EF13/5058, DOC17/234441-02
SSD 7968

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

Dear Mr McManus

SSD 7968 – ORAN PARK SCHOOLS – Environmental Impact Statement

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 5 October 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'; the EPA, has therefore not reviewed any environmental management plan forming part of, or referred to, in the EIS.

The EPA notes that the eastern boundary of the development site adjoins Julia Creek a tributary of South Creek.

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) construction phase noise and vibration impacts on noise sensitive receivers such as surrounding residences;

(b) construction phase dust control and management,

(c) construction phase erosion and sediment control and management;

(d) operational phase 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);

(e) 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;

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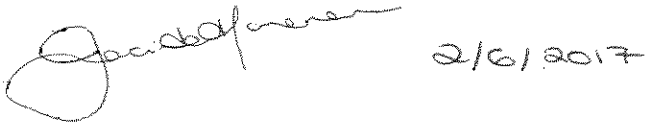
(f) the need to minimise operational water quality impacts on surface waters, especially Julia Creek which is a tributary of South Creek;

(g) practical opportunities to implement water sensitive urban design principles, including stormwater re-use; and

(h) practical opportunities to minimise consumption of energy generated from non-renewable sources 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



2/6/2017

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

Attachment A

Contact officer: J GOODWIN
9995 - 6838

ATTACHMENT A

- ENVIRONMENT PROTECTION AUTHORITY COMMENTS –

SSD 7968 ORAN PARK SCHOOLS

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 surrounding residences which may be adversely affected by noise impacts during the demolition, site preparation, construction and operation 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 and assessment, including an unexpected finds protocol,
- 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

EIS Appendix 7 (Report on Phase 2 Contamination Assessment, May 2011) refers to assessment area as 'Tranche 7, Tranche 8 and Anthony Reserve' within which the development site is located. Section 1.2 to Appendix 7 indicates that the proposed land uses in the assessment area includes residential and community uses.

The EPA notes that the Appendix 7 report covers an area much broader than the development site and adopted a sampling density of one sample per hectare. Whilst the sampling density is inconsistent with the EPA's *Sampling Design Guidelines*, the EPA notes the previous land use was predominantly grazing.

Section 9 (4th para) of Appendix 7 indicates that asbestos containing material was not observed during the intrusive investigation nor in soil samples.

Section 9 of Appendix 7 concludes that the area within which the development site is located is considered "... suitable for the proposed use" and, recommends preparation of an Unexpected Finds Protocol that sets out "... the standard procedures for inspecting and managing any unexpected, potential site contamination issues encountered during development works." However, Appendix 7 does not include an unexpected finds protocol and the EPA does not consider it sufficient to propose that "... all works should stop and an environmental consultant should be engaged to inspect the site and address the issue."

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 unexpected finds of asbestos containing material.

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 anticipates that construction and construction-related activities are likely to have significant noise and vibration impacts on surrounding residences and other noise sensitive receivers.

Accordingly, the EPA encourages the proponent to adopt standard construction hours and intra-day respite periods as follows:

2.2.1 general construction hours

Recommendation

The proponent be required to ensure that as far as practicable all construction and construction-related work, likely to exceed 5 dB above the background level at any noise sensitive receivers such as 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, construction and construction-related activities generating noise 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 between continuous periods , 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

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, 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 Impacts

The EPA anticipates the proposed development (especially out of hours use of school facilities by Council and other external parties) may have significant operational noise impacts on nearby sensitive receivers, including existing and proposed residences.

The EPA notes with the proximity of surrounding residences (existing and proposed) 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 (including facilities proposed to be shared with the local council) 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, brush cutters and lawn mowers).

EIS Appendix 22 (Acoustic Assessment Report) adopts predicted future background noise levels. However, the New South Wales Industrial Noise Policy (INP) does not include a provision for adoption of future background noise levels.

EIS Appendix 22 does not appear to assess the impact operational noise impacts associated with:

- undertaking waste collection services;

- grounds maintenance using powered equipment (leaf blowers, brush cutters and lawn mowers); and

- community use and after hours school events that extend into the night-time hours.

Appendix 22 appears to overlook the need for time restrictions and other feasible and reasonable noise mitigation measures on the use of school facilities outside normal school hours.

'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 the proposed community use of school facilities (especially the gymnasium, sports field and 3 outdoor basketball courts) 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 implementation of all feasible and reasonable noise mitigation and management measures, including but not limited to:

(a) gymnasium design and construction to –

  (i) orientate all windows and doors (other than emergency egress doors) away from nearby residences, and

  (ii) incorporate wall and roof materials selected to achieve noise attenuation adequate to prevent emission of noise of a level, nature, character, or quality likely to interfere unreasonably with the comfort or repose of persons not on the development site;

(b) restricting use of the proposed gymnasium to not later than 10.00 pm;

(c) restricting use of the outdoor sports field and sports courts to –

  (i) not later than 7.00 pm on week nights,

  (ii) 8.00 am to 6.00 pm on Saturdays, and

  (iii) no use on Sundays and public holidays;

(c) comprehensive noise compliance monitoring of representative uses of the gymnasium, outdoor sports field, outdoor sports courts 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; and.

(d) submission of 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 recommended times at which and the frequency of each type of use of the gymnasium, outdoor sports field, outdoor sports courts and associated facilities (e.g. parking) outside school hours.

The EPA anticipates that the recommended noise compliance monitoring would include quantitative noise impact assessment to address noise emissions arising from amongst other things –

- audience/spectator noise,
- referee whistle noise,
- basketball impact noise on sports court floor, walls and backboard surfaces,
- training sessions as well as sporting events,
- amplified sound during concerts/events and any associated sound checks and rehearsals,
- 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 3.1.6 to EIS Appendix 23 indicates that natural ventilation to most teaching and learning spaces (other than the air conditioned communications room and other critical areas).

The EPA further notes that section 7.7 to EIS Appendix 22 proposes to prepare such a detailed noise impact assessment of mechanical plant and equipment pending selection of plant. And. assumes that such plant would only operate during ".. daytime hours Monday to Friday."

Recommendation

The proponent be required to:

(a) provide a comprehensive quantitative assessment of operational noise impacts on surrounding noise sensitive receivers, especially adjoining surrounding residences (existing and proposed);

(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 western 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 implement the EIS recommendations concerning the design, installation and operation of the school public address/bell system and 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 notes that EIS sections 6.4.4 and 6.4.7 and Appendix 23 (ESD Report) outline various measures proposed to minimise water and energy consumption and Water Sensitive Urban Design principles.