DOC19/980101-4

Mr David Way
Department of Planning, Industry and Environment
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SYDNEY NSW 2001

Email: david.way@planning.nsw.gov.au.

Dear Mr Way

SSD-9477 – NEW CATHERINE FIELD PRIMARY SCHOOL – ENVIRONMENTAL IMPACT STATEMENT

I am writing in reply to your invitation to the Environment Protection Authority (EPA) to provide advice on the Environmental Impact Statement (EIS), including recommendations for Conditions of Approval, for the above proposal.

The EPA has reviewed the EIS provided by the Department of Planning, Industry and Environment (DPIE) and provides comments in **Attachment A**. The EPA requests that this submission be read in conjunction with its letter (EPA number DOC18/502127-01) in respect of the draft Secretary's Environmental Assessment Requirements (SEARs) for the project.

The EPA considers that the project comprises distinct phases of construction and operation and has set out its comments on that basis. The EPA comments relate to a range of contaminated land management, noise and vibration, waste management, air (dust) and water (erosion and sediment control) issues.

The EIS states the proponent will be a 'public authority'. Under the Protection of the Environment Operations (POEO) Act 1997 the can issue notices or other legal directions on public authorities to protect the environment (for example, if activities are carried out in an environmentally unacceptable manner).

If you have questions regarding the above, please phone Chris Kelly on (02) 4224 4100.

Yours sincerely

11/12/19

PETER BLOEM
Manager Regional Operations Illawarra
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Attachment A

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ATTACHMENT A – EPA COMMENTS

1.0 Construction Phase

The EPA expects that all construction and construction related activities will be undertaken in an environmentally responsible manner with an emphasis on:

- contaminated land management,
- compliance with recommended standard construction hours,
- intra date respite periods,
- feasible and reasonable noise vibration and mitigation;
- waste handling and management;
- effective dust control and management; and
- erosion and sediment control.

1.1 Contaminated Land Management

EIS Appendix Q *Stage 2 Environmental Site Assessment* indicates that the areas of concern at the site include fill material, historical agricultural use and dryland salinity. Monitoring results for soil and groundwater generally indicated levels below the site acceptance criteria, except for some metals that exceeded groundwater criteria. The Report also identified saline conditions at the site warrant management. Landscaped areas and built structures exposed to soil and groundwater should be designed to withstand aggressive and saline conditions.

The potential remains for isolated pockets of contamination to be present in untested areas of the site. To appropriately manage unexpected potential contamination issues encountered during development works, the EPA recommends the preparation and implementation of an unexpected find protocol (UFP) during the development at this site.

Recommendations

The proponent be required to ensure that prior to commencing any work on the development site, an appropriate procedure is prepared and implemented:

a) to identify and deal with unexpected contamination, asbestos and other unexpected finds; and

b) to identify who will be responsible for implementing the unexpected finds procedure and the roles and responsibilities of all parties involved.

If unexpected contamination is found, the proponent must:

a) prepare a remediation action plan; and

b) if remediation is required, the proponent should engage an EPA accredited site auditor to prepare a section B site audit statement that confirms that the land can be made suitable for the proposed use; and

c) The proponent must adhere to the management measures accepted by the auditor.

The proponent be required to ensure that the processes outlined in State Environmental Planning Policy 55 - Remediation of Land (SEPP55) be followed in order to assess the suitability of the land and any remediation required in relation to the proposed use.

The proponent be required to ensure 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 [note that this would render the proponent the 'person responsible' for the contamination under section 6(2) of *Contaminated Land Management Act 1997* (CLM Act)].

The proponent be required to notify the EPA (under section 60 of the CLM Act) should any contamination of the development site be identified which meets the triggers in the NSW EPA (2015) *Guidelines for the Duty to Report Contamination.*

The EPA recommends the use of "certified consultants". The EPA's Contaminated Land Consultant Certification Policy, Version 2, November 2017, (http://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/clm/18520-contaminated-landconsultant-certification-policy.pdf?la=en) supports the development and implementation of nationally consistent certification schemes in Australia and encourages the use of certified consultants by the community and industry. The EPA requires all reports submitted to the EPA to comply with the requirements of the CLM Act to be prepared, or reviewed and approved, by a certified consultant.

1.2 Noise and Vibration

Bulk earthworks, construction and construction related activities have the potential to cause noise and vibration impacts on adjoining and surrounding residences. The EPA recommends standard construction hours and that that intra-day 'respite periods' should be scheduled.

Site preparation, bulk earthworks, construction and construction related activities should be undertaken during the recommended standard hours of construction. Table 1 to the EPA's (2009) *Interim Construction Noise Guideline* (ICNG) identifies the best practicable measures in respect of the recommended standard hours of construction (in the absence of strong justification for alternative hours in the particular case).

EIS section 3.10.2 under the heading '*Construction Hours'* states standard week day construction hours (7:00 am to 6:00 pm) and Saturday construction hours (8:00 am to 1:00 pm).

The EPA is aware from previous 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.

The EIS or ARSB (Appendix M) appears to make no reference to the use of reversing beepers on the construction vehicles including trucks, excavators, dozers and bobcats

The EPA has identified the noise from 'beeper' type plant movement alarms can be intrusive and is aware of feasible and reasonable alternatives. Transport for NSW, Barangaroo Delivery Authority/Lend Lease and Leighton Contractors 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. Appendix C of the ICNG provides additional background material on this issue.

