NSW EPA

Your reference SSD 7081
Our reference: EF13/5547, DOC16/343732-02
Contact: J Goodwin 9995 6838

Mr Peter McManus
Department of Planning and Environment
GPO BOX 39
SYDNEY 2001

Dear Mr McManus

SSD 7081 - SYDNEY UNIVERSITY FACULTY OF ARTS AND SOCIAL SCIENCES - 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 14 June 2015 concerning the draft SEARs for the project.

The EPA understands that the closest (off campus) noise sensitive receivers include:

(a) residences about 85 metres north in Arundel Street (backing onto Erridge Place); and

(b) the RPA Chapel and medical centre located over open ground at about 316 and 350 metres southwest respectively

The EPA further understands from EIS section 1.6.2 that a substation and switch room are to be demolished and removed from the development site under a separate assessment process. And, is concerned about potential PCB site contamination associated with those facilities.

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 any environmental management plan forming part of or referred to in the EIS.

The EPA has identified the following site specific concerns based on the information (including the draft SEARs) available on the Department of Planning and Environment major projects web site:

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

(b) handling, transport and disposal of any asbestos and lead-based paint waste encountered during demolition, site preparation and bulk earthworks;

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(c) demolition, site preparation, bulk earthworks, construction and construction-related noise 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 and RPA hospital) arising from operational activities such as waste collection, loading dock activities and mechanical plant and equipment, and from use of the level 6 function room and adjoining terrace at night;

(j) 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

26.8.16

MIKE SHARPIN
Acting Manager, Metropolitan Infrastructure
NSW Environment Protection Authority
encl. Attachment A

ATTACHMENT A

- ENVIRONMENT PROTECTION AUTHORITY COMMENTS –

SYDNEY UNIVERSITY FACULTY OF ARTS AND SOCIAL SCIENCES PROJECT

1. General

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

The EPA notes the proximity of residences on the northern side of Parramatta Road and Royal Prince Alfred Hospital (about 400 metres southwest) which may be adversely affected by noise impacts during site preparation, bulk earthworks, construction and operation phases of the project.

2. Construction phase

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

- Site investigation and remediation,
- 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 concrete waste and rinse water, and

2.1 Site investigation and remediation

EIS section 1.6.2 (p.16-17) indicates at that substation No. 54 and switch room, and the Ross Street storage facility (dangerous goods store) are to be demolished pursuant to a separate assessment process. The EPA notes the potential for PCB and other chemical contamination associated with the substation and chemical store. However, the EPA is unclear whether those buildings were demolished prior to undertaking the detailed site contamination investigation'.

EIS Appendix CC 'Detailed Site Contamination Investigation' does not appear to explicitly address the issue of potential PCB contamination associated with substation No.54.

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.

The EPA understands that soil sampling during the detailed site investigation was undertaken in the vicinity of the existing structures but would not have extended to those areas of the site beneath the footprint of those structures. Thus, the proponent should undertake further assessment following demolition of those structures and prior to any earthworks, including investigation of –

- potential PCB contamination within the footprint and immediate surrounds of the demolished substation No.54, and

- localised chemical contamination within the footprint of the 'Ross Street' dangerous goods store).

Recommendation

The proponent be required to undertake further assessment of soil contamination following demolition of existing structures and prior to undertaking any earthworks.

Given the age of the existing structures scheduled for demolition, the EPA anticipates the presence of asbestos containing materials and lead-based paint.

Recommendation

The proponent be required prior to commencing work to prepare and implement an appropriate procedure for identifying and dealing with unexpected finds of site contamination, including asbestos containing materials and lead-based paint, during demolition and site preparation.

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.

2.2 Noise and vibration

The EPA notes the proximity of noise sensitive receivers, including –

- residences on the northern side of Parramatta Road, and
- Royal Prince Alfred Hospital.

The EPA emphasises the importance of properly managing noise impacts during demolition, site preparation, bulk earthworks, 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 strongly recommends that intra-day respites be imposed in negotiation with Sydney Local Health District and RPA hospital managements (see also intra-day respites below).

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).

The EPA considers that the project is likely to generate significant noise impacts on surrounding residences and some degree of impacts on the RPA hospital during demolition, site preparation, bulk earthworks, construction and construction-related activities.

The EPA emphasises the importance of properly managing noise and vibration impacts during demolition, site preparation, bulk earthworks, 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

The EPA emphasises that demolition, site preparation, bulk earthworks, 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, 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, bulk earthworks, 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 both nearby hospitals.

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, bulk earthworks and subsequent construction. For instance, bulk earthworks inevitably generate dust as a result of –

(a) the excavation, processing and handling of excavation spoil,

(b) wind action on spoil stock piles, and

(c) wind action on and plant movement across areas bare of vegetation or other cover.

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, and

(b) energy efficiency and water conservation measures.

3.1 Noise impacts

EIS section 3.22 (p.44) states that the FASS building and refurbished RD Watts building "... will operate during the hours of 8am – 9pm with occasional evening events to occur past this time."

The EPA notes the proximity of the RPA hospital and the orientation of the proposed level 6 function room and adjoining terrace. And, EIS Appendix HH 'noise impact assessment' assumes that the function room and terrace would only be used between 7.00 am and 10.00 pm and thus would not represent a risk of sleep disturbance.

Recommendation

The proponent be required to only use the level 6 function room and adjoining terrace between the hours of:

(a) 7.00 am to 10.00 pm Monday to Saturday (excluding public holidays), and

(b) 8.00 am to 10.00 pm during Sundays and public holidays.

3.6 Water Conservation

The EPA emphasises that water conservation is an essential component of ecologically sustainable development particularly pursuant to the principle of inter-generational equity.

The EPA considers the design stage of the project to be the optimum time to integrate measures to achieve water sensitive urban design, including stormwater harvesting, treatment and re-use for non-potable purposes.

The EPA acknowledges the proposal in section 3.3 EIS Appendix W to implement water efficiency measures including harvesting and re-use of stormwater for non-potable purposes.

3.7 Energy Efficiency

The EPA emphasises that energy efficiency is an essential component of ecologically sustainable development particularly pursuant to the principle of inter-generational equity.

The EPA considers the design stage of the project to be the optimum time to integrate measures to achieve passive and active energy efficiency throughout the new facilities.

The EPA acknowledges the proposal in section 3.3 EIS Appendix W to implement energy efficiency measures.
