

Supplementary  
Submission  
No 471a

## INQUIRY INTO IMPACT OF THE WESTERN HARBOUR TUNNEL AND BEACHES LINK

**Organisation:** Willoughby Environmental Protection Association (WEPA)

**Date Received:** 20 August 2021

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Dear Sir/Madam,

The Willoughby Environmental Protection Association Inc (WEPA) wishes to supplement its submission in a number of respects as a result of concerns we've expressed in relation to the management of contamination and how those concerns have been responded to.

Our experience in this regard is set out in more detail below, and has relevance to three of the committee's terms of reference:

1. terms of reference (d) and (f) relating to governance and consultation

Our concern is that, as detailed below, it appears that DPIE allows a proponent to water down an undertaking given in the EIS, and presumably in public consultations, in its response to submissions on the EIS even though the watering-down doesn't arise from matters raised in the submissions being responded to. The watered-down provision then becomes the enforceable Condition of Approval, whereas the public would be entitled to believe that the undertaking originally given would be honoured. This is fundamentally unfair. If the proponent had originally put the watered-down undertaking in the EIS members of the public would have an opportunity to raise objections to it in their submissions. The proponent would then have had to defend its position in its response to submissions and the DPIE would have an opportunity to consider the appropriate Condition of Approval in light of the submissions and the response.

2. term of reference (k) relating to the adequacy of processes responding to various impacts affecting residents

As detailed below our recent experience is that DPIE is failing to enforce Conditions of Approval which should protect residents from contamination risks, instead allowing work to commence before those risks have been properly assessed.

Please see attached the letter from WEPA to the Department of Planning, Industry and Environment (DPIE) dated 10 August setting out our complaint in relation to the management of contamination at Cammeray Golf Course.

In summary the complaint relates to a Detailed Site Inspection Report (DSI) prepared in relation to six sites on the Cammeray Golf Course which are to be used for the installation of critical utilities, in preparation for the use of the site as a major construction site for the WFUWHT. The complaint alleges a number of failings in the DSI, relying in part on an assessment prepared for WEPA by an expert, a retired EPA accredited auditor, as to whether the DSI complies with the Contaminated Land Management Act (CLMA). The Conditions of Approval for the WFUWHT require the DSI to comply with the CLMA and our expert identified failings including:

1. not taking an adequate number of samples
2. incorrect management of samples involving volatile contaminants
3. impermissible averaging of results to bring them below the applicable Health Investigation Levels (HILs), without which the results at one location would have been over double that permitted for commercial/industrial use and more than 40 times the level for recreational use
4. using results from previous testing without appropriate verification

In going through the DSI WEPA also identified other issues of concern, including:

1. the DSI was not prepared by an independent expert but by Jacobs, one of the partners in the Sydney Program Alliance, a partnership standing to benefit from the project proceeding

2. although Transport for NSW (TfNSW) undertook in the EIS, and presumably in public consultations, to have DSIs reviewed by an "independent EPA accredited auditor" this commitment was watered down in TfNSW's response to submissions on the EIS, so that reviews would only be undertaken where the contamination was complex. This watering down cannot be justified by anything contained in the submissions that were being responded to, and it is concerning that DPIE allowed the watered down commitment to be the one that ultimately applied.
3. the exclusion of previous testing results which indicated asbestos pollution, and concerning levels of polycyclic aromatic hydrocarbons, on the basis that the sampling locations couldn't be identified, appears to be a false or misleading statement in the DSI
4. the DSI uses HILs applicable to industrial/commercial use although the sites adjoin land which will continue to be used as a golf course during construction, for which the HILs for recreational use would be applicable. If the HILs for recreational use were applied, the results would exceed them.

DPIE met with WEPA to discuss the concerns it raised in its letter on 13 August. At that meeting DPIE asserted that no DSI was required in relation to the six sites because Condition of Approval E115 only required the preparation of a DSI where there would be "disturbance" of land and, as the work involving the installation of critical utilities only involved the 'removal of grass' this didn't constitute "disturbance". DPIE did not contend that the DSI that was prepared complied with the CLMA and did not contest any of the matters raised by the WEPA engaged expert as to why it didn't. It said it was having the DSI reviewed but was unable to provide details as to the qualifications of the reviewer or a date for completion of the review.

The DPIE referred to the Staging Report prepared by the Environmental Representative (ER) engaged by the proponent which set out the Conditions of Approval applicable to the stage where critical utilities were installed and did not contest that the ER did not identify Condition E115 as not being applicable during this stage. The DPIE did not respond to WEPA's question as to whether the DPIE was applying a less stringent standard than that applied by the proponent's ER.

The DPIE also stated that it would not be imposing a requirement for perimeter monitoring for asbestos at this time, despite asbestos being identified as a site contaminant in earlier reports.