Recommendations

The EPA recommends the proponent be required to ensure that construction activities associated with the project must only be undertaken during the following construction hours:

a) 7:00 am to 6:00 pm Mondays to Fridays, inclusive;
b) 8:00 am to 1:00 pm Saturdays, and
c) no work on Sundays or gazetted public holidays.

Site preparation, bulk earthworks, 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 ICNG) should 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 section 4.5 of ICNG.

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.

The proponent be required to:
a) 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.
b) where feasible, ensure construction vehicles turn off their engines during idling to reduce noise impacts.
c) comply with quiet work practices to minimise noise including those described in ARSB (Appendix M) section 10.2.

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.

1.3 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.

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.

Proper site controls and management should be implemented to ensure mud and waste is not tracked off the site during the project.

Concrete deliveries and pumping during the project may generate 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:

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

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

Recommendations

The proponent be required to ensure that:

1) all waste generated during the project is assessed, classified and managed in accordance with the EPA (2017) *Waste Classification Guidelines Part 1: Classifying Waste*, and the 2016 addendum thereto;
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.

The proponent be required to ensure that concrete waste and rinse water are not disposed of on the development site, and prevented from entering waters, including any natural or artificial watercourse.

The proponent be required to minimise dust emissions on the site and prevent dust emissions from the site.

1.4 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. 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. Site preparation, bulk earthworks, construction and construction-related activities should not commence until appropriate and effective sediment controls are in place. Daily inspection of sediment controls should be undertaken to ensure timely maintenance and repair of those controls.

Recommendation

The proponent be required to design and implement erosion and sediment control to comply with Landcom's *Managing Urban Stormwater Soils and Construction,* 4th Edition.

2.0 Operational Phase

Environmental impacts that arise once the development is operational should be able to be largely averted by responsible environmental management practices. The EPA emphasises that it does not review or endorse environmental management plans or similar. The EPA encourages the development of such programs to ensure proponents demonstrate how they will meet their statutory obligations and designated environmental objectives. Out role is to set the environmental objectives for environmental management, not be directly involved in the development of strategies to achieve those objectives. As such, the EPA has not reviewed any environmental management plan forming part of or referred to in the EIS.

2.1 Noise and vibration impacts

The proposed development (especially out of hours use of school facilities by external parties) could have the potential for significant operational noise impacts on nearby sensitive receivers, unless carefully considered. There are surrounding residences in the proximity of the school and the EPA is aware from previous experience of the need for appropriate operational noise mitigation and management measures, particularly regarding:

a) the nature of and times during which school facilities are made available for community use;
b) design, selection and operation of mechanical ventilation plant and equipment;
c) the design and operation of the school public address/bell system;
d) the design and location of waste storage facilities;
e) time restrictions on waste collection services; and

f) time restrictions on grounds maintenance using powered equipment (e.g. leaf blowers, brushcutters and lawn mowers).

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

Section 11 of the EIS outlines the need to identify and assess operational noise including out of hours community use of school facilities, as well as identifying measures to minimise and mitigate the potential impacts on the surrounding community. The ARSB does not appear to have assessed external activities by non-school uses as they were not proposed

Inadequate design and installation as well as inappropriate use of school public address and bell systems can generate community complaint.

Section 6.3.1 of the EIS states that, "Mechanical plant will be acoustically treated to achieve the Project Noise Level criteria. The project Noise Trigger Level criteria at the nearest affected residence are 50LAeq during the day, 43LAeq during the evening and 38LAeq during the night".

Section 6.3.1 of the EIA states that "Public Address (P.A.) systems and electric or electronic school bells shall be calibrated and set (fixed) such that the Project Noise Tigger Level criteria at the nearest affected residence are 50 LAeq,15min are not exceeded during their operation."

Section 6.3.1 states "...The assessment recommends that waste collection be carried out after 7am to minimise sleep disruption at the nearest residence on O'Keefe Drive."

The use of powered equipment (example: leaf blowers, lawn mowers, brush cutters) during grounds maintenance at schools during early morning and evening periods as well as on weekends and public holidays can generate community complaints.

Recommendations

The proponent be required to ensure that the school hall is not made available for community use:
a) during week day mornings,
b) later than 10:00 pm on week nights,
c) other than between the hours of 8:00 am and 6:00 pm on Saturdays, and
d) at any time on Sundays and public holidays.

The proponent be required to ensure doors and other large ventilation opening should be closed after 6:00 pm where activity involves amplified loud music or speech.

If external activities are likely to be considered in the future, the proponent should be be required to:
a) Undertake comprehensive noise compliance monitoring of representative uses of the school hall, 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.

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 more stringent or more relaxed restrictions on the times at which and the frequency of each type of use of the school hall, 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 –
   i. audience/spectator noise,
   ii. referee whistle noise,
   iii. training sessions as well as sporting events,
   iv. any amplified sound during sporting events and any associated training sessions,
   v. any amplified sound during music performances and other non-sporting events and any associated rehearsals, and
   vi. post-event audience/spectator noise, including vehicle door slamming and departure noise.

d) Ensure that the outdoor sports courts are 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.

Appropriate design, installation and operation of school public address and bell systems should:
- 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.

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 to minimise noise impacts on surrounding receivers in the more sensitive morning, evening and night time periods.

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.

2.3 Waste management

The proponent should manage waste in accordance with the waste management hierarchy outlined in section 1.3 of this document.

Recommendation

The *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (EPA, 2012)* provides advice to help architects, developers, council staff and building managers to incorporate better waste management practice into the design, establishment, operation and ongoing management of waste services in commercial and industrial developments. The guidelines can be accessed on the EPA website at Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities