

APPENDIX 4. EPA SUBMISSION AND CORRESPONDENCE



#### **Environment Protection Authority**

GPO Box 2607 Adelaide SA 5001 211 Victoria Square Adelaide SA 5000 T (08) 8204 2000 F (08) 8204 2020 Country areas 1800 623 445

EPA 603-323

Ms Kayla Gaskin-Harvey Senior Consultant Future Urban Level 1, 74 Pirie Street ADELAIDE SA 5000

via email: kayla@futureurban.com.au

Dear Ms Gaskin-Harvey

#### O'Sullivan Beach Residential Code Amendment

Thank you for providing the Environment Protection Authority (EPA) with the opportunity to comment on the O'Sullivan Beach Residential Code Amendment (CA).

When reviewing documents such as this CA, the key interest of the EPA is to ensure that all environmental issues within the scope of the objects of the *Environment Protection Act 1993* are identified and considered. The EPA is primarily interested in the potential environmental and human health impacts that would result from any development that may be proposed subsequent to this CA. At the CA stage, the EPA works to ensure that appropriate planning policy is included in the Code to allow proper assessment at the development application stage.

The EPA also reviews relevant technical reports to determine their suitability to support decision-making on the CA.

The EPA understands the CA seeks to rezone six hectares of land from the Strategic Employment Zone to General Neighbourhood Zone at O'Sullivan Beach. The site comprises two adjoining land parcels on the corner of Baden Terrace and Gumeracha Road, O'Sullivan Beach (CT 6136/727 and 6214/427).

The EPA has reviewed the 'O'Sullivan Beach Code Amendment, OSB Pty Ltd - For Consultation' (2021) prepared by Future Urban and provides comments for your consideration below on a range of environmental issues.

## Site contamination

A *Preliminary Site Investigation and Targeted Intrusive Site Investigation* (prepared by WSP dated 25 September 2020 – the "PSI") was submitted to support the rezoning.

The PSI identified that the site was previously used for broad-acre agricultural purposes with limited commercial activity comprising the installation of antenna and/or TV testing systems. The PSI identified that no potentially contaminating activities (PCA) were identified on-site with the exception of 'Agricultural activities', a class 3 activity (or low risk activity) for planning purposes. Intrusive soil investigations were completed as

part of the PSI, with WSP concluding that site contamination of soils did not exist for a commercial / industrial land use or residential land use.

However, there were exceedances of metals (zinc) above ecological investigation levels in four surface soil samples, as well as concentrations of metals, Polycyclic Aromatic Hydrocarbons (PAH) and Total Recoverable Hydrocarbons (TRH) above the laboratory limit of reporting with Benzo(a)pyrene (B(a)P TEQ) exceeding *National Environment Protection (Assessment of Site Contamination) Measure 1999* Health Investigation Levels for Residential A¹ and B² as well as Recreational use³.

In relation to neighbouring sites, the EPA holds site contamination information for the adjacent site (currently undertaking a class 1 PCA being 'Metal coating, finishing or spray painting'), including notifications of site contamination that affects or threatens underground water. The contaminants of concern include chlorinated hydrocarbons which can cause vapour intrusion risk at high concentrations.

#### Adequacy of the PSI site history

Site history information in Section 2.4 of the PSI has an error, listing the same CT and allotment twice, omitting CT 6214/472.

The site history section of the PSI notes that the site was owned by Hills Industries Limited (and related entities) as part of the larger industrial site, and states that limited commercial activity took place on the affected area. However, the PSI does not contemplate or provide adequate information on the potential for the affected area to previously have been used for PCAs during the some 50 years of ownership by Hills Industries. The PSI provides no documented interviews with former owners or employees of the site as to what activities occurred on the affected area. Historic aerial photographs show pathway / roadways into the affected area as well as soil stockpiling activities on the southern boundary, with a note that this material was removed off-site.

No groundwater investigations were undertaken as part of the PSI. Groundwater conditions at the site are unknown, with known volatile chemicals present in groundwater adjacent to the site. Site contamination reports held for the neighbouring site indicate that hydrogeological conditions at the site may be restricting movement of groundwater, with dissolved phase groundwater contamination not expected to be moving on to the subject site.

Noting these data gaps within the site history information, the PSI report does not currently provide sufficient information for the EPA to make an informed decision if the affected area can be made suitable with respect to site contamination for the proposed rezoning.

Further site history investigations (and potentially detailed site investigations) should be undertaken to give certainty that the site can be made suitable for the proposed residential land use.

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<sup>&</sup>lt;sup>1</sup> HIL A – Residential with garden/accessible soil (home grown produce <10% fruit and vegetable intake (no poultry), also includes childcare centres, preschools and primary schools.

<sup>&</sup>lt;sup>2</sup> HIL B – Residential with minimal opportunities for soil access; includes dwellings with fully and permanently paved yard space such as high-rise buildings and apartments.

<sup>&</sup>lt;sup>3</sup> HIL C – Public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths. This does not include undeveloped public open space where the potential for exposure is lower and where a site-specific assessment may be more appropriate.

#### Water quality - Stormwater

The EPA notes that section 6.3 (Stormwater quality) of the 'Stormwater Management Report: Gumeracha Road, O'Sullivan Beach' (MLEI Consulting Engineers, dated 16 August 2021) states "Stormwater quality is to be addressed during the planning documentation submission".

Whilst the EPA supports the City of Onkaparinga stormwater quality management targets<sup>4</sup>, the EPA notes that drainage from over two hectares of the affected area from the stormwater concept plan design bypasses the proposed detention basin. The stormwater design at the land division stage should ensure that the stormwater quality targets are met, noting the Planning and Design Code contains stormwater policy that would be applicable at the land division stage.

## **Noise**

SONUS prepared a report 'O'Sullivan Beach Residential Rezoning Environmental Noise Assessment' (ref: S6537C2, August 2020) to support the Code Amendment.