The DPIE did, however, state that it would be initiating an investigation as to whether section 10.6 of the Environmental Planning and Assessment Act had been breached by the statement in the DSI that the location of the earlier golf course boreholes, where asbestos and polycyclic aromatic hydrocarbons had been found, couldn't be located. Section 10.6 makes it an offence to make a false or misleading statement in a DSI,

WEPA considers this process and the responses from DPIE inadequate in that:

1. it is clear that the work involves "disturbance" - see attached photo taken at one of the six sites on 15 August. It is concerning that DPIE apparently seems to have accepted the self-interested assertion of the proponent without undertaking any inspection of what is one of the major construction sites for the WFUWHT.
2. even if it did only involve the 'removal of grass' this would be "disturbance" as contaminants such as asbestos can appear at any depth, and that discovered on previous testing, but excluded in this DSI, had been between 0.25-0.5 mtrs
3. it would appear that the DPIE is taking a less stringent approach than the proponent's ER
4. DPIE should not allow proponents to water down commitments given in EISs, and presumably public consultations, where such actions are not responding to submissions received

5. the watered-down Condition of Approval raised in WEPA's letter requires a DSI to be reviewed by an "EPA accredited auditor" where the contamination is "complex". The contamination in this instance is complex as the results of testing to date reveal uncontrolled dumping on the site. Yet DPIE is not having the DSI reviewed by an EPA accredited auditor and, on the basis of the so-far uncontested opinion of WEPA's expert, a retired EPA accredited auditor, the DSI does not comply with the standards it needs to, namely those set out in the CLMA.

If this process is a precursor to that which will occur when further DSIs are prepared and considered by DPIE, the community could have little faith that the protections afforded by the Conditions of Approval or the CLMA will be of much use in protecting children, residents, other park users and workers from dangerous contaminants.

Sincerely,

John Moratelli  
President, Willoughby Environmental Protection Association Inc.



10 August 2021

Department of Planning Industry and Environment

Cc: Rob Stokes, Minister for Planning; Jim Betts, Secretary, DPIE; Chris Ritchie, Director, Industry Assessments; Erica van den Honert, Executive Director, DPIE

Dear Mr Sherry

**Re: management of contamination at Cammeray Golf Course**

I am writing on behalf of the Willoughby Environmental Protection Association Inc. (**WEPA**) in relation to "Site Investigation Report – Cammeray Golf Course (WP12)" by Jacobs Group (Australia), date redacted (**Jacobs Report**). The Jacobs Report is stated to have been carried out for the Sydney Program Alliance (**SPA**).

WEPA is concerned that the Jacobs Report breaches the Conditions of Approval in relation to the Western Harbour Tunnel and Warringah Freeway Upgrade (**WHTWF**) and is seeking to have the DPIE take enforcement action in respect of the breaches.

I understand that WEPA member, \_\_\_\_\_, has already spoken to \_\_\_\_\_ on 16 July and \_\_\_\_\_ on 3rd August and alerted the DPIE to TFNSW's commitment (SG6), the high levels of benzo(a)pyrene and lead at BH15 and the exclusion of known contaminants in the EIS (asbestos and PAHs), which are discussed in detail below. The purpose of these calls was to enable the DPIE to begin investigations prior to receiving this letter. I understand that it is standard practice for agencies (e.g. EPA and SafeWork NSW) to begin investigations based on verbal complaints, particularly where public safety issues have been raised and immediate action is needed to protect the public.

**1. THE RELEVANT CONDITIONS OF APPROVAL BREACHED**

**1.1 TFNSW commitment (SG6) to undertake specific environment management measures**

Conditions of Approval A1 to A3 provide (emphasis added):

*A1 The Proponent must carry out the CSSI in accordance with the terms of this approval and generally in accordance with the:*

*(a) Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement – Volumes 1A-B and 2A-J (dated January 2020) (the EIS); and*

*(b) Western Harbour Tunnel and Warringah Freeway Upgrade Response to Submissions Report (dated September 2020) (the RtS).*

A2 The CSSI must only be carried out in accordance with all procedures, **commitments**, preventative actions, performance criteria and mitigation measures set out in the documents listed in Condition A1 unless otherwise specified in, or required under, this approval.

A3 In the event of an inconsistency between:

(a) the terms of this approval and any document listed in Condition A1 inclusive, the terms of this approval will prevail to the extent of the inconsistency; and

(b) any document listed in Condition A1 inclusive, the most recent document will prevail to the extent of the inconsistency.

The Response to Submissions Report contains the following section:

*After consideration of the issues raised in the public submissions, the environmental management measures for the project have been revised (Table D2-1).*

*The adjustments to the measures were made to: ...*

- *Modify the wording so that the outcome of a commitment is clearer to implement. Where new commitments have been added or new text has been added to an existing measure, it is in bold text. Where a commitment has been deleted or text from a commitment deleted, it appears as strikethrough text.*

*All revised environmental management measures would be incorporated into management plans*

The relevant part of Table D2-1 is reproduced below. By virtue of the combined operation of conditions A1 to A3, quoted above, Environmental Management Measure SG6 is now a Condition of Approval which needs to be complied with.

