NSW EPA

Your reference SSD 7372
Our reference: EF13/5058, DOC16/318458-01
Contact: J Goodwin 9995 6838

Mr David Gibson
Department of Planning and Environment
GPO BOX 39
SYDNEY 2001

Dear Mr Gibson

SSD 7237 – O'CONNELL STREET PUBLIC SCHOOL – EIS

I am writing to you in reply to your invitation to the EPA to provide a submission in respect of the project EIS.

The EPA requests that the following advice be considered together with its letter dated 16 November 2016 concerning the draft SEARs for the project.

The EPA emphasises that it does not review or endorse environmental management plans or the like for reasons of maintaining regulatory 'arms length'. And, has not reviewed the environmental management plans forming part of or referred to in the EIS.

Separate assessment process (site establishment and demolition)

The EPA understands that the project is limited to lot 1 in deposited plan 1112822 (off Marist Place) and lot 6 in deposited plan 1182647 with site establishment and demolition phases of the project to be undertaken under a separate assessment process.

The EPA emphasises the need for the proponent to ensure seamless transition of environmental impact mitigation and management measures between site establishment and demolition phases and the construction phase, including bulk earthworks (if any).

Site auditor recommended

The EPA notes that given the age of the structures (including former boiler house) identified for demolition, lead-based paint and asbestos (friable and cement matrix) may be encountered. The EPA further notes the potential for PCB contamination from old light fittings, and TPH and PAH contamination from the disused underground petroleum storage system and bitumen paving respectively.

Accordingly, the EPA strongly recommends that the proponent engage a site auditor accredited under the Contaminated Land Management Act 1997 to ensure the site is made suitable for the proposed use.

Operational noise

The EPA understands that the development site is adjoined to the north by St Patricks Cathedral (lot 1 DP1034092) which includes the cathedral and presbytery (clergy residence) each of which is a noise sensitive land use.

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The EPA further understands that –

- a 6 storey residential building has been approved on lot 5 DP 1182647 (cnr. O'Connell Street) which also adjoins the development site to the north, and
- a Sisters of Mercy convent (residence) is located on the northern side of Victoria Road opposite the cathedral.

However, EIS Appendix R appears to identify 'Marsden Apartments' at 101 Marsden Street (southern side of the Parramatta River) as the most affected residence.

General

The EPA has identified the following site specific concerns based on the project information available on the Department of Planning and Environment major projects web site:

(a) the need to undertake a detailed assessment of potential site contamination following demolition of existing buildings, and infrastructure, including information about groundwater;

(b) handling, transport and disposal of any asbestos waste, lead-based paint waste and PCB contaminated materials encountered during demolition;

(c) demolition, site preparation, bulk earthworks, construction and construction-related noise and vibration impacts (including recommended standard construction hours and intra-day respite periods for highly intrusive noise generating work) on noise sensitive receivers such as surrounding residences;

(d) demolition, site preparation, bulk earthworks and construction phase dust control and management;

(e) demolition, site preparation, bulk earthworks and construction phase erosion and sediment control and management;

(f) operational noise impacts on noise sensitive receivers (especially surrounding residences) arising from operational activities such as waste collection, loading dock activities and mechanical services, (including commissioning of mechanical air handling plant and equipment);

(g) operational waste management within the context of the waste management hierarchy; and

(h) operational water and energy conservation and efficiency.

The EPA expands on its concerns in Attachment A to this letter.

Should you require clarification of any of the above please contact John Goodwin on 9995 6838.

Yours sincerely

15-8-16

MIKE SHARPIN
Acting Manager, Metropolitan Infrastructure
NSW Environment Protection Authority

Attachment A

ATTACHMENT

- ENVIRONMENT PROTECTION AUTHORITY COMMENTS –

O'CONNELL STREET PUBLIC SCHOOL

1. General

The EPA considers that the project comprises distinct phases of construction (including demolition) and operation and has set out its comments on that basis.

The EPA notes the proximity of surrounding residences which may be adversely affected by noise impacts during demolition, site preparation, construction and operation phases of the project.

