments Endeavour Energy has no objection to the Development Application / Modifications.

- Network Capacity / Connection

Endeavour Energy has noted the following in the Environmental Assessment:

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Endeavour Energy's Asset Strategy & Planning Branch have reviewed the Solar Report provided with the application and, whilst not having undertaken a detailed evaluation of the proposal, have provided the following advice.

The Department may be concerned that this is large development within the Western Sydney Aerotropolis where Endeavour Energy have advised that existing sub-transmission capacity (network assets designed to supply zone or customer substations and operate at a primary voltage of 132 kV, 66 kV or 33 kV high voltage) is limited.

In terms of this development there are two main parts:

- 1. Increased load for the expanded brick making facilities, previous enquiry of 4.5 megawatt amperes (MVA).*
- 2. More recently received solar farm (with tracking system) 5 megawatt (MW) plus a smaller battery component.*

Whilst Endeavour Energy is still in the process of reviewing technical details for the connection, Endeavour Energy's network should be able to accommodate the connection of both as a combined proposal.

Endeavour Energy needs to consider not just the capacity for load/generation but the impact on reverse power flow at times of high solar/light load on voltage control and protection systems.

As previously advised, the customer may be up for 11 kV works, the extent of which is not currently known.

The solar battery system has reduced the net load required by this customer and has probably reduced the 11 kV upstream works required compared with the load on its own.

Overall the combination of generation plus load is easier to accommodate than if the proponent was only proceeding with one of the proposals.

As the battery is relatively small there will the site will still be reliant on the grid during cloudy days/early morning and night.

Should the Department require any additional advice regarding the foregoing please contact

Jason Lu

Capacity Planning Manager

Asset Strategy and Planning

T 61 2 9853 5003

M 0403 604 607

51 Huntingwood Drive

Huntingwood NSW 2148

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As the applicant has already submitted a Technical Review Request to Endeavour Energy's Network Connections Branch, they should continue to contact the responsible Contestable Works Project Manager or Endeavour Energy's Network Connections Branch via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm. Endeavour Energy's Network Connections Branch are responsible for managing the conditions of supply with the customer / proponent and their Accredited Service Provider (ASP).

- Urban Network Design

Endeavour Energy's Company Policy 9.2.5 'Network Asset Design', includes the following requirements for electricity connections to new urban subdivision / development:

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• Location of Electricity Easements / Prudent Avoidance

Depending on the outcome of the assessment, any electricity infrastructure required to be located within the property to facilitate the proposed development ie. new feeder routes, padmount substations, will need to be provided in a suitable and accessible location and be protected by an easement and associated restrictions benefitting and gifted to Endeavour Energy. Please refer to Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights'. Endeavour Energy's preference is to have continuity of its easements over the most direct and practicable route affecting the least number of lots as possible. The incorporation of electricity easements into privately owned lots is generally problematic for both Endeavour Energy and the future landowners and requires additional easement management to ensure no uncontrolled activities / encroachments occur within the easement area. Accordingly Endeavour Energy's recommendation is that whenever reasonably possible, easements be entirely incorporated into public reserves and not burden private lots (except where they are remnant lots or not subject to development). This is also in keeping with a policy of prudent avoidance by the siting of more sensitive uses away from any electricity infrastructure to minimise exposure to electric and magnetic fields (EMF), noise etc. associated with the 24/7/365 (all day, every day of the year) operation of the electricity network. Please find attached a copy of Energy Networks Association's 'Electric & Magnetic Fields – What We Know, which can also be accessed via the link to their website at <https://www.energynetworks.com.au/electric-and-magnetic-fields> and provides the following advice:

Electric fields are strongest closest to their source, and their strength diminishes rapidly as we move away from the source.

The level of a magnetic field depends on the amount of the current (measured in amps), and decreases rapidly once we move away from the source.

Typical magnetic field measurements associated with Endeavour Energy's activities and assets given the required easement widths, safety clearances etc. and having a maximum voltage of 132,000 volt / 132 kV, will with the observance of these separation distances not exceed the recommended magnetic field public exposure limits.

• Earthing

The construction of any building or structure (including fencing, signage, flag poles, hoardings etc.) whether temporary or permanent that is connected to or in close proximity to Endeavour Energy's electrical network is required to comply with Australian/New Zealand Standard AS/NZS 3000:2018 'Electrical installations' as updated from time to time. This Standard sets out requirements for the design, construction and verification of electrical installations, including ensuring there is adequate connection to the earth. Inadequate connection to the earth to allow a leaking/fault current to flow into the grounding system and be properly dissipated places persons, equipment connected to the network and the electricity network itself at risk from electric shock, fire and physical injury.

