



DOC17/534996-01
SSD 7503

29/11/17

Mr Adam O'Connor
Department of Planning and Environment
GPO BOX 39
SYDNEY NSW 2001

Dear Mr O'Connor

SSD 7503 – ULTIMO PYRMONT PUBLIC SCHOOL – ENVIRONMENTAL IMPACT STATEMENT (EIS)

I am writing to you in reply to your invitation to the NSW Environment Protection Authority (EPA) to make a submission concerning the above project EIS.

The EPA requests that this submission be read in conjunction with its letter dated 29 February 2016 in respect of 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 therefore has not reviewed any environmental management plan forming part of or referred to in the EIS.

The EPA further notes that demolition of the existing school is to be undertaken as complying development under the 'Education SEPP' and thus does not form part of the project the subject of the EIS. Nevertheless, the EPA emphasises the importance of ensuring:

- (a) a seamless transition and hand over of environmental control and management measures (e.g. site remediation, erosion and sediment controls, dust minimisation and mitigation measures) provided during the demolition phase, particularly if those works are to be undertaken by a contractor other than the contractor undertaking the works the subject of this proposal; and
- (b) that demolition activities would be carried on by such practicable means as may be necessary to prevent, control or minimise pollution, the emission of any noise and the generation of waste, including the environment protection measures outlined in the EPA's advice and recommendations in respect of this project.

demolition waste – asbestos

The EPA anticipates that demolition of the existing school is likely to generate asbestos waste. Clause 79 of the Protection of the Environment Operations (Waste) Regulation 2014 has required transporters

of certain loads of asbestos waste to provide details of the loads to the EPA, using the online WasteLocate tool **prior** to the transportation of the load commencing, including: the source site, date of proposed transport, details of the proposed destination site and the approximate weight of asbestos waste in the load.

Transporters are required to use WasteLocate to report the movement of more than 100 kilograms of asbestos waste or more than 10 square metres of asbestos sheeting within NSW. The details can be reported on WasteLocate by using an app on a mobile phone or tablet or by using a computer.

Note: The EPA provides additional guidance material at its web-site about tracking asbestos waste via the following link:

<http://www.epa.nsw.gov.au/your-environment/waste/tracking-transporting-hazardous-waste/transporting-asbestos-waste-tyres/tracking-asbestos-waste-locate>

operational noise

The EPA is aware that government policy promotes community use of school facilities outside of school hours. A sports court and 'communal' hall are proposed to be developed on the site and be made available to be used by community groups. The EPA notes the proximity of the multi-storey residential flat buildings adjoining and overlooking the southern boundary of the development site.

Appropriate operational noise mitigation and management measures are needed, particularly in regard to:

- (a) the design and operation of the school public address/bell system;
- (b) the design and location of waste storage facilities;
- (c) time restrictions on grounds maintenance using powered equipment (e.g. leaf blowers, brush cutters and lawn mowers);
- (d) time restrictions on waste collection services; and
- (e) the nature of and times during which school facilities, including the proposed hall and sports court, are made available for community use.

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 for a detailed assessment of potential site contamination, including information about groundwater and a detailed assessment of the footprint and surrounds of existing buildings following their demolition;
- (b) construction phase 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;
- (c) construction phase dust control and management,
- (d) construction phase erosion and sediment control and management;

- (e) operational noise impacts on noise sensitive receivers (especially surrounding residences on adjoining and adjacent holdings) arising from operational activities such as public address/school bell systems, community use of school facilities, waste collection services and mechanical services (especially air conditioning plant);
- (f) the need to assess feasible and reasonable noise mitigation and management measures (including time restrictions on the use of the facilities proposed to be available for community use) to minimise operational noise impacts on surrounding residences;
- (g) practical opportunities to implement water sensitive urban design principles and to minimise consumption of energy and to implement effective energy efficiency measures.

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

Yours sincerely



JACINTA HANEMANN
Regional Manager Operations, Metropolitan Infrastructure
NSW Environment Protection Authority

Attachment A

ATTACHMENT A
- ENVIRONMENT PROTECTION AUTHORITY COMMENTS -
ULTIMO PYMONT PUBLIC SCHOOL EIS

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 adjoining and nearby residences which may be adversely affected by noise impacts during demolition, site preparation, bulk earthworks, and the construction and operational phases of the project.