There are some issues with the SONUS report, namely:

- Indicative noise levels were derived from the former Onkaparinga (City) Development Plan rather than the Planning and Design Code.
- Noise measurements were undertaken over a 24-hour period at the interface of the industrial area; however, the noise measurement location remains unclear. In addition, given the limited measuring period the noise data may not be representative of the worst-case noise levels likely to be experienced in the area. Noise logging of at least 1-2 weeks would provide a better representation of the existing noise environment.
- Some noise modelling was undertaken but the data has been represented in terms of Sound Exposure Categories instead of actual noise impacts (measured in dB value) compared with the indicative noise levels derived from the *Environment Protection (Noise) Policy 2007*.
- Reference is made to the now superseded Minister's Specification SA78B rather than *Ministerial Building Standard MBS010: Construction requirements for the control of external sound* (MBS010). The EPA notes that MBS010 is not intended to address impacts of environmental noise from industrial noise sources (neither was SA78B). MBS010 (and SA78B) is designed to reduce internal noise impacts from transportation noise sources such as road and rail corridors and is only applicable when used in conjunction with the Noise and Air Emissions Overlays. MB010 is also not designed to consider external noise levels.

Despite the issues mentioned above, the SONUS report proposes that a three metre-high barrier coupled with treating the dwelling facades (i.e. the requirements of the SA78B) would be sufficient to ensure (internal) acoustic amenity for future residents in the area.

In response, Future Urban do not recommend that the Noise and Air Emissions Overlay apply to the affected area. Future Urban recommend applying the 'Interface Management Overlay' to a depth of 10 metres along the eastern boundary of the Affected Area (adjacent to the Strategic Employment Zone, refer to **Figure 1** below). Based on the SONUS modelling, this policy approach would not provide suitable acoustic amenity for future residents as noted in Figure 2 on pages 13 and Page 14 of the SONUS report.

<sup>&</sup>lt;sup>4</sup> Stormwater runoff quality in outflows from new development shall have load reduction (when compared to untreated stormwater outflows) improvement equivalent to: 80% reduction in Total Suspended Solids; 60% reduction in Total Phosphorous; 45% reduction in Total Nitrogen; and 90% reduction in Gross Pollutants.

PROPOSED

Interface
Management
Overlay
O'Sullivan Beach

LEGEND
Interface Management Overlay
(Interface Management Overlay)

Figure 1: Proposed Interface Management Overlay application

Source: Future Urban (2021), Appendix 2: Current and Proposed Zone and Overlay Mapping

The EPA remains concerned that whilst the SONUS report concludes that both façade treatments and barriers are required to achieve an acceptable internal noise environment, the recommended policy change provides no mechanism to ensure that those noise mitigation measures would be implemented at the planning consent or building rules consent stages.

In conclusion, the EPA has highlighted potential site contamination and noise concerns that require further investigation and consideration before any final decision can be made about the suitability of the proposed rezoning.

For further information on this matter, please contact James Cother on 82042093 or james.cother@epa.sa.gov.au.

Yours sincerely

Phil Hazell

# MANAGER PLANNING AND IMPACT ASSESSMENT ENVIRONMENT PROTECTION AUTHORITY

20 October 2021

## Kayla Gaskin-Harvey

From: Cother, James (EPA) <James.Cother@sa.gov.au>

**Sent:** Friday, 11 February 2022 4:18 PM

**To:** Kayla Gaskin-Harvey

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Follow Up Flag: Follow up Flag Status: Flagged

## **OFFICIAL**

Hi Kayla,

See below for summary comments on acoustic measures.

#### **Summary**

SONUS conclude that to provide a suitable interface between existing industry in the Strategic Employment Zone and future residents, the following measures are recommended:

- construction of a minimum height 2.4m barrier at the industry interface;
- restricting development on a portion of the land to only single storey residences (within 45 metres of the noise barrier); and
- upgrades to dwelling facades (i.e. a performance standard of sound exposure category 1 in the MBS010, or a comparable or better level of acoustic performance).

Without a concept plan or TNVs or some other policy mechanism, it appears that the Planning and Design Code cannot neatly capture the work that has gone into this Code Amendment beyond the generic application of the Interface Management Overlay.

If the abovementioned acoustic measures can be achieved via the application of the Interface Management Overlay to whole affected area then the EPA is reasonable satisfied that these matters can be resolved at the land division stage.

## **Background**

Rezone two parcels from Strategic Employment Zone to a General Neighbourhood Zone. There are existing industrial land uses currently adjacent to the affected area.

The acoustic report 'O'Sullivan Beach Code Amendment: Environmental Noise Assessment', dated January 2022 (ref. S6537C7) prepared by SONUS provides an updated version of a previous report.

The Planning and Design Code zones have been interpreted to the following land use categories:

( ode zone	Land Use Category ( Noise EPP)	Day	Night
Strategic Employment	General Industry	65 dB(A)	65 dB(A)
General Neighbourhood	Residential	59 dB(A)	50 dB(A)

SONUS undertook noise measurements at three locations for approximately 10 days and found that worst case noise levels were 63dB(A)/52 dB(A) for day/night time periods prior to the application of character penalties at the boundary of the affected area. The acoustic report recommends a number of attenuation methods to be undertaken simultaneously to achieve a suitable noise amenity.

It is predicted that the external noise levels at the nearest point would be 57dB(A) and 51 dB(A) at night with only the barrier. These values are prior to the inclusion of character penalties. At 62 dB(A) and 56 dB(A), the external noise levels would still be considered to be exceeding the indicative noise levels of the *Environment Protection* (Noise) Policy 2007.

The requirements of only having one floor for the residential receivers closer to the barrier is supported by the EPA as the height of the barrier is not sufficient to ensure amenity for higher floors.