• Easement Management / Network Access

The following is a summary of the usual / main terms of Endeavour Energy's electrical easements requiring that the land owner:

• Do not install or permit to be installed any services or structures within the easement site.

• Do not alter the surface level of the easement site.

• Do not do or permit to be done anything that restricts access to the easement site without the prior written permission of Endeavour Energy and in accordance with such conditions as Endeavour Energy may reasonably impose.

Endeavour Energy's preference is for no activities or encroachments to occur within its easement areas. However, if any proposed works (other than those approved / certified by Endeavour Energy's Network Connections Branch as part of an enquiry / application for load) may encroach/affect Endeavour Energy's easements or protected assets, contact must first be made with the Endeavour Energy's Easements Officer, Philip Wilson, on direct telephone 9853 7110 or alternately by email Philip.Wilson@endeavourenergy.com.au or Easements@endeavourenergy.com.au.

Please find attached for the applicant's reference copies of Endeavour Energy's:

• General Restrictions for Overhead Power Lines.

• Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights' which in Section 5.14 'Encroachments on overhead line easements' deals with activities / encroachments within easements.

It is imperative that the access to the existing electrical infrastructure on and in proximity of the site be maintained at all times. To ensure that supply electricity is available to the community, access to the electricity infrastructure may be required at any time. Restricted access to electricity infrastructure by maintenance workers causes delays in power restoration and may have severe consequences in the event of an emergency.

• Vegetation Management

The planting of large trees in the vicinity of electricity infrastructure is not supported by Endeavour Energy. Suitable planting needs to be undertaken in proximity of electricity infrastructure. Only low growing shrubs not exceeding 3.0 metres in height, ground covers and smaller shrubs, with non-invasive root systems are the best plants to use. Larger trees should be planted well away from electricity infrastructure (at least the same distance from overhead power lines as their potential full grown height) and even with underground cables, be installed with a root barrier around the root ball of the plant. Landscaping that interferes with electricity infrastructure may become a potential safety risk, cause of bush fire, restrict access, reduce light levels from streetlights or result in the interruption of supply. Such landscaping may be subject to Endeavour Energy's Vegetation Management program and/or the provisions of the *Electricity Supply Act 1995* (NSW) Section 48 'Interference with electricity works by trees' by which under certain circumstances the cost of carrying out such work may be recovered.

• Dial Before You Dig

Before commencing any underground activity the applicant is required to obtain advice from the *Dial Before You Dig 1100* service in accordance with the requirements of the *Electricity Supply Act 1995* (NSW) and associated Regulations. This should be obtained by the applicant not only to identify the location of any underground electrical and other utility infrastructure across the site, but also to identify them as a hazard and to properly assess the risk.

• Demolition

Demolition work is to be carried out in accordance with Australian Standard AS 2601—2001: 'The demolition of structures' as updated from time to time. All electric cables or apparatus which are liable to be a source of danger, other than a cable or apparatus used for the demolition works shall be disconnected ie. the existing customer service lines will need to be isolated and/or removed during demolition. Appropriate care must be taken to not otherwise interfere with any electrical infrastructure on or in the vicinity of the site eg. streetlight columns, power poles, overhead power lines and underground cables etc.

• Public Safety

Workers involved in work near electricity infrastructure run the risk of receiving an electric shock and causing substantial damage to plant and equipment. I have attached Endeavour Energy's public safety training resources, which were developed to help general public / workers to understand why you may be at risk and what you can do to work safely. The public safety training resources are also available via Endeavour Energy's website via the following link:

<http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw+homepage/communitynsw/safety/safety+brochures>.

If the applicant has any concerns over the proposed works in proximity of the Endeavour Energy's electricity infrastructure to the road verge / roadway, as part of a public safety initiative Endeavour Energy has set up an email account that is accessible by a range of multiple stakeholders across the company in order to provide more effective lines of communication with the general public who may be undertaking construction activities in proximity of electricity infrastructure such as builders, construction industry workers etc. The email address is Construction.Works@endeavourenergy.com.au.

• Emergency Contact

In case of an emergency relating to Endeavour Energy's electrical network, the applicant should note the Emergencies Telephone is 131 003 which can be contacted 24 hours/7 days.

I appreciate that not all the foregoing issues may be directly relevant or significant to the Modifications. However, Endeavour Energy's preference is to alert proponents / applicants of the potential matters that may arise should development within closer proximity of the existing and/or required electricity infrastructure needed to facilitate the proposed development on or in the vicinity of the site occur.

Could you please pass on a copy of this submission and the attached resources to the applicant? Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified above in relation to the various matters. Due to the high number of development application / planning proposal notifications submitted to Endeavour Energy, to ensure a response contact by email to property.development@endeavourenergy.com.au is preferred.

Yours faithfully

Cornelis Duba

Development Application Specialist

Network Environment & Assessment

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