2. Construction phase

The EPA anticipates that demolition, construction and construction-related activities will be undertaken in an environmentally responsible manner with particular emphasis on –

- Site investigation, remediation and certification,
- compliance with recommended standard construction hours,
- intra-day respite periods from high noise generating construction activities (including jack hammering, rock breaking, pile boring or driving, saw cutting),
- feasible and reasonable noise and vibration minimisation and mitigation,
- effective dust control and management,
- runoff, erosion and sediment, and
- waste handling and management, particularly asbestos, lead-based paint and PCB wastes.

2.1 Site investigation and remediation

The EPA has considered the following documents on the Department's web site –

(a) Appendix H1 - SEPP 55 Letters Part 1 and 2, and

(b) Appendix H2 - Detailed Site Investigations- SMEC report titled *Detailed Site Investigations 3 Marist Place and 24 O'Connell Street Parramatta* dated June 2016

The Environment Protection Authority (EPA) advises that neither Lot 1 in deposited plan 1112822 nor Lot 6 in deposited plan 1182647 are currently regulated by EPA under the *Contaminated Land Management (CLM) Act*. Accordingly, any contamination issues associated with the development should be addressed under the planning process and implementation of *State Environmental Planning Policy 55*. Nonetheless, the proponent must ensure the proposed development does not result in a change of the pre-existing contamination of the land so as to result in significant contamination, which would warrant regulation of the site under the CLM Act.

The site investigation undertaken to date focused on a depth of between 0.2 metres and 1.3 metres below the existing ground level and indicates that:

- The site is underlain by fill in many sectors (Oval, carpark, quadrangle) at depths varying from surface to 1.3 metres below *existing* ground level;
- The fill material contains demolition rubble, tiles and concrete including materials that contain asbestos;
- A range of metal contaminants have been identified in some samples of fill – e.g. lead, zinc, copper, nickel at levels exceeding either the relevant HIL or EIL; and
- polycyclic aromatic hydrocarbons (as benzo(a)pyrene Toxicity Equivalency Quotient- BaP TEQ) was identified in a limited number of samples.

The EPA understands that Underground Storage Tanks (USTs) have been identified in the area of the former boiler house on the site and are proposed to be excavated. Section 3.2 of the letter prepared by 'Consara' and dated 14 June 2016 states that the abandoned USTs and associated pipework and plant "... will be decommissioned and removed as part of the construction works." And further, that "... an investigation will be conducted once the UST infrastructure has been removed to confirm the absence of contaminated soils and groundwater and a validation report will be prepared ..." in accordance with the requirements of the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2014.

The EPA notes with concern that:

(a) intrusive investigations have not been undertaken below 1.3 metres;

(b) a number of existing buildings on the site are proposed to be demolished and the extent of any contamination under and around those buildings is unknown and may include residual pesticides intended to deter termite infestation;

(c) some of the existing buildings are proposed to re-used; and

(d) the EIS is mute regarding the proposed extent of any soil excavation and re-contouring of soils on the site.

Accordingly, further detailed site assessment will be necessary.

Recommendation

The proponent be required to

(a) engage a site auditor accredited under the Contaminated Land Management Act 1997;

(b) ensure management plans for the construction works and waste management are reviewed by the site auditor referred to in (a) above;

(c) undertake further detailed site assessment (including at depths more than 1.3 metres below the existing ground level) should deep excavation or re-contouring of the site be proposed;

(d) undertake a detailed investigation following removal of the UST infrastructure and to prepare a validation report in accordance with the requirements of the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2014;

(e) prepare and implement a remediation action plan as necessary;

(f) provide a Section A site audit statement for the whole of the development site by the site auditor referred to in (a) to determine suitability of the site for a school prior to undertaking any construction, including any excavation and site contouring.

Asbestos material, lead-based paint and Polychlorinated Biphenyls (PCBs)

Given the age of the existing structures, the EPA anticipates the presence of asbestos containing materials, lead-based paint (and potentially PCBs associated with light fittings) in those structures. Section 3.3 of the letter prepared by 'Consara' and dated 14 June 2016 confirms that:

(i) friable asbestos was identified during the detailed site investigation; and

(ii) PCBs associated with old light fittings were identified during the detailed site investigation.