SG6	Construction	Impacts on site workers and/or local community through disturbance and mobilisation of	Potentially contaminated areas directly affected by the project will be investigated and managed in accordance with the requirements of guidance endorsed under section 105 of the <i>Contaminated Land Management Act 2008</i> .  This includes, but is not limited to, further investigations in potential areas of environment interest in the project footprint, including:	WHT/WFU
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Western Harbour Tunnel and Warringah Freeway Upgrade  
Submissions report

D2-22

D Revised environmental management measures, conclusion and references  
D2 Revised environmental management measures

Ref	Phase	Impact	Environmental management measure	Location
		contaminated material	<ul style="list-style-type: none"> <li>• Easton Park</li> <li>• Birchgrove peninsula (including Yurulbin Park)</li> <li>• Balls Head peninsula</li> <li>• Waverton Park</li> <li>• Warringah Freeway (from North Sydney to Cammeray).</li> </ul> <p>Subject to the outcomes of the investigations, a Remediation Action Plan will be implemented in the event that site remediation is warranted <del>prior to</del> <b>construction</b>.</p> <p>The Remediation Action Plan will be prepared and implemented in accordance with Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land (Department of Urban Affairs and Planning and EPA, 1998).</p> <p>An independent NSW EPA Accredited site Auditor will be engaged <b>where contamination is complex</b> to review <b>applicable</b> all contamination reports and evaluate the suitability of sites for a specified use as part of the project.</p>	

<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=EXH-2682%2120200914T005951.156%20GMT>

The contamination revealed by the Jacobs Report is complex because:

- of the difficulties in choosing the appropriate HILs
- the nature, scope and location of the contaminants is uncertain
- of the uncontrolled fill material identified by SMEC
- some samples show an exceedance of recreational HIL values and, if averaging is not applied, of industrial/commercial HIL values
- some of the contamination is odorous contamination
- the Jacobs Report recognises that further testing is needed before there are sub-surface works in areas such as around the hotspot at BH15
- the Jacobs Report recognises the need for a site auditor at least at some stage because of the nature and level of the contaminants being disturbed, potentially impacting sensitive users who may use the golf course and attend neighbouring schools. Normally a site auditor (who has a higher level of expertise and is independent) is involved throughout the whole of the project, rather than at the end of the project

These matters are covered in further detail in section 2.

Accordingly, an independent EPA site auditor needs to be engaged in accordance with SG6.

#### **1.1.1 An independent NSW EPA Accredited site auditor should be engaged even where contamination is not complex**

It is of great concern that, as part of the planning approval process, the proponent in its formal response to submissions waters down an undertaking given to members of the public in the EIS i.e. to engage an EPA accredited auditor to review all contamination reports; to a less stringent undertaking i.e. to engage an EPA accredited auditor where contamination is complex to review applicable contamination reports.

It is difficult to see what this watering down is in response to given the EPA's submission on the EIS which relevantly contains the following:

*The desktop review identifies several areas of environmental interest, and it is considered that site remediation will be a likely outcome. However, site investigations are required to determine what remedial measures should be implemented. As such, the EPA recommends that the proponent be required to engage a NSW EPA-accredited Site Auditor for the duration of construction to ensure that any work required in relation to soil or groundwater contamination is appropriately managed.*

See

<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=PAE-1961%2120200312T064027.397%20GMT>

The watering down is also inconsistent with the statement introducing Table D2-1, which contains the modified SG6, i.e.:

*After consideration of the issues raised in the public submissions, the environmental management measures for the project have been revised (Table D2-1). The adjustments to the measures were made to:*

- *Make additional commitments based on the response to submissions within this report*

- *Make additional commitments based on the findings of further assessments provided within this report*
- *Make additional commitments based on the additional consultation carried out during the preparation of this report*
- *Modify the wording so that the outcome of a commitment is clearer to implement.*

Members of the public are entitled to believe that commitments made in the EIS will be honoured rather than watered down in documents they are unlikely to be aware of and have no opportunity to respond to.

The Planning Secretary should make directions, if necessary, under Condition A4(a) to require TfNSW to adhere to commitment SG6 in its original form

## **1.2 Condition E117(i)**

This condition requires that a Detailed Site Investigation report provide details on:

- (i) *whether the land is suitable (for the intended final land use) or can be made suitable through remediation.*

The Jacobs Report asserts that this condition does not apply because:

*these works are not considered (sic) meet the definition of 'disturbance' as described in Condition E117(i)*

This appears to be an error in the Jacobs Report as the word 'disturbance' does not appear in E117(i) and the discussion in relation to this issue at page 9 of the Jacobs Report refers to condition 115(a) which relates to the need to prepare a Detailed Site investigation report "Prior to the commencement of **any work that would result in the disturbance**" (emphasis added) of a site such as the Cammeray Golf Course site.

Nevertheless, it is sufficiently clear that the authors of the Jacobs Report are arguing that because there won't be disturbance, the suitability of the land for its final use does not need to be considered.

This argument should be rejected for the following reasons:

1. Just because the work immediately proposed is "ancillary" work doesn't mean that there won't be 'disturbance'. The works are said to "include":
  - *Establishment of temporary site construction facilities and equipment storage areas. These area(s) were to be used primarily for construction support activities (e.g. temporary site shed, vehicle parking, laydown areas for equipment/supplies, etc.)*
  - *Note that these areas were 'sub-areas' within the larger alignment corridor*
  - *Oversight of assessment activities to support the future Main Works contractor*
  - *Identification, management and potential relocation of underground services.*

Such work clearly involves 'disturbance' of soil and it is such disturbance which poses a contamination risk.



2. The site is a sub-area within one of the major construction sites for the project and as a thorough investigation of it will provide an indication of the suitability of the wider site, it makes sense to do those investigations now rather than later.

### **1.3 Condition E116**

This requires that - *A Detailed Site Investigation Report must be prepared and submitted to the Planning Secretary for information following the completion of Detailed Site Investigations required by Condition E115. The report must be prepared in accordance with relevant guidelines made or approved by the EPA under section 105 of the Contaminated Land Management Act 1997 (NSW)*

For the reasons set out below the Jacobs Report does not comply with the relevant guidelines approved under section 105 of the *Contaminated Land Management Act 1979 (CLMA)*.

## **2. THE CAMMERAY GOLF COURSE SITE INVESTIGATION REPORT**

This section identifies serious shortcomings in the Jacobs Report. Section 2.1 contains shortcomings identified by a senior environmental professional, experienced in the assessment and remediation of contaminated land, who has reviewed the Jacobs Report on behalf of WEPA and sections 2.2 to 2.8 sets out shortcomings WEPA has identified.

### **2.1 The report does not comply with the guidelines approved under section 105 of the CLMA**

The senior environmental professional identified significant failures to comply with the relevant guidelines namely the following schedules of the National Environmental Protection (Assessment of Site Contamination) Measures (**NEPM**):

- Schedule B1: Guideline on Investigation Levels for Soil and Groundwater
- Schedule B2: Guidelines on Site Characterisation

Some of the failures of the Jacobs Report identified by the expert are:

#### **2.1.1 The sampling plan is flawed**

The Jacobs Report did not adopt the Data Quality Objectives (DQOs) approach which is a fundamental requirement of Schedule B2.

The seven-step DQO is a critically important process to be followed to ensure the objectives of the DSI are fully complied with so that a conceptual model of the contamination (lateral and vertical extent of potential contamination and relevant chemicals of potential concern) expected to be present on the subject site is defined so that the sampling plan (dimensions of sampling grid, number of sample locations, depth intervals of samples to be collected and sampling method/s) and the analytical plan (chemicals of potential concern) can be finalised.

It is not possible to prepare a reliable DSI if the conceptual model of contamination expected on the subject site is not defined as the final step in the DQO process since this procedure determines the sampling grid, method of sampling, depths of sample collection, sample containers, preservation method/s and chemicals of potential concern that are to be analysed in a commercial chemical laboratory registered by NATA for each chemical analysis or physical test for identification of asbestos fibres.

## Sampling locations

The Jacobs Report stated the total area of the six construction support sites was 14 000 square metres and that guidelines made by NSW EPA (Sampling Design Guidelines, 1995) required soil samples to be collected from a minimum of 24 grid-based locations.

The Jacobs Report further stated results of the SMEC report from 13 locations and 15 additional locations were adopted for the DSI and that this number exceeded the number of 24 samples listed in the Sampling Design Guidelines.

However, the sampling guidelines referred to in the Jacobs Report refer to the minimum number of sampling locations required to identify a contamination “hot spot” of dimensions derived in consideration of the conceptual site model, as explained above. The number of sampling locations is determined by the dimensions of a contamination hot spot defined in the conceptual model of site contamination.

It is noted that the sampling guidelines referred to above relate to detection at a 95 % confidence level for a circular contamination hot spot of a radius derived from the conceptual model of contamination expected on the site, employing a square grid. However, inspection of Figures 3-1, 3-2 and 3-3 of the Jacobs Report indicates sampling was not carried out from a square grid, but rather from an undefined, irregular-shaped grid, from which the diameter of a contamination hot spot that would be detected was not defined.

The concept adopted in the Jacobs Report of aggregating the areas of the six construction support sites of environmental concern into one area of 14 000 square metres for the purpose of determining the appropriate number of sampling locations is flawed.

The six construction support sites identified in the Jacobs Report are discrete, being separated by wide intervals and the presence of uncontrolled fill, materials identified by SMEC in all locations tested by them, and the typical inconsistency of types of materials and chemical contaminants of uncontrolled fill materials requires the number of sampling locations at each of the six construction support sites be addressed individually.