2. Construction phase

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

- the site contamination remediation action plan accompanying the EIS,
- 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,
- erosion and sediment control, and
- waste handling and management, particularly concrete waste and rinse water.

2.1 Site contamination and hazardous materials

The EPA understands that the site has been an operational school since 1914, and prior to that was part of a sandstone quarry. There is hardstand across the site, with between 1.5 and 8.1 metres of fill overlaying clayey sand, silty sand and sandy clay underlain by sandstone bedrock.

The EPA is concerned that the Preliminary Site Assessment tabulation of results is confusing with two very different tables presented on individual pages which do not appear to be reflective of laboratory results.

The EPA notes that Appendix L drawings do not appear to show current ground levels thus the extent of excavation works anticipated could not be readily determined. The EPA understands that only 1500 cubic metres of fill is proposed to be removed for disposal off site.

A Preliminary Site Assessment was conducted which indicated minor contamination throughout the fill materials at varying depths. The EPA notes that much of the site is covered by existing structures and

thus anticipates that further investigation of site contamination would occur once existing structures have been demolished. Section 11 to EIS Appendix E recommends a stage 2 Environmental Site Assessment be undertaken and a Remedial Action Plan (RAP) prepared.

The EPA considers that construction should not commence until the detailed Stage 2 assessment is completed to enable proper consideration to be made concerning whether the site is suitable for the intended use or requires remediation prior to such use.

Recommendation

The proponent be required to ensure that:

- (a) following demolition of any existing structures and in ground utilities, a Detailed Site Assessment is conducted and reviewed by a contaminated land certified consultant (or a site auditor accredited *Contaminated Land Management Act* 1997 has issued a Section A Statement certifying the site is suitable for the proposed use);
- (b) the processes outlined in State Environmental Planning Policy 55 are followed in order to assess the suitability of the land and any remediation required in relation to the proposed use;
- (c) a long term management plan is developed and used to identify the location and the requirements for ongoing management of contaminated soil to be contained on the site;
- (d) all services are installed above the marker layer to minimise any risks to workers undertaking future maintenance work in service trenches;
- (e) where any contamination which meets the trigger in the EPA '*Guidelines for the Duty to Report Contamination*' is identified, that contamination is notified in accordance with requirements of section 60 of the Contaminated Land Management Act; and
- (f) the proposed development does not result in a change of risk in relation to any pre-existing contamination on the site so as to result in significant contamination.

hazardous materials

The EPA anticipates that given the age of some of the structures on the development site, asbestos containing materials and lead-based paints are likely to be encountered during demolition. EIS Appendix F reports on a hazardous building materials survey which confirms the presence of asbestos cement sheeting in the eaves soffit lining and predicts such materials in those areas of the existing structures that were inaccessible at the time of the survey.

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 –

- (i) asbestos containing materials, and
- (ii) lead-based paint.

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'.

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 anticipates that demolition, site preparation, bulk earthworks, construction and construction-related activities are likely to have significant noise and vibration impacts on surrounding residences, (especially residences in the multi-storey residential flat buildings adjoining the southern boundary of the development site) and the passive recreation areas in Wentworth Park.

The EPA notes that EIS Appendix Q (Acoustic Report) does not appear to provide details of predicted construction phase noise impacts on Wentworth Park.

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.

The EPA notes that the Department of Education is a 'public authority' within the meaning of the Protection of the Environment Administration Act 1991 and further, that the EPA has general responsibility under that Act for amongst other things:

- (a) ensuring that the best practicable measures are taken for environment protection in accordance with the environment protection legislation and other legislation, and
- (b) coordinating the activities of all public authorities in respect of those measures.

The EPA's Interim Construction Noise Guideline recommends standard hours of construction as a best practicable environment protection measure. However, section 5.2 to EIS Appendix Q proposes Saturday construction hours that are inconsistent with the standard construction hours recommended in Table 1 to the EPA's Interim Construction Noise Guideline. And, provides no strong justification for the proposed departure from the standard hours.

Recommendation

The proponent be required to ensure that as far as practicable all demolition, site preparation, bulk earthworks, construction and construction-related activities likely to exceed 5dB above RBL at any noise sensitive receivers, such as surrounding residences, are only undertaken during the standard construction hours, being -

- (a) 7.00 am to 6.00 pm Monday to Friday,
- (b) 8.00 am to 1.00 pm Saturday, and
- (c) no work on Sundays or gazetted public holidays.