The proponent should inform itself of the requirements of the 'Polychlorinated Biphenyl Chemical Control Order 1997' (made under the Environmentally Hazardous Chemicals Act 1985), including the requirements in regard to keeping, conveying and disposing of any PCB material or PCB waste.

Note: a copy of the Polychlorinated Biphenyl Chemical Control Order is available on the EPA web site via the following link –

http://www.epa.nsw.gov.au/resources/pesticides/pcbcco1997.pdf

The proponent should note that amongst other things –

- The movement of PCB containing waste to its disposal site will require tracking via the Online Waste Tracking (OWT) under the code M100 (http://www.epa.nsw.gov.au/owt/wclist.htm), and

- (with respect to safe removal and handling of PCB material and PCB waste) section 6.3.2 of the Chemical Control Order requires *" The occupier of any premises where, or in or on which, PCB material or PCB waste are kept must ensure that any person handling PCB material or PCB waste is trained in handling PCBs and methods of containing PCB spills, and wears appropriate personal protective equipment"*, and

- if the PCB containing material found on the development site does not satisfy the criteria for disposal at a landfill licensed to accept that waste, high temperature incineration is the only available method that can be used to destroy PCBs in Australia.

Recommendation

The proponent be required prior to commencing work –

(a) to prepare and implement an appropriate procedure for identifying and dealing with finds of site contamination, including –

  (i) asbestos containing materials,

  (ii) lead-based paint, and

  (iii) PCBs associated with old light fittings and electrical equipment.

(b) to develop and implement site clean up and remediation as necessary.

Recommendation

The proponent be required to satisfy the requirements of the Protection of the Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 'asbestos wastes'.

Note: The EPA provides additional guidance material at its web-site

http://www.environment.nsw.gov.au/waste/asbestos/index.htm.

Recommendation

The proponent be required to consult with Safework NSW concerning the handling of any asbestos waste that may be encountered during the course of the project.

Recommendation

The proponent be required to ensure that it only keeps, conveys and disposes of any PCB material and any PCB waste in accordance with the requirements of the 'Polychlorinated Biphenyl Chemical Control Order 1997' (made under the Environmentally Hazardous Chemicals Act 1985)

2.2 Noise and vibration

The EPA emphasises the importance of properly managing noise and vibration impacts during demolition, site preparation, bulk excavation, construction and construction-related activities, especially in regard to high noise impact activities, such as grinding, jack hammering, pile driving, rock breaking and hammering, rock drilling, saw cutting, and vibratory rolling.

The EPA provides guidance material available on its web site including downloadable copies of –

- the Interim Construction Noise Guideline (2009), and
- Assessing Vibration: a technical guideline (2006).

2.2.1 general construction hours

EIS section 5.11 indicates "...proposed hours of construction ..." from 8.00 am to 3.30 pm on Saturdays which hours are inconsistent with the recommended standard Saturday construction hours of 8.00 am to 1.00 pm.

The EPA emphasises that demolition, site preparation, bulk excavation, construction and construction-related activities should be undertaken during the recommended standard construction hours set out in Interim Construction Noise Guideline (ICNG) Table 1.

Recommendation

The proponent be required to ensure that demolition, site preparation, bulk excavation, construction and construction-related work is undertaken only during the standard construction hours recommended in Table 1 Chapter 2 of the Interim Construction Noise Guideline, July 2009.

2.2.2 Construction hours (intra-day respite periods)

ICNG section 4.5 identifies construction activities proven to be particularly annoying and intrusive to nearby residents. The EPA anticipates that those demolition, site preparation, construction and construction-related activities generating noise with particularly annoying or intrusive characteristics would be subject to a regime of intra-day respite periods where –

(a) they are only undertaken after 8.00 am,

(b) they are only undertaken over continuous periods not exceeding 3 hours with at least a 1 hour respite every three hours, and.

(c) 'continuous' means any period during which there is less than an uninterrupted 60 minute respite between temporarily halting and recommencing any of the work referred to in ICNG section 4.5

Recommendation

The proponent be required to schedule intra-day 'respite periods' for construction activities identified in the Interim Construction Noise Guideline as being particularly annoying to noise sensitive receivers, including surrounding residents and places of public worship.

2.2.3 Queuing and idling construction vehicles and vessels

The EPA is aware from previous major infrastructure projects that community concerns are likely to arise from noise impacts associated with the early arrival and idling of construction vehicles (including concrete agitator trucks) at the development site and in the residential precincts surrounding that site.

Recommendation

The proponent be required to ensure construction vehicles (including concrete agitator trucks) involved in construction and construction-related activities do not arrive at the project site or in surrounding residential precincts outside approved construction hours.

2.3 Dust control and management

The EPA considers dust control and management to be an important air quality issue during demolition, site preparation, and subsequent construction.

Recommendation

The proponent be required to:

(a) minimise dust emissions on the site, and

(b) prevent dust emissions from the site.

2.4 Erosion and sediment control

Managing Urban Stormwater Soils and Construction, 4th Edition published by Landcom (the so-called 'Blue Book') provides guidance material for achieving effective erosion and sediment control on construction sites. However, the proponent should implement all such feasible and reasonable measures as may be necessary to prevent water pollution in the course of developing the site.

The EPA emphasises the importance of –

(a) not commencing demolition, earthmoving, construction and construction-related activities until appropriate and effective erosion and sediment controls are in place, and

(b) daily inspection of erosion and sediment controls which is fundamental to ensuring timely maintenance and repair of those controls.

2.5 Waste control and management (general)

The proponent should manage waste in accordance with the waste management hierarchy. The waste hierarchy, established under the Waste Avoidance and Resource Recovery Act 2001, is one that ensures that resource management options are considered against the following priorities:

Avoidance including action to reduce the amount of waste generated by households, industry and all levels of government

Resource recovery including reuse, recycling, reprocessing and energy recovery, consistent with the most efficient use of the recovered resources

Disposal including management of all disposal options in the most environmentally responsible manner.

All wastes generated during the project must be properly assessed, classified and managed in accordance with the EPA's guidelines to ensure proper treatment, transport and disposal at a landfill legally able to accept those wastes.

The EPA further anticipates that, without proper site controls and management, mud and waste may be tracked off the site during the course of the project.

Recommendation

The proponent be required to ensure that:

(1) all waste generated during the project is assessed, classified and managed in accordance with the "*Waste Classification Guidelines Part 1: Classifying Waste*" (Department of Environment Climate Change and Water, December 2009);

(2) the body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to prevent any spill or escape of any dust, waste, or spoil from the vehicle or trailer; and

(3) mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site, is removed before the vehicle, trailer or motorised plant leaves the premises.

2.6 Waste control and management (concrete and concrete rinse water)

The EPA anticipates that during the course of the project concrete deliveries and pumping are likely to generate significant volumes of concrete waste and rinse water. The proponent should ensure that concrete waste and rinse water is not disposed of on the project site and instead that –

(a) waste concrete is either returned in the agitator trucks to the supplier or directed to a dedicated watertight skip protected from the entry of precipitation, and

(b) concrete rinse water is directed to a dedicated watertight skip protected from the entry of precipitation or a suitable water treatment plant.

Recommendation

The proponent be required to ensure that concrete waste and rinse water are not disposed of on the development site.

3. Operational phase

The EPA considers that environmental impacts that arise once the development is operational should be able to be largely averted by responsible environmental management practices, particularly with regard to:

(a) feasible and reasonable noise mitigation measures;

(b) waste management in accordance with the waste management hierarchy;

(c) water sensitive urban design; and

(d) energy conservation and efficiency.

3.1 Noise and vibration impacts

The EPA anticipates the proposed development may have significant operational noise impacts (especially out of hours use by external parties) on nearby sensitive receivers, including residences, schools and churches. And, those noise impacts are likely to include noise emitted from amongst other things -

- mechanical ventilation plant and equipment,
- use of school facilities (including an all weather sports court) for out of hours hire to external parties,
- school public address system,
- grounds maintenance using powered equipment, and
- truck movements (incl. reversing beepers) associated with waste collection services.