Although the sampling locations were identified on Figures 3-1, 3-2 and 3-3, the scale of the figures was not shown. Consequently, the areas of each of the six construction support sites could not be estimated. However, in consideration of the respective areal extents of the six construction support sites, and blindly applying the requirement of Table A of NSW EPA (1995) Sampling Design Guidelines, soil samples are required to be collected from approximately 45 locations.

However, the appropriate number of sampling locations, the depth intervals that samples are to be collected from and the chemicals of potential concern can be identified reliably only after application of the DQO program for the project.

As a consequence of the deficiencies in the sampling program the results documented in the Jacobs Report can apply only to the locations sampled and cannot be used to reliably estimate the extent of contamination on the construction support sites.

### 2.1.2. Sample collection method inappropriate for VOCs

Soil samples for chemical analysis were collected from a number of depth intervals below ground surface using a hand auger and were placed in glass jars and transported to a NATA registered chemical laboratory in cool containers under chain-of-custody documentation.

Soil samples collected using a hand auger are referred to as 'disturbed' samples from which volatile components are partially or wholly lost during auguring and transfer of soil samples into the glass jars. Disturbed soil samples are not suitable to be used for chemical analysis of volatile organic compounds such as light petroleum hydrocarbons and benzene, toluene, ethylbenzene and xylenes (BTEX).

The Jacobs Report stated that soil samples were collected from 28 locations, but descriptions of the sub-surface stratigraphy for soils and fill materials (Table 9-1) were provided only for the 15 locations sampled by Jacobs. No descriptions of the soil and fill materials reported by SMEC were provided. As parts of the sample collection procedures, it is common for the presence of volatile organic compounds (light petroleum hydrocarbons and BTEX compounds) be screened on-site shortly after collection using a photoionisation detector (PID). Use of the PID on-site allows additional samples to be collected to better define areas of environmental concern and provides a qualitative means of checking results for VOCs in soil samples reported by the commercial chemical laboratory.

As a consequence of disturbed soil samples being analysed for volatile chemical compounds, the presence of these compounds in the fill materials across the construction support site remains uncertain.

### **2.1.3 Impermissible averaging of results of analyses**

The Jacobs Report stated "... concentrations of contaminant compounds were below the adopted HIL/HSL with the exception of the benzo(a)pyrene TEQ reported in sample BH15\_D\_CGC at a depth of 1mbgl (sic) in fill at concentrations exceeding the adopted HIL. This result was consistent with a distinct 'asphalt' odour and an asphalt 'layer' was also encountered at this location.

No other sample collected by SMEC or Jacobs reported contamination at concentrations above the adopted HIL D level, applicable to sites proposed to be used for commercial/industrial purposes.

Odorous and contaminated soil was reported at one location (BH15). However, statistical analysis of the data set showed that reported contamination levels were (on average) below the HIL D guideline values for the proposed construction use of the site.

However, given uncontrolled fill materials were identified on the construction support sites it is not appropriate to apply the average concentration across all of the sites in the manner applied in the Jacobs Report. It is clear that, if there was the requirement to assess the suitability of the construction support sites, the presence of asphaltic substances in fill would require investigation at additional locations to identify its nature and extent to assess whether remediation of these substances was required.

### **2.1.4 Other deficiencies identified by expert**

The Jacobs Report did not assess the reliability of the results documented in the SMEC report and, consequently, the results documented in the SMEC report cannot be relied on to inform the Jacobs Report. The results reported in the SMEC report should not have been used to support the Jacobs Report without ensuring the reliability of the SMEC results.

The report of 'distinct asphalt odours' at BH15 may also be indicative of a larger area of contamination within this area. The observation of similar fill across the investigation area combined with the heterogenous nature and complexity of uncontrolled fill, suggest that there is the potential

for unexpected contamination to be encountered in other areas of the site. However, the presence of a “larger area of contamination” identified in the Jacobs Report in BH15 provides evidence for the presence of uncontrolled fill materials being present at parts of the six construction support sites where no sampling was carried out by Jacobs and in the locations sampled by SMEC for which the Jacobs Report did not assess their reliability.

## 2.2 Individual samples exceed guideline values for recreational use

The Jacobs Report states:

*To evaluate the significance of the reported soil concentrations with respect to the proposed use, Jacobs compared the analytical testing results against the soil quality guidelines published in the NEPC (2013) (i.e. health-based soil investigation (HIL) levels).*

*The HILs for a commercial/industrial land use (HIL-Setting D), NEPC (2013) were used to evaluate the significance of contamination.*

Using the HILs for commercial/industrial use, the Jacobs Report goes on to summarise the results of soil sampling as follows:

*The benzo(a)pyrene TEQ reported in sample BH15\_D\_CGC (88mg/kg) was the only individual sample with concentrations reported above the guideline value (40 mg/kg). Statistical analysis of the data set indicated the average soil concentration for B(a)P TEQ (4.35 mg/kg) was below the adopted soil quality guideline value and that application of the average concentration was acceptable based on the statistical analysis recommended by the NEPM.*

The Jacobs Report states that the averaging is permitted by the NEPM which requires that:

*the data set must meet the following criteria:*

- *No single value should exceed 250% of the relevant investigation or screening level; and*
- *The standard deviation of the results should be less than 50% of the relevant investigation or screening level’.*

For the reasons set out above, averaging should not have been applied.