The acoustic report therefore recommends that the lowest level of attenuation recommended by MBS010 be included as well to ensure that internal noise levels achieve the desired outcome. As discussed, the main issue of this recommendation is that there is no legal mechanism to apply MBS010 for an industrial interface, beyond a voluntarily negotiated outcome through a development application.

The recommendations also means that at worst case scenario external amenity may not be sufficient if only the barrier is applied for some of the closer receivers. This may be alleviated somewhat by the smart arrangement of allotments.

The SONUS report has correctly based recommendations on the worst case scenario, noting a 1 in 10 day non-compliance would likely cause annoyance for future residents.

Regards

**James** 

## **James Cother**

Principal Adviser, Planning Policy & Projects

Planning and Impact Assessment Environment Protection Authority Phone (08) 820 42093 211 Victoria Square Adelaide 5000



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Please consider the environment before printing this e-mail.

From: Kayla Gaskin-Harvey [mailto:kayla@futureurban.com.au]

Sent: Monday, 7 February 2022 5:54 PM

To: Cother, James (EPA) <James.Cother@sa.gov.au>

Subject: RE: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Hi James,

I hope you're well.

Have you had an opportunity to review the below?

Kind regards,

**KAYLA GASKIN-HARVEY** 

**Associate Director** 



M. 0421 957 656

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A. Level 1, 74 Pirie Street, Adelaide, SA, 5000

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From: Kayla Gaskin-Harvey < kayla@futureurban.com.au >

Sent: Tuesday, 25 January 2022 11:48 AM

To: Cother, James (EPA) <James.Cother@sa.gov.au>

Cc: Chris Turnbull < ct@sonus.com.au >

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Hi James,

Thankyou for your feedback below. That sounds quite positive and that the site contamination matters have been resolved.

A copy of the updated acoustic report is attached as discussed. Based on the advice from the AGD and Sonus, we propose to apply the Interface Management Overlay to the entire Affected Area.

If you have any questions, please do not hesitate to let me know.

Kind regards,

KAYLA GASKIN-HARVEY

**Associate Director** 



M. 0421 957 656

E. kayla@futureurban.com.au

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A. Level 1, 74 Pirie Street, Adelaide, SA, 5000

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From: Cother, James (EPA) <James.Cother@sa.gov.au>

Sent: Monday, 24 January 2022 1:58 PM

To: Kayla Gaskin-Harvey <Kayla@futureurban.com.au>

Subject: [SPAM]RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

#### **OFFICIAL**

Hi Kayla,

Thank you for taking my call earlier today. I look forward to the updated Sonus report.

In the meantime see below for a brief summary on site contamination matters.

#### Site contamination

Further to the EPA's correspondence on the O'Sullivan Beach Residential Code Amendment dated 20 October 2021 (EPA ref: 603-323), the EPA has now reviewed the following information:

- Preliminary Site Investigation (PSI) and Targeted Site Investigation, Gumeracha Road, O'Sullivan Beach, SA. Prepared by wsp and dated 25 September 2020 (the PSI)
- O'Sullivan Beach Residential Code Amendment Residual Contamination Review. Prepared by Shya Jackson of wsp and dated 1 December 2021. Ref: PSI20574-SHJ-SA-ADL-CLM-MEM-Rev A. (the memorandum)
- Phase 1 and 2 Environmental Due Diligence (EDD) Assessment. Prepared by WSP and dated 31 March 2014. (the EDD report)

The memorandum and EDD both include additional site history information that sufficiently addresses the data gaps previously identified by the EPA. Collectively, the memorandum, PSI and the EDD report appropriately and adequately considers and identifies site contamination issues that are present at the site.

In addition, the site contamination consultant has concluded following review of site contamination information held for the site and broader area of land, that the site can be made suitable for residential purposes with additional assessment and remediation (if required) to be undertaken at the land division stage. Further investigations will also provide further information to allow the EPA to determine the appropriate practitioner to provide a statement of site suitability in the event an EPA referral is required.

## Regards

## **James Cother**

Principal Adviser, Planning Policy & Projects
Environment Protection Authority | P (08) 8204 2093

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From: Kayla Gaskin-Harvey < Kayla@futureurban.com.au >

Sent: Wednesday, 19 January, 2022 4:25 PM

To: Cother, James (EPA) < <u>James.Cother@sa.gov.au</u>>

Cc: Chris Turnbull <ct@sonus.com.au>

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Hi James,

Happy new year. I hope this email finds you well.

I have spoken with the AGD-PLUS since we previously spoke and a copy of their correspondence is attached. They agree that the Interface Management Overlay is the best approach.

In the light of this, the Noise and Air Emissions Overlay and the Technical and Numeric Variation Overlay are no longer proposed. The Interface Management Overlay will continue to be applied to the land.

Sonus are preparing an updated Acoustic Report that has regard to this and any acoustic techniques referred to by Sonus, Future Urban will propose the suitable planning mechanism to address these. Ideally this will be through policy within the Planning and Design Code. However, other options will be explored if necessary.

We look forward to receiving your updated response in relation to site contamination soon and will send through the updated acoustic information when this is available.

Kind regards,

KAYLA GASKIN-HARVEY

**Associate Director** 



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From: Cother, James (EPA) < <u>James.Cother@sa.gov.au</u>>

Sent: Monday, 13 December 2021 3:46 PM

To: Kayla Gaskin-Harvey < Kayla@futureurban.com.au>

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

**OFFICIAL** 

Hi Kayla,

Thank you for the package of information in relation to the O'Sullivan Beach Residential Code Amendment.

In terms of timing, I think it's probably more likely to be early in January 2022 for a formal written response.

In the interim, AGD-PLUS has confirmed that the Noise and Air Emissions Overlay/MBS 010 was not designed to work with industrial noise/emission sources and that the Interface Management/Significant Interface Management Overlays and Interface between Land Use General Development Policies are more likely to address this (i.e. so MBS 010 will not apply).

Regards

#### **James Cother**

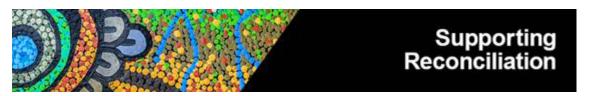
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From: Kayla Gaskin-Harvey < Kayla@futureurban.com.au>

Sent: Monday, 13 December, 2021 10:01 AM

To: Cother, James (EPA) < <u>James.Cother@sa.gov.au</u>>

**Cc:** Michael Osborn <<u>michael@futureurban.com.au</u>>; Jackson, Shya <<u>Shya.Jackson@wsp.com</u>>; Chris Turnbull <<u>ct@sonus.com.au</u>>;

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Hi James,

Further to our previous correspondence with me, WSP and Sonus, I write in response to the feedback received from the EPA in relation to the O'Sullivan's Beach Code Amendment.

As part of this response, I have attached the following documents:

- A new Environmental Noise Assessment prepared by Sonus, removing reference to the former standards and including noise modelling for a period of 11 days
- A memorandum prepared by WSP, confirming that 'WSP are satisfied that the land can be made suitable for a residential purpose' and providing more clarification regarding the matters raised by the EPA

Based on the feedback from WSP and Sonus, I can confirm the following in relation to the Code Amendment:

• The Planning Development and Infrastructure (General) Regulations 2017, Practice Direction 14 – Site Contamination and the Site Contamination General Development Policies within the Planning and Design Code all work together to ensure that the means of making the site suitable for a residential use will be determined and implemented as part of a future land use or land division development application. Accordingly, no further changes to the Code Amendment are proposed in relation to site contamination.

- We will update the Code Amendment to:
  - Include a Noise and Air Emissions Overlay for a width of 100 metres from the eastern boundary, ensuring future dwellings are acoustically attenuated in accordance with MBS 010:
  - Increase the depth of the Interface Management Overlay from 10 metres to 100 metres, ensuring that there is policy enabling a relevant authority to require an acoustic barrier as part of the assessment of a future DA affecting the land (i.e. for land division and/or a dwelling); and
  - Include a Technical and Numeric Variation that designates the area shown as 'Single Storey dwellings' in Sonus' report as subject to a maximum building height of 1 level (this area is 45 metres in width).

I am happy to discuss the above in a meeting or over the phone if you feel it would assist.

I also kindly request that you confirm in writing whether the above adequately addresses your feedback in relation to site contamination and noise.

Should you have any questions, please do not hesitate to contact me on 0421 957 656.

Kind regards,

KAYLA GASKIN-HARVEY

**Senior Consultant** 



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From: Cother, James (EPA) <James.Cother@sa.gov.au>

Sent: Wednesday, 17 November 2021 9:56 AM

To: Kayla Gaskin-Harvey <Kayla@futureurban.com.au>

Cc: 'John Kefalianos' ; Michael Osborn <michael@futureurban.com.au>; Chris Turnbull

<<u>ct@sonus.com.au</u>>

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

OFFICIAL

Hi Kayla,

I've had a conversation with Chris Turnbull (Sonus) and Shya Jackson (WSP) regarding acoustics and site contamination respectively. I believe they have also spoken to EPA specialists to clarify expectations.

I understand and support your reasons for applying the Interface Management Overlay, and this Overlay still has a role to play at the Planning Consent stage, although the proposed spatial application may need review once Sonus complete their work.

I've also contacted the AGD-PLUS Building Team to clarify the practical application of the Noise and Air Emissions Overlay ("N&AE Overlay") together with the Ministerial Building Standard 010: Construction requirements for the control of external sound ("MBS 010"). My concern is that even if the N&AE Overlay applies through the Planning and Design Code it may in effect not give rise to any mandatory obligation under MBS 010 at the Building Rules Consent stage having regard to the standard's scope and definitions. I'm awaiting a response from AGD-PLUS.

So there a few moving pieces to work through before the policy solution is resolved.

#### Regards

#### **James Cother**

Principal Adviser, Planning Policy & Projects
Environment Protection Authority | P (08) 8204 2093

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Please consider the environment before printing this e-mail.

From: Kayla Gaskin-Harvey < Kayla@futureurban.com.au>

Sent: Tuesday, 16 November, 2021 5:19 PM

To: Cother, James (EPA) <James.Cother@sa.gov.au>

Cc: 'John Kefalianos' < johnk@financelab.com.au >; Michael Osborn < michael@futureurban.com.au >; Chris Turnbull

<ct@sonus.com.au>

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Hi James,

I hope you're well.

I believe Chris Turner may have contacted you directly since my email below. However, subject to the updated information from Sonus, would the below approach resolve your concerns regarding the planning mechanisms for enforcing the acoustic measures?

If you have any questions, I am happy to discuss this via phone or in person.

Kind regards,

KAYLA GASKIN-HARVEY

**Senior Consultant** 



**M.** 0421 957 656

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From: Kayla Gaskin-Harvey

Sent: Tuesday, 9 November 2021 5:52 PM

To: Cother, James (EPA) < <u>James.Cother@sa.gov.au</u>>; Chris Turnbull < <u>ct@sonus.com.au</u>>

**Cc:** Jackson, Shya <<u>Shya.Jackson@wsp.com</u>>; 'John Kefalianos' Michael Osborn

<michael@futureurban.com.au>

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Hi James,

Thanks for your response.

In relation to the planning mechanisms:

- We will apply the Noise and Air Emissions (N&AE) Overlay, and can confirm this in our response to the EPA.
- The modelling and response being prepared by Sonus will inform the extent/depth of the Overlay.
- We are also looking at whether imposing a Technical and Numeric Variation at the building height will address some of the noise attenuation challenges with two storey dwellings, if this cannot be addressed by the N&AE Overlay (i.e. ensuring that two storey buildings are setback from the boundary) again this will be informed by Sonus' advice.