2.2.2 *intra-day respite periods*

The EPA anticipates that those demolition, site preparation, bulk earthworks, construction and construction-related activities generating noise and vibration with particularly annoying or intrusive characteristics (such as those identified as particularly annoying in section 4.5 of the Interim Construction Noise Guideline) 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 intrusive and annoying work referred to in Interim Construction Noise Guideline section 4.5

The EPA emphasises that intra-day respite periods are not proposed to apply to those demolition, site preparation, bulk earthworks, construction and construction-related activities that do not generate noise with particularly annoying or intrusive characteristics.

Recommendation

The proponent be required to schedule intra-day ‘respite periods’ for construction activities identified in section 4.5 of the Interim Construction Noise Guideline as being particularly annoying to noise sensitive receivers, including surrounding residents.

2.2.3 *idling and queuing construction vehicles*

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 demolition, site preparation, bulk earthworks, construction and construction-related activities do not arrive at the project site or in surrounding residential precincts outside approved construction hours.

2.2.4 *reversing and movement alarms*

The EPA has identified the noise from ‘beeper’ type plant movement alarms to be particularly intrusive and is aware of feasible and reasonable alternatives. Transport for NSW (nee Transport Construction Authority), Barangaroo Delivery Authority/Lend Lease and Leighton Contractors (M2 Upgrade project) have undertaken safety risk assessments of alternatives to the traditional ‘beeper’ alarms. Each determined that adoption of ‘quacker’ type movement/reversing alarms instead of traditional beepers on all plant and vehicles would not only maintain a safe workplace but also deliver improved outcomes of reduced noise impacts on surrounding residents.

Interim Construction Noise Guideline Appendix C provides additional background material on this issue.

Recommendation

The proponent be required to consider undertaking a safety risk assessment of site preparation, bulk earth works, construction and construction-related activities to determine whether it is practicable to use audible movement alarms of a type that would minimise the noise impact on surrounding noise sensitive receivers, without compromising safety.

2.4 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.

Recommendation

The proponent be required to :

- (a) minimise dust emissions on the site, and
- (b) prevent dust emissions from the site.

2.5 Sediment control

Managing Urban Stormwater Soils and Construction, 4th Edition published by Landcom (the so-called 'Blue Book') provides guidance material for achieving effective sediment control on construction sites. 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, site preparation, bulk earthworks, construction and construction-related activities until appropriate and effective sediment controls are in place, and
- (b) daily inspection of sediment controls which is fundamental to ensuring timely maintenance and repair of those controls.

2.6 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.

2.7 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

- (a) not disposed of on the development site, and
- (b) prevented from entering waters, including any natural or artificial watercourse.

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 (especially out of hours use of school facilities by external parties) may have significant operational noise impacts on nearby sensitive receivers, especially adjoining residences in the multi-storey residential flat buildings adjoining the development site.

The EPA notes with concern the proximity of the surrounding residences (especially those adjoining the southern boundary of the development site) and is aware from long experience of the need for appropriate operational noise mitigation and management measures, particularly in regard to:

- (a) the nature of and times during which school facilities are made available for community use;
- (b) the design and operation of the school public address/bell system;
- (c) the design and location of waste storage facilities;
- (d) time restrictions on waste collection services;
- (e) design, selection and operation of mechanical ventilation plant and equipment; and
- (f) time restrictions on grounds maintenance using powered equipment (e.g. leaf blowers)

background noise measurement

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 NSW Industrial Noise Policy (INP) specifies that at least a 'week's worth' of monitoring data is required to establish background noise levels and that noise levels measured during rainfall should be excluded when deriving those background levels. The EPA notes that the proponent appears to have obtained at least a week of valid data from which to derive daytime background noise levels.

However, EIS Appendix Q indicates that -

- attended noise measurements are only provided for the 'day' period, and
- the attended background noise monitoring is reported to have been undertaken on 27 March and 24 April 2017 but the days of the week ascribed to those dates in Appendix Q do not appear to correlate with the days of the week ascribed to those dates in the 2017 calendar.

out of hours' community use of school facilities

The EPA is aware of government policy to encourage out of hours community use of school facilities provided that use does not cause noise emissions that interfere unreasonably with the comfort or repose of persons not on the premises.