The benzo(a)pyrene (BaP) level at BH15 (88 mg/kg) is, however, more than **forty times** the HIL for recreational use (4) and could not, therefore, be averaged if that HIL was applied. Even if it was, the mean level (4.35) is also above the HIL for recreational use.

One sample has a lead level (697) which exceeds the HIL for recreational use (600 mg/kg), although the mean level does not.

The Total PAHs at B15 (1900 mg/kg) also exceeded the recreational HILs (300 mg/kg).

The BaP was high at BH89 at 1 metre - 38.8 mg/kg (nearly 10 times the HIL for recreational use). That is near the boundary close to Warringah Freeway and there is a risk that BaP will be mud-tracked from the construction site as trucks enter and exit the site, with the risk that sensitive users will be exposed to contaminated BaP dust.

## 2.3 The HILs for recreational use should be used

In considering whether site remediation is warranted it is not appropriate to simply consider the HILs in relation to commercial/industrial land use.

This is because the CLMA is not only concerned with the contaminated land in question but the threat that contamination poses to neighbouring land and the neighbouring land in this case is used for recreational purposes. This is made clear by section 60(3)(a) which provides:

*(3) A person is required to notify the EPA under subsection (1) or (2) only if—*

*(a) each of the following is true—*

*(i) the substance contaminating the land (the contaminant) or any by-product of the contaminant has entered or will foreseeably enter neighbouring land, the atmosphere, groundwater or surface water,*

*(ii) the regulations prescribe for the purposes of this subparagraph, or the guidelines specify, a level of the contaminant or by-product in the neighbouring land, atmosphere, groundwater or surface water,*

*(iii) the level of the contaminant or by-product after that entry is, or will foreseeably be, above the level prescribed or specified and will foreseeably continue to remain above that level,*

As illustrated by the screenshot below, the six sub-areas considered by the Jacobs Report, are located towards the top of a rim, with the golf course below them and any groundwater from the sites would be expected to migrate in a generally north-easterly direction to Willoughby Creek which then discharges into the waters of Willoughby Bay via Primrose Park.

## Cammeray

[Topographic maps > Australia > New South Wales > Sydney > Cammeray](#)

Click on the map to display elevation.



Cammeray, Lower North Shore, Sydney, North Sydney Council, New South Wales, 2062, Australia (-33.82227 151.21399)

The Report, at most, only addresses the obligation to notify that arises under section 60(3)(b), which operates independently of section 60(3)(a). But, as discussed, the Jacobs Report does not adequately address even this requirement.

## **2.4 The report has an overly limited focus**

The Jacobs Report has been limited by its chosen focus:

*Soil data was the most relevant media for exposure by construction workers. Therefore, collection of near surface soils (i.e. up to 1m depth) soil data was the focus of the assessment*

This is not sufficient to address the requirements of the CLMA (as discussed above) or the Conditions of Approval (e.g., E117) which requires consideration of off-site impacts and transmission pathways.

The EPA's *Consultants reporting on contaminated land: Contaminated Land Guidelines* (The EPA Guideline) and NEPM Schedule B2 - *Guideline on Site Characterisation* make clear that the information under E117 is to include:

- a list of human and ecological receptors (both on- and off-site)
- potential and complete exposure pathways (both on- and off-site)
- see page 8 at <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/contaminated-land/20p2233-consultants-reporting-on-contaminated-land-guidelines.pdf?la=en&hash=EBB6758A2DE448534B6FDD5057D280523E423CC7>

## **2.5 Known asbestos and PAHs in the EIS have been excluded without proper inquiry**

It is also of concern that the Jacobs Report, at page 13, excludes data from the EIS stating:

*It is Jacobs understanding that the statement of "Known contamination" for this area (from the EIS) is based on the Western Harbour Tunnel and Beaches Link - Contamination Factual Report, AECOM and Coffey, 2018. The reported contamination was related to Polycyclic Aromatic Hydrocarbons (at two locations) and asbestos containing materials (at one location). However, the location of these sample points, in relation to the investigation area, (i.e. Cammeray Golf Course) being assessed by Jacobs, was not clear. Therefore, it is not known if these sample points are located within the investigation area (the subject of this report), and the data was excluded.*

This statement is contrary to the EIS which states that the asbestos was found at a borehole in Cammeray Golf Course (B340\_0.05-0.25) - see Appendix M, section 4.4.4, at page 65 and the last dot point on page 64.