To revisit our conversation from last week, our investigations and reasons for applying the Interface Management Overlay (rather than the N&AE Overlay) concentrated on the applicable policies for planning consent only, not for building consent. As a result, the N&AE Overlay was not initially proposed (see below excerpt from page 15 of the Code Amendment Report):

'It is further noted that the Code has a Noise and Air Emissions Overlay. However, General Neighbourhood Zone Tables 2 and 3 do not apply the policy contained within this Overlay to development. As a result, this Overlay has not been chosen as it would have no influence on the future development of the land.'

However, it is apparent that this Overlay will enable the noise attenuation to be considered as part of the building consent of the future dwellings, which we had not considered previously. Accordingly, we will update the Code Amendment to include this Overlay, to the satisfaction of the EPA.

Subject to the updated information from Sonus, would this resolve your concerns regarding the planning mechanisms for enforcing the acoustic measures?

If easier to discuss this over the phone, please do not hesitate to give me a call.

Kind regards,

KAYLA GASKIN-HARVEY

**Senior Consultant** 



**M.** 0421 957 656

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From: Cother, James (EPA) < <u>James.Cother@sa.gov.au</u>>

Sent: Tuesday, 9 November 2021 5:21 PM

To: Chris Turnbull <ct@sonus.com.au>; Kayla Gaskin-Harvey <Kayla@futureurban.com.au>

Cc: Jackson, Shya <Shya.Jackson@wsp.com>; 'John Kefalianos' ; Michael Osborn

<michael@futureurban.com.au>

Subject: Re: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Hi Chris,

I was aware that MBS 010 also applies to mixed land use areas, although the affected area is not a mixed land use area. I also understood that Future Urban were not recommending the application of the Noise and Air Emission Overlays to the Affected Area.

So based on my understanding of the Overlay/MBS 010 there would be no mandatory obligation to do anything at the Building Rules Consent stage because the affected area would not identified as a 'noise attenuation area' and the industrial area is not a 'designated sound source'.

Regards

## **James Cother**

Principal Adviser, Planning Policy & Projects

Environment Protection Authority | T (08) 820 42093

From: Chris Turnbull < <a href="mailto:ct@sonus.com.au">ct@sonus.com.au</a> Sent: Tuesday, November 9, 2021 5:07 PM

**To:** Cother, James (EPA) < <u>James.Cother@sa.gov.au</u>>; 'Kayla Gaskin-Harvey' < <u>Kayla@futureurban.com.au</u>> **Cc:** Jackson, Shya < <u>Shya.Jackson@wsp.com</u>>; 'John Kefalianos' ; 'Michael Osborn'

<michael@futureurban.com.au>

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Hi James,

Just to clarify, the Overlay and MBS 010 do not only apply to transport noise (road rail and aircraft) but also apply to Mixed Land.

Inclusion of an area in the Overlay at the interface with an industrial area results in a mandatory obligation at the Building Rules Consent stage to provide upgraded residential facade constructions. These upgraded facades not only assist in achieving an appropriate level of amenity for residents but also assist in protecting the ongoing operation of the industries.

Please let me know if you would like to discuss.

#### **Chris Turnbull**

Director 0417 845 720 ct@sonus.com.au

Sonus Pty Ltd www.sonus.com.au



From: Cother, James (EPA) [mailto:James.Cother@sa.gov.au]

Sent: Tuesday, 9 November 2021 4:54 PM

**To:** Kayla Gaskin-Harvey

Cc: Jackson, Shya; ct@sonus.com.au; John Kefalianos; Michael Osborn

Subject: Re: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Thanks Kayla,

I'll pass on the contact details.

In relation to acoustics, it was also about the lack of planning mechanisms available given that MBS 010 only works with the Nosie and Air Emissions Overlay and neither the Overlay nor MBS 010 applies to industrial noise sources.

Regards

#### **James Cother**

Principal Adviser, Planning Policy & Projects

Environment Protection Authority | T (08) 820 42093

From: Kayla Gaskin-Harvey < Kayla@futureurban.com.au >

Sent: Tuesday, November 9, 2021 4:28 PM

To: Cother, James (EPA) < <u>James.Cother@sa.gov.au</u>>

Cc: Jackson, Shya <Shya.Jackson@wsp.com>; ct@sonus.com.au <ct@sonus.com.au>; John Kefalianos

Michael Osborn <michael@futureurban.com.au>

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

Hi James,

I hope you are well.

I am emailing to provide a quick update following our conversation last week.

WSP and Sonus have been engaged to respond to the feedback from the EPA and acoustic modelling has started.

They would like to be able to discuss their responses with the EPA's acoustic and site contamination experts respectively to ensure that all feedback is addressed to the EPA's satisfaction.

Would you be able to provide these contact details to them directly:

- WSP Contact: Shya Jackson, Shya.Jackson@wsp.com
- Sonus Contact: Chris Turnbull, ct@sonus.com.au

Upon receipt of their responses, we are aiming to finalise and issue the Interim Engagement Report quite quickly and we would like to have a response from the EPA confirming if the feedback has been

adequately responded to before doing so. As a result, we are hoping direct discussion with the relevant experts will enable you to be able to provide a quick response to the updated information, following receipt.

If you have any questions, please do not hesitate to contact me on 0421 957 656.

Kind regards,

KAYLA GASKIN-HARVEY

**Senior Consultant** 



M. 0421 957 656

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From: Cother, James (EPA) < <u>James.Cother@sa.gov.au</u>>

Sent: Thursday, 4 November 2021 2:13 PM

**To:** Kayla Gaskin-Harvey < <a href="mailto:Kayla@futureurban.com.au">Kayla@futureurban.com.au</a>>

Subject: RE: O'Sullivan Beach Residential Code Amendment - EPA 603-323 [SEC=OFFICIAL]

**OFFICIAL** 

Hi Kayla,

I've spoken to our Site Contamination Branch (SCB) about the data gaps in the WSP report.