The EPA considers that, in relation to the school hall, noise from normal school activities in class hours would not be acoustically significant. However, the use of the hall for other events, particularly outside school hours, has the potential to adversely impact on residences.

The EPA considers the proposed community use of school facilities (especially the hall and outdoor sports court) outside normal school hours needs to be carefully managed to ensure noise impacts on nearby residences are minimised.

Recommendation

The proponent be required to ensure that the outdoor basketball court is not made available for community use –

- (i) during week day mornings,
- (ii) later than 6.00 pm on week nights,
- (iii) other than between the hours of 8.00 am and 6.00 pm on Saturdays, and
- (iv) during Sundays and public holidays.

Recommendation

The proponent be required to –

- (a) undertake comprehensive noise compliance monitoring of representative uses of the school hall and outdoor sports court and associated facilities (e.g. parking) outside school hours to demonstrate that the level, nature, quality and character of noise emitted by those uses and the time at which and frequency of those uses would not interfere unreasonably with or be likely to interfere unreasonably with the comfort or repose of persons not on the development site, especially the occupants of nearby residences.
- (b) submit a detailed noise compliance monitoring report with noise measurements reported against relevant noise criteria and the outcomes of appropriate community consultation together with detailed recommendations concerning any additional feasible and reasonable noise mitigation and management measures, including further or more relaxed restrictions on the times at which and the frequency of each type of use of the 'futsal' fields and outdoor sports courts and associated facilities (e.g. parking) outside school hours.
- (c) ensure that noise compliance monitoring referred to in paragraph (a) above, would include quantitative noise impact assessment to address noise emissions arising from amongst other things –
 - audience/spectator noise,
 - referee whistle noise,
 - training sessions as well as sporting events,
 - any amplified sound during sporting events and any associated training sessions, and
 - post-event audience/spectator noise, including vehicle door slamming and departure noise.

mechanical plant and equipment

Section 4.3 to EIS Appendix Q states that mechanical plant "... will be acoustically treated to achieve the amenity and intrusiveness noise criteria in Table 6 ...".

Recommendation

The proponent be required to:

- (a) provide a comprehensive quantitative assessment of operational noise impacts on surrounding noise sensitive receivers, especially adjoining residences;
- (b) ensure mechanical plant and equipment installed on the development site does not generate noise that –
 - (i) exceeds 5 dBA above the rating background noise level (day, evening and night) measured at the southern boundary of the development site, and
 - (ii) exhibits tonal or other annoying characteristics.

Public address and school bell system

The EPA notes numerous reports of community concern arising from inadequate design and installation as well as inappropriate use of school public address and bell systems and considers that appropriate design, installation and operation of those systems can both –

- meet the proponent's objectives of proper administration of the school and ensuring the safety of students, staff and visitors, and
- avoid interfering unreasonably with the comfort and repose of occupants of nearby residences.

Recommendation

The proponent be required to design, install and operate the school public address/bell system to implement all such other measures as may be necessary to ensure use of that system does not interfere unreasonably with the comfort and repose of occupants of nearby residences.

waste collection services

The EPA notes numerous reports of community concern arising from waste collection services undertaken at schools and especially during evening and night times.

Recommendation

The proponent be required ensure waste collection services are not undertaken outside the hours of 7.30 am to 6.00 pm Monday to Friday.

grounds maintenance using powered equipment

The EPA notes numerous reports of community concern arising from grounds maintenance involving the use of powered equipment (example: leaf blowers, lawn mowers, brush cutters) at schools during early morning and evening periods as well as on weekends and public holidays.

Recommendation

The proponent be required ensure grounds maintenance involving the use of powered equipment is not undertaken outside the hours of 7.30 am to 6.00 pm Monday to Friday.

3.2 Waste management

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.

3.3 Water sensitive urban design and energy conservation and efficiency

The EPA acknowledges that EIS Appendix N comprises an environmentally sustainable development report that proposes –

- (a) a range of water sensitive urban design measures, including –
 - (i) rainwater harvesting and re-use, and
 - (ii) water efficient fixtures.
- (b) a range of measures to maximise energy efficiency and minimise energy consumption, including –
 - (i) natural ventilation and lighting of all teaching and learning spaces, and
 - (ii) installation of rooftop solar photovoltaic arrays