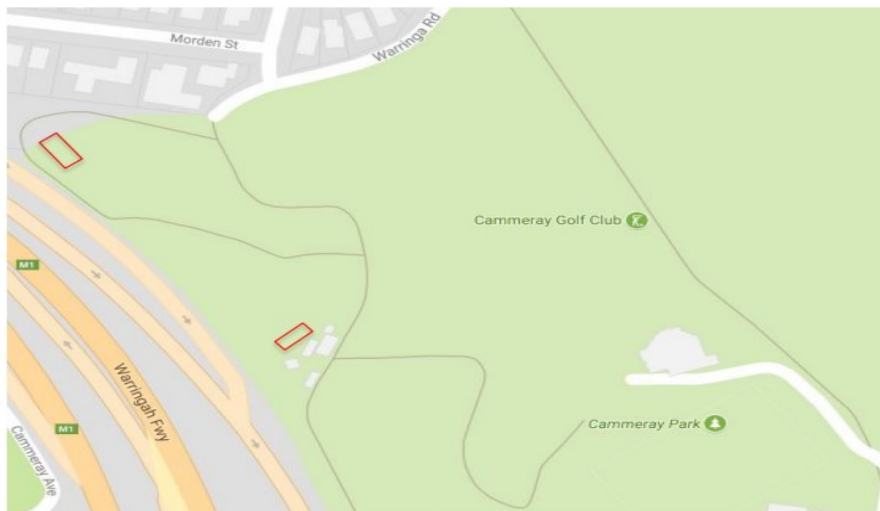
The precise location of the borehole within Cammeray Golf Course would be expected to be precisely recorded and this information would be available to Jacobs via TfNSW.

It also appears that the location of B340 within Cammeray Golf Course could have been established by a simple internet search showing the intended location of the geotechnical investigations carried out in 2017, see: <https://roads-waterways.transport.nsw.gov.au/projects/01documents/western-harbour-tunnel-beaches-link/whtbl-cammeray-golf-club-geotech-b337-b338-b339-b340-2017-07.pdf>

Which has this map showing the intended investigation areas in Cammeray Golf Course:

#### Work area

##### Cammeray Golf Club, Cammeray – geotechnical work sites



Similarly, it is likely that the location of the PAHs can be established. The EIS refers to exceedances of safe levels of benzo(a)pyrene at B337, another borehole at Cammeray Golf Course, and the depth is also given: see page 65 and dot point 4 on page 64 of Appendix M.

WEPA would like to have this matter investigated to assess whether Jacobs should be prosecuted for making a false or misleading statement – see section 10.6 of the *Environmental Planning and Assessment Act 1979 (EPAA)* in conjunction with clause 285B of the Regulation.

#### **2.6 The Jacobs Report does not stand alone and this is a further breach of the CLMA**

The Jacobs Report refers to an investigation by SMEC and a report, “SMEC (2020)”, although the title of the report is not referred to.

The Jacobs Report is incomplete as it does not include the SMEC report, which would have provided information about the test results e.g., the reliability of the SMEC results. Nor does it include the AECOM and Coffey report.

The EPA’s *Consultants reporting on Contaminated Land Guidelines* (at page 6) states:

*Each report must stand alone, containing enough information to be readily understood. A summary of certain information can be provided, if relevant information has been included in a previous report prepared by a consultant (unless that information has since been superseded).*

The Jacobs Report does not ‘stand alone’. It needs to be read in conjunction with other reports which have not been provided or summarised.

As the SMEC Report has not been provided, the following information has not been included:

- The report only contains a summary of the testing results for soil samples taken by SMEC within the sub-area covered by the Early Works, but not in other areas of the construction site
- The report does not contain groundwater testing results. The Jacobs Report states that one groundwater monitoring well was installed by SMEC, but inspection of Figures 3-1, 3-2 and 3-3 of

the Jacobs Report shows the locations of **three** groundwater monitoring wells. The quality of groundwater for any of the wells was not addressed in the Jacobs Report.

The SMEC Report, including all soil and groundwater results for the whole site, should have been included, as it may indicate whether the construction site as a whole is suitable as a dive site and the likelihood of significant contamination in sub-surface levels.

### **2.7 The authors of the Jacobs Report are not independent**

The Report states:

*The sole purpose of this report is to present the findings of a site investigation carried out by Jacobs for the Sydney Program Alliance (SPA)*

A business name search shows that the SPA is a business name owned by a partnership consisting of Freyssinet Australia Pty Ltd & Jacobs Group (Australia) Pty Ltd & John Holland Pty Ltd.

It should be noted that Jacobs will be affected if a site auditor is involved at the beginning of the project, rather than at the end as Jacobs is recommending, as it would delay the early works and potentially its role as a development partner (which it is also tendering for).