Here is what the ASC NEPM (Volume 3 Schedule B2) states about interviews:

## 3.3.18 Interview information

Interviews with past property or business owners and occupiers and employees should be conducted where practicable. The objective of interviews is to confirm information collected in the desktop study and to gain additional relevant site information (for example, source of drinking water, presence of wells on-site, date of connection to sewer, history of spills and leaks, arrangements for liquid and solid waste disposal etc.). Owners and occupants of neighbouring properties may also be able to provide useful information.

So the advice from our SCB is that if interviews are not practicable, the site contamination consultants will need to document very clearly the issues around why no interviews were completed and use other lines of evidence to clearly demonstrate activities undertaken at the site. Often, interviews with past owners / occupiers / workers provides excellent anecdotal evidence of waste disposal practices which is one of the data gaps around this site, so they are a critical part of the site history process.

Our SCB will require solid lines of other evidence to fill any gaps.

Regards

**James Cother** 

Principal Adviser, Planning Policy & Projects
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From: Kayla Gaskin-Harvey < Kayla@futureurban.com.au>

Sent: Thursday, 28 October, 2021 10:08 AM

To: Cother, James (EPA) < <u>James.Cother@sa.gov.au</u>>

Subject: O'Sullivan Beach Residential Code Amendment - EPA 603-323

Hi James,

I hope this email finds you well.

Further to my voicemail, I am contacting you regarding the EPA's feedback on the O'Sullivan Beach Residential Code Amendment.

Would you be able to give me a call to discuss?

We are liaising with WSP and Sonus regarding EPA's feedback however, wanted to discuss site contamination with you before deciding how to proceed.

Kind regards,

KAYLA GASKIN-HARVEY

**Senior Consultant** 



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**MEMO** 

TO: John Kefalianos, Kayla Gaskin-Harvey

FROM: Shya Jackson

SUBJECT: O'Sullivan Beach Residential Code Amendment – Residual Contamination

Review

**OUR REF:** PS120574-SHJ-SA-ADL-CLM-MEM-Rev A

DATE: 1 December 2021

The following memorandum seeks to address the comments from the South Australian Environment Protection Authority (SA EPA) with regards to the O'Sullivan Beach Code Amendment and provides responses to the potential offsite and onsite issues raised as part of their review documented in a letter ref EPA603-323 dated 20 October 2021 (Phil Hazell to Kayla Gaskin Harvey).

Table 1 identifies the particular comment and provides evidence or commentary around how the gap has or may be addressed in the future.

In addition, it is understood that the SA EPA hold several reports for the upgradient Class 1 PCA site under EPA reference number 61181. These reports were requested from the EPA and comprised the following documents noted in chronological order.

- 20130621 HMRMP, 29 Morrow Road (former Walker Australia site)
- 61181 01 S83A notification 18092013
- 61181 20130920 REVISED DRAFT EDD, entire site
- 61181\_02 Section 83A notification update 28102013, additional chemical substances
- 20131021 EDD, Walker Australia site
- 61181 20160504 Contamination Assessment Draft, former Hills site for Bluescope Steel
- 61181 20160714 SEMP Rev3, former Hills site environmental management plan for Bluescope steel
- 61181 20161220 Sep2016 SEMP Monitoring Event, first event under SEMP
- 20180223 WSP Walker DD report 2018, 51 85 Morrow Road, former Walker site
- 61181\_03 S83A notification 08032018, minor perched PCE not source site
- 61181 20180418 Oct2017 SEMP Monitoring Event, second event under SEMP
- 61181\_04 S83A notification update 06112018, Orrcon facility, part of 29 Morrow Road
- 61181 20190503 ROA & SMP, Orrcon facility, part of 29 Morrow Road
- 61181 20201127 Annual Mon Event #5 Sept 20, Orrcon facility, part of 29 Morrow Road
- 61181 20210222 OSB\_Remediation\_Report\_2020\_Rev\_0, Orrcon facility
- 61181 20210222 Site Remediation Progress Report (duplicate of above)
- 61181\_05 S83A notification update 04112021, updated for Cadmium

These reports indicate a progressive assessment of impacts to the Orrcon site by JBS&G which included attempts of remedial activity of the perchloroethylene present in perched water as well as soil vapour extraction and treatment at the site. The latest report supplied in February 2021 stated the following:

The environmental assessment works completed by JBS&G on an annual basis (for the past five years) have not identified risks associated with the contamination to on-site commercial / industrial workers or to off-site properties (which uses include commercial / industrial and residential).

The perched water (which generally occurs between 2 and 5 m bgl) does not appear to be continuous throughout the site and based on the monitoring results over the past 12 months, does not appear to be well connected across the western portion of the site. The perched water is impacted, predominantly by PCE. All perched water wells were impacted with PCE with the exception of BHB37 which is located in the north western portion of the site.

Groundwater occurs at around 25 m bgl. The concentrations of PCE in groundwater are low with the highest concentrations recorded in the south western corner of the site (adjacent to the former paint shop) at GW02.

Excerpt from EPA held report reference: 61181 20210222 OSB\_Remediation\_Report\_2020\_Rev\_0.pdf

Therefore, the potential impact of migration from site contamination present in perched water and soil vapour approximately 100m from the subject site appears to be low. In addition the depth to groundwater and lack of source pathway receptor linkages within the subject site (no groundwater extraction wells present or proposed) mean that the risks to site occupants from impacts in the deeper aquifer are similarly low.

The *Planning Development and Infrastructure (General) Regulations 2017*, Practice Direction 14 – Site Contamination and the Site Contamination General Development Policies within the Planning and Design Code all work together to ensure that the means of making the site suitable for a residential use will be determined and implemented as part of a future land use or land division development application. Therefore, based on the preliminary and intrusive investigations conducted to date and having regard to the above reports and findings, WSP are satisfied that the land **can** be made suitable for a residential purpose.

## **Background**

The Gumeracha Road (subject) site comprises two allotments under a new title issued in May 2014 to Gumeracha Road Pty Limited. Allotment 67 FP 152643 and Allotment 20 FP 115116 bounded by Gumeracha Road to the west, Baden Terrace to the north, residential dwellings and Moorong Road to the south. To the east are the former Hills Holdings buildings previously occupied by Orrcon and leased to Bluescope Steel and Walker Automotive Pty Limited. Whilst the site is zoned Strategic Employment Zone it is surrounded on 3 sides by a residential zone and dwellings.

As part of the due diligence process prior to purchase during the cooling off period Gumeracha Holdings allowed Kambitsis Group to undertake targeted intrusive investigations.

The Phase 1 ESA was undertaken in July 2020 and the limited soil investigation comprised the following:

- advancement of 20 test pits (TP01 to TP20) up 2.2 mBGL targeting areas of interest identified during the PSI which included historical site features from 1979, 1989, 2004, 2010, 2013 and 2014
- advancement of several boreholes targeting:
  - the water drainage alignments identified during the site inspection in the southern portion of the site
  - advancement of 8 boreholes to a depth of 3 mBGL targeting the two underground stormwater pipes in the southern portion of the site
  - advancement of 2 boreholes to a depth of 4 mBGL targeting the underground sewerage pipe along the easement in the boundary between the northern and southern allotments
- Potential for perched water and migration from sources upgradient was examined via the soil bore investigation documented above, including PID readings that remained below 1ppm
- Natural groundwater assessment was precluded due to restricted timing and likely depth being in the order of > 30m below ground level, therefore the impacts from groundwater contaminants migrating

under the site were likely to be low with respect to vapour impacts to future buildings proposed for the site. Since no groundwater abstraction was proposed in the future redevelopment, the source pathway receptor linkages were incomplete.

The main objectives of the investigation were to understand the contamination status of the site and the feasibility of the proposed rezoning and development in the context of the site's contamination profile.

The investigation also sought to assess if potential contamination from off site sources may have migrated onto the site through preferential pathways identified during the site inspection.

The report concluded the following;

Based on the intrusive investigations undertaken to date, chemical substances in soils were not found to exceed the relevant health based guidelines for residential or commercial/industrial land use. Therefore, site contamination of soils taking into account residential or commercial/industrial land use has not been found on the subject site.

Potential migration of chemical substances onto the site from the adjacent Class 1 activity was investigated via assessment of the soils in close proximity to the drainage systems bisecting the site from properties to the east. No evidence of gross soil impacts or volatile organic compounds were found within soils at depths corresponding to the base of this underground infrastructure. Therefore, the likelihood that the site has been impacted by historical site contamination emanating from an adjacent land use appears to be low.

The following table provides specific responses to the concerns raised in the EPA letter.

Table 1 Responses to EPA letter 063-323

ITEM	COMMENT	RESPONSE
1	There were exceedances of metals (zinc) above ecological investigation levels in four surface soil samples, as well as concentrations of metals, Polycyclic Aromatic Hydrocarbons (PAH) and Total Recoverable Hydrocarbons (TRH) above the laboratory limit of reporting with Benzo(a)pyrene (B(a)P TEQ) exceeding National Environment Protection (Assessment of Site Contamination) Measure 1999 Health Investigation Levels for Residential A1 and B2 as well as Recreational use.	Noted, however these are restricted to surficial samples that will be addressed as part of site redevelopment works
2	In relation to neighbouring sites, the EPA holds site contamination information for the adjacent site (currently undertaking a class 1 PCA being 'Metal coating, finishing or spray painting'), including notifications of site contamination that affects or threatens underground water. The contaminants of concern include chlorinated hydrocarbons which can cause vapour intrusion risk at high concentrations.	Noted, the potential for this was acknowledged as part of the targeted intrusive investigations conducted by WSP during the cooling off period and assessed using soil bores along 3 pipelines bisecting the site from upgradient. No elevated PID readings and no gross impacts in soils were found
3	Site history information in Section 2.4 of the PSI has an error, listing the same CT and allotment twice, omitting CT 6214/472	Noted, this is a typographical error on the table header and not material. Details for CT6214/472 were provided in the remainder of the table and in other sections of the report e.g. 2.4.3 EPA Section 7 search
4	The site history section of the PSI notes that the site was owned by Hills Industries Limited (and related entities) as part of the larger industrial site, and states that	The report undertaken during the cooling off period documented a previous 2014 report which included interviews conducted in 2013 that confirmed that no

ITEM	COMMENT	RESPONSE
	limited commercial activity took place on the affected area. However, the PSI does not contemplate or provide adequate information on the potential for the affected area to previously have been used for PCAs during the some 50 years of ownership by Hills Industries.	PCAs were undertaken at the site which was investigated via intrusive investigations both in 2013 and in 2020. Historic features were documented in the site plans and a targeted intrusive investigation undertaken in 2020.
5	The PSI provides no documented interviews with former owners or employees of the site as to what activities occurred on the affected area. Historic aerial photographs show pathway / roadways into the affected area as well as soil stockpiling activities on the southern boundary, with a note that this material was removed off-site.	The personnel associated with the former owners vacated the site in 2014, interviews were undertaken in 2013 when the Environmental Due Diligence was completed, and these were considered when the targeted intrusive investigation was undertaken in 2020. Details of these interviews are provided below.
6	No groundwater investigations were undertaken as part of the PSI. Groundwater conditions at the site are unknown, with known volatile chemicals present in groundwater adjacent to the site. Site contamination reports held for the neighbouring site indicate that hydrogeological conditions at the site may be restricting movement of groundwater, with dissolved phase groundwater contamination not expected to be moving on to the subject site	As noted by EPA, natural groundwater is likely to be intersected deeper than 25 m below ground level and therefore any volatile contaminants were unlikely to interact with a redevelopment. The potential for intermittent perched water was noted and the targeted bore investigations along existing infrastructure that could form a pathway was investigated.
7	Noting these data gaps within the site history information, the PSI report does not currently provide sufficient information for the EPA to make an informed decision if the affected area can be made suitable with respect to site contamination for the proposed rezoning.	The PSI report includes targeted intrusive investigations across the site to identify any historical activities that may impact on site redevelopment. These investigations found no evidence of uncontrolled dumping or elevated concentrations of chemical substances that were indicative of site contamination under the EPA definition. This work was based on a previous Environmental Due Diligence investigation conducted in 2013 which already documented the gaps that the EPA have indicated concern with. Since the EPA hold copies of the EDD documents for the Orrcon and Walker sites, WSP have provided a copy of this report appended to this memorandum.
8	Further site history investigations (and potentially detailed site investigations) should be undertaken to give certainty that the site can be made suitable for the proposed residential land use.	Two rounds of site history investigations have been conducted at this site in 2013 and 2020. Both investigations have included documented intrusive investigations where no evidence of elevated concentrations of chemical substances that related to the definition of site contamination under Section 5B of the Environment Protection Act, 1993. In general, the analytical results were below the NEPM criteria for both commercial/industrial and residential land use. Hence the rationale for supporting the code amendment to enable future redevelopment for a residential land use.

## **Key Aspects to support Code Amendment**

Whilst this site was historically owned by an entity that conducted a Class1 Potentially Contaminating activity, no gross contamination of the subject site was found during the initial targeted investigations.

Two environmental due diligence phases have been conducted at the site, one in 2013 when Hills Holdings were vacating the site, which included site interviews and a subsequent PSI, while targeted intrusive investigations were conducted in 2020 as part of the property transaction.

Nineteen borehole locations were advanced in 2013 and a further 20 test pit and 11 targeted soil bore locations were advanced in 2020 seeking evidence of site contamination being present at the Gumeracha Road site.

None of the soil samples analysed in 2013 or 2020 exceeded the adopted human health criteria, and where there were exceedances of ecological investigation levels documented in 2020, these were in surficial samples that could be managed during redevelopment works.

No evidence of any major uncontrolled waste disposal pits was found within the site and this was supported by the 2013 investigation of the entire site by WSP, dated 31 March 2014, which included an interview with the General Manager on 11 June 2013 who confirmed that there were no waste pits located at the site. An excerpt of this interview is provided below.

## 2.5 Site Interviews

The General Manager – Manufacturing Operations for Hills Holdings Antenna & TV Systems was briefly interviewed during the site inspection on 11 June 2013.

It should be noted that although Hills Holding Antenna & TV Systems do not control the site, they do undertake some antenna/reception testing within the centre of the site. Based on the limited activities undertaken by Hills Holding Antenna & TV Systems, the General Manager provided the following information:

- The site has not been used for the storage of chemicals/oils/lubricants;
- No underground or above ground storage tanks are/have been located within the site;
- There has been no generation of hazardous materials or wastes;
- No abstraction or monitoring bores are present;
- No truck/car maintenance areas have been located on-site;
- No stained soils or discoloured, dying or stressed vegetation;
- No odours from soils have been noted;
- No septic tanks located within the site;
- No waste pits have been located within the site.

Excerpt from Phase 1 and 2 Environmental Due Diligence (EDD) Assessment, dated 31 March 2014.

The site is currently zoned as Strategic Employment but is surrounded on three sides by residential properties to the north, south and west. Therefore, a residential redevelopment at the subject site would not be out of keeping with the overall amenity and land use mix across the locality.

Whilst the adjacent Orrcon and Walker Corporation sites have been identified as having potentially contaminating activities within soil vapour and intermittent perched water, there is no evidence of these impacts directly migrating to the Gumeracha Road site. The EPA notes in their letter "Site contamination reports held for the neighbouring site indicate that hydrogeological conditions at the site may be restricting movement of groundwater, with dissolved phase groundwater contamination not expected to be moving on to the subject site"

During the JBS&G investigations, the source of the perched water at the Orrcon site was identified as being likely from leaking water infrastructure with limited evidence of migration beyond that site boundary. Where potential preferential pathways were noted during the 2020 site investigation, these were addressed through the advancement of targeted soil bores adjacent to the pipes bisecting the Gumeracha Road site.

Detailed investigations are not normally required as part of a Code Amendment, and these further investigations are usually undertaken at the development application stage when site layouts, land uses etc are known. WSP has previously stated that it is possible that an auditor will be required to make a statement around suitability of a site for a sensitive land use (Residential) and this could include further intrusive investigations around the development application stage.

The *Planning Development and Infrastructure (General) Regulations 2017*, Practice Direction 14 – Site Contamination and the Site Contamination General Development Policies within the Planning and Design Code all work together to ensure that the means of making the site suitable for a residential use will be determined and implemented as part of a future land use or land division development application. This enables the land owner to have the assurance (i.e. an approved rezoning applying the General Neighbourhood Zone) to the land *before* investing in the more detailed investigations. This is consistent with the approach taken with other Code Amendments.

It is understood that the focus of the EPA at the code amendment stage is to ensure that there is evidence that site contamination issues have been appropriately and adequately considered and identified, to give confidence that the rezoning is appropriate. And their concern is based on similar sites that have shown significant site contamination issues associated with uncontrolled waste dumping.

In the intrusive investigations conducted at the site which included targeted and grid based investigations, documented in 2014 and 2020 reports, there is no evidence that the vacant land (subject site) was used to bury wastes, with natural soils being encountered in the 40 plus locations advanced to date.

It is recommended that the 2014 report also be submitted to the EPA with this memorandum for their reconsideration as it may provide additional comfort that sufficient investigations have been undertaken at the site to support a code amendment and facilitate the progression of a more sensitive land use at the site.

Yours sincerely,

Shya Jackson

Team Manager SA, CLM