The EPA emphasises that properly establishing background noise levels in accordance with guidance material in the New South Wales Industrial Noise Policy (INP) is fundamental to a consistent approach to the quantitative assessment of noise impacts of development.

The EPA notes that section 3.3 to EIS Appendix R identifies 'Marsden Apartments' as the most affected noise sensitive receivers. The EIS and acoustic assessment note the site is adjacent to St Patrick's Cathedral on Lot 1 DP1034092. The cathedral complex includes a presbytery (clergy residence), which was not identified in the environmental impact statement or acoustic assessment as a sensitive receiver

The EPA understands that noise sensitive receivers would include:

- to the north - presbytery (clergy residence) and Cathedral on the adjoining allotment 1 at the corner of Marist Place and Victoria Road);
- to the north – Sisters of Mercy Convent (residence) on northern side of Victoria Road,
- to the north – a proposed part 5 storey/ part 6 storey residential building (77 residences) approved on the adjoining allotment 5 at the corner of O'Connell Street and Victoria Road; and
- to the south east - 'Marsden Apartments' on the opposite side of the Parramatta River at 101 Marsden Street.

The EPA understands that monitoring to establish the background noise levels in the locality was undertaken over 8 days between Monday 16 November 2015 and Monday 23 November 2015. The EPA is aware that

rainfall of 8 mm and 19.4 mm was observed on 16 November 2016 at Parramatta and Olympic Park respectively. The EPA further understands that attended noise monitoring was carried out on 16 and 23 November 2015 and section 3.1 (6th para, p. 11) of EIS Appendix R notes that "Weather conditions were calm and dry during attended noise survey."

The EPA notes that Figure 3 to EIS Appendix R (Acoustic Assessment) indicates that noise logger location 2 was near the northern boundary of the site (with line of sight to O'Connell Street). The New South Wales Industrial Noise Policy (EPA 2000) generally requires background noise monitoring to be undertaken at the nearest sensitive receiver, rather than the site of the proposed development. However, in this case the EPA accepts that the location of logger 2 is likely to provide data representative of background noise levels at the nearest sensitive receivers.

Mechanical plant and equipment

Section 8.2 to EIS Appendix R (p.29) states that:

(a) some buildings will be air conditioned; but

(b) "... a detailed [noise impact] assessment has not been carried out."

External hire of school facilities

The EPA is aware that it is government policy to maximise community use of school facilities outside school hours. And, that the Department has developed internal assessment policies for external hire of school facilities.

The EPA is also aware from long experience that noise from external hire of school facilities (example: band practice, basketball, religious services) at other schools has been the source of considerable community concern.

Section 8.3 to EIS Appendix R provides an assessment of noise impacts anticipated from use of the school facilities by external parties. The EPA notes the location of the school hall towards the southern end of the complex of school buildings and anticipates some degree of noise shielding offered by those intervening buildings to some of the levels of the residential development approved on adjoining lot 5 (cnr. O'Connell Street and Victoria Road).

The EPA notes the location of the 'covered sports court' adjacent to the northern boundary of the development site. However, Appendix R does not appear to address noise from out of hours use of the school's 'covered sports court' by external parties.

Recommendation

Consideration be given to:

(a) requiring the proponent to relocate the 'covered sports court' proposed adjacent to the northern boundary of the site to a location on the southern side of the complex of buildings; or

(b) imposing appropriate curfews and other restrictions on the use of the proposed 'covered sports court', especially in respect of after hours and weekend use by external parties.

Public address system (school bells and announcements)

The EPA recognises the importance of a school public address system for –

- the proper administration of the school; and

- for the safety of students, visitors and staff.

However, the EPA is aware from long experience that school bell and music broadcast over school public address systems has been the source of considerable community concern at a number of localities.

EIS Appendix R does not appear to provide any assessment of noise impacts from use of the school public address system. And, importantly does not propose any appropriate noise mitigation and management measures such as the –

- the number, location, distribution and power of speaker horns,
- prohibiting the regular broadcast of music on the school public address, and
- restricting the volume at which the school public address system is used to that which would not compromise the safety of students, employees and visitors.