An EPA accredited site auditor, however, is required to be independent and without a financial interest in the project.

### **2.8 The Jacobs Report should cover the whole site and not just the six sub-areas currently covered**

The Conditions of Approval contemplate that a DSI will be prepared for the whole site before the commencement of any works:

- Condition 115 states that a DSI Report is needed prior to the commencement of work if there is any disturbance of **a moderate to high risk contaminated site**, as identified in the WHT EIS.
- Condition 116 permits the Proponent to prepare individual Detailed Site Investigation Reports for the separate sites but does not contemplate contamination reports only being prepared for parts of sites.

The failure to identify the risk of contamination at the whole site is contrary to the cautionary approach outlined in the SEPP 55 – at page 7:

*The general principle of the Guidelines is that planning authorities should adopt a cautionary approach when exercising a planning function. The object of this approach is to enable any land contamination issues to be identified and dealt with at **an early stage** in the planning process in order to prevent harm and reduce delays and costs.*

The SEPP 55 guidelines, at pages 1 and 2, suggest that officials cannot rely on the exclusion of personal liability in section 2.28 of the *Environmental Planning and Assessment Act 1979* if the approach in the SEPP guidelines are not followed.

TfNSW internal guidelines recognise the need for early investigation of a site:

*It is beneficial to identify contamination early to avoid ongoing impacts. By proactively managing contamination issues, the risk of harm to RMS staff, the community or the environment can be appropriately managed. Where there are concerns that contamination could be present,..., site investigations should be done so associated risks and liabilities can*



*be recognised and minimised. Decisions can then be made on any requirements to remediate or otherwise manage any contamination on the site.*

*Land contamination has the potential to cause off-site pollution and/or the exposure of site workers or the community to contamination. If sites are not managed appropriately, and the condition of the site and surrounds is left to degrade, they may become difficult or expensive to resolve.*

<https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/documents/guides-manuals/guideline-management-contamination.pdf>

Because of the uncertainties arising from the Jacobs Report not following guidelines required to be followed under the CLMA and the apparent widespread presence of uncontrolled fill materials containing elevated concentrations of some chemical substances, it would be appropriate to carry out a DSI across the entire extent of the golf course.

### **3. DUTY TO AVOID HARM TO CHILDREN**

The DPIE has a duty to avoid potential harm to children in exercising its compliance functions: *Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment* [2021] FCA 560.

Although Sharma specifically considered the threat of personal injury to children from climate change this was an application of the broader principle that decision makers have a duty at common law to prevent personal injury to children in the exercise of their duties. Clearly there is a risk of personal injury to children from contamination in present circumstances due to the proximity of construction to schools, child care centres and pre-schools, and the continuing use of the golf course by sensitive users.

### **4. CONCLUSION**

For the above reasons WEPA is seeking the following actions:

- A new DSI should be prepared, complying with the CLMA and other shortcomings identified above, and cover the entire extent of the golf course
- The DSI should evaluate the site for its intended uses throughout the project and finally
- That DSI should be reviewed by an EPA accredited auditor
- The review should be made publicly available
- All work at the six sub-areas should cease pending completion of the above actions
- The asbestos at B340 should be treated as a hot spot and work on site should cease until the extent of the hot spot is determined after further investigation under the supervision of an EPA accredited site auditor and an asbestos expert

- Any additional investigations, including those identified above, should be carried out before the review by the EPA accredited auditor
- If evidence becomes available of fill materials containing residues from fires on any of the sites to be investigated, testing for PFAS chemicals should be carried out
- The DSI should contain an assessment of whether the site is suitable for its final land use or can be made suitable by remediation
- The nature of the assessment should be such that it won't be negated by any Main Works contract
- Consistent with the CLMA, the proponent should also be required to notify the EPA pursuant to section 60
- If remediation is required such remediation should be completed before any further work is carried out
- The Department should review all Conditions of Approval to ensure compliance and, in particular, ensure that the inadequacies in the investigations identified above are addressed
- If necessary, the Department should impose such additional conditions as may be required pursuant to Condition A4(a) which empowers the Planning Secretary to give written directions
- The Department should investigate whether Jacobs should be prosecuted for having made false or misleading statements in the Jacobs Report with WEPA being advised of the outcome of the investigation

WEPA is aware of complaints about other DSI reports lodged by WEPA member, Diane Staats. WEPA is concerned about the slow speed of the investigations into these complaints as the breaches of the Conditions of Approval raised in those complaints have potential impacts on the health and wellbeing of vulnerable members of the community including children. Given the seriousness of the matters raised in this letter, WEPA would appreciate a response to this letter within 5 business days. If you are unable to respond within this time frame, please phone the number provided below to advise as to a timetable. WEPA reserves its right to escalate this matter to the NSW Ombudsman and the NSW Legislative Council inquiry should there not be a timely response.

Yours sincerely,

John Moratelli (phone:

President

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