Grounds maintenance

Grounds maintenance involving the use of power equipment, such as lawn mowers and leaf blowers, have been a source of community concern at other schools when that equipment is used other than between 7.30 am and 6.00 pm on weekdays.

Waste collection services

Waste collection services have been a source of community concern at other schools when those services are rendered other than between 7.30 and 6.00 pm on weekdays.

Recommendation

The proponent be required to:

(a) provide a quantitative assessment of predicted operational noise impacts on surrounding noise sensitive receivers, especially the adjoining church, school, clergy residence and proposed residences on land adjoining the northern boundary of the development site;

(b) design, install and operate the school public address system to minimise noise impacts on surrounding noise sensitive receivers, including but not limited to –

  (i) installing a system with zoned broadcast capability,

  (ii) installing more lower power widely-distributed speaker horns (rather than a few high power speakers),

  (iii) orientating speaker horns to broadcast into the school premises and downwards at an appropriate angle,

  (iv) prohibiting the use of the system for the regular broadcast of music, and

  (iv) restricting use of the system to the proper administration of the school whilst not compromising student, staff and visitor safety;

(c) ensure plant and equipment does not generate noise that –

(i) exceeds 5 dBA above the night-time background noise level measured at the northern boundary of the development site, and

(ii) exhibits tonal or other annoying characteristics;

(d) ensure grounds maintenance using powered equipment (such as leaf blowers, lawn mowers, edgers and trimmers) is not undertaken outside the hours of 7.30 am to 6.00 pm Monday to Friday; and

(e) ensure waste collection services are not undertaken outside the hours of 7.30 am to 6.00 pm Monday to Friday.

Recommendation

That consideration be given to requiring the proponent –

(a) to undertake noise compliance monitoring and assessment during commissioning of mechanical plant and equipment serving the school; and

(b) to report the results of the compliance assessment monitoring referred to in (a) to confirm that noise levels do not exceed levels predicted in the required noise impact assessment and acceptable noise criteria identified in the NSW Industrial Noise Policy, January 2000.

3.2 Waste management

The development is proposed to serve up to 300 students plus staff.

The proponent should manage waste in accordance with the waste management hierarchy. The waste hierarchy, established under the Waste Avoidance and Resource Recovery Act 2001, is one that ensures that resource management options are considered against the following priorities:

Avoidance including action to reduce the amount of waste generated by households, industry and all levels of government

Resource recovery including reuse, recycling, reprocessing and energy recovery, consistent with the most efficient use of the recovered resources

Disposal including management of all disposal options in the most environmentally responsible manner.

Recommendation

The proponent be required to identify and implement feasible and reasonable opportunities for the re-use and recycling of waste, including food waste.

Clinical and related waste

The EPA is unclear whether the school would be likely to generate 'clinical and related waste'.

Clause 50 of Schedule 1 to the Protection of the Environment Operations Act 1997defines clinical and related waste.

Recommendation

The proponent be required to identify the nature and scope of any clinical and related waste likely to be generated during operation of the new schools and the measures proposed to handle, store, transport and dispose of those wastes, if any.

3.3 Water sensitive urban design

The EPA notes that EIS section 3.11 (final para, p.38) under the sub-heading 'Legal Point of Discharge' states "There will be two legal points of discharge for the development". However, the EPA does not propose to licence any points of discharge to the Parramatta River.

Instead, the EPA anticipates that the proponent would adopt water sensitive urban design principles:

(a) to minimise water consumption for potable and grounds maintenance uses; and

(b) to protect receiving waters from gross pollutants and other pollutants typical of runoff from the proposed land use.

The EPA suggests that the proponent adopt appropriate systems to quantify and compare the performance of the various water conservation and efficiency measures against agreed performance benchmarks.

Recommendation

The proponent be required to identify and adopt all feasible and reasonable opportunities to implement the principles and practices of water sensitive urban design. And, to adopt appropriate systems to quantify and compare the performance of the various water conservation and efficiency measures against agreed performance benchmarks.

3.4 Energy conservation and efficiency

EIS section 3.13 outlines proposed measures to implement passive and active energy conservation and efficiency measures.
