NSW EPA

Your reference SSD 6407
Our reference: EF15/2643, DOC15/432054-03
Contact: J Goodwin 9995 6838

Mr Brendon Roberts
Department of Planning and Infrastructure
GPO BOX 39
SYDNEY 2001

Dear Mr Roberts

SSD 6407 – WEST HOXTON COMMERICAL PRECINCT EIS

I am writing to you in reply to your invitation to the EPA to comment on the above proposal.

The EPA has had regard to the Department's letter dated 27 October 2015 and information obtained from the Department's Major Projects web site.

The EPA understands that the proposal is for –

- Stage 1 concept plan,
- demolition of existing structures,
- site preparation, bulk earthworks and subdivision civil works.

The EPA notes previous uses of the development site for a bus depot and market garden. The EPA anticipates risks of site contamination associated with those previous uses, including the likelihood that –

- pesticides and herbicides were applied over many years, and
- hydrocarbon spills may have occurred in conjunction with the storage and handling of petroleum products.

The EPA also notes the proximity of the site to the WaterNSW owned and operated Upper Canal water supply aqueduct which forms a critical part of the Sydney water supply system.

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

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

Yours sincerely

27/11/15

JANE BURGETT
Acting Manager, Metropolitan Infrastructure
NSW Environment Protection Authority
encl. Attachment A

ATTACHMENT A

- ENVIRONMENT PROTECTION AUTHORITY COMMENTS –

WEST HOXTON COMMERICAL PRECINCT

1. General

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

The EPA notes the proximity of surrounding residences and the Upper Canal being an integral part of the Sydney water supply.

The EPA understands that adequate sewerage will not be available to serve the site until at least June 2016. The EPA would not support development of the site until adequate sewerage services are available or guaranteed to be available prior to commencement of proposed subdivision or stage 1 development.

The EPA further notes the likely presence of asbestos, most likely asbestos sheeting, and potentially site contaminating previous uses of parts of the site for a bus depot and a market garden.

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.

2. Construction phase

The EPA anticipates that demolition, site preparation, clearing, bulk earthworks and other civil 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,
- adoption of 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 control, and
- waste handling and management, particularly concrete waste and rinse water.

2.1 Site investigation and remediation

The EPA understands that the previous uses of the development site (comprising 185 and 195 Fifteenth Avenue, West Hoxton) include, a bus depot, poultry farming and market garden.

EIS Appendix 17 comprises a May 2015 preliminary site investigation of 195 Fifteenth Avenue being that part of the development site not occupied by the former bus depot. Section 7.1 to Appendix 17 states that "The potential for broad acre impact of the study area from application of pesticides and herbicides from market

gardening is considered to be low, however there is greater potential for localised impact at agricultural chemical storage or mixing areas". The EPA is unclear on what basis it was determined that the risk of broad acre herbicide, fungicide or pesticide contamination would be low. And, understands that the location of agricultural chemical storage and mixing areas is not known.

EIS Appendix 18 'Detailed Site Investigation' appears to be limited to 185 Fifteenth Avenue being the former bus depot site. However, section 12 to EIS Appendix 18 confusingly identifies the need to undertake further detailed site investigation should the proposed child care facility proceed despite that facility being proposed on that part of the development site being 195 Fifteenth Avenue.

EIS Appendix 18 appears to indicate that the site investigation included analyses of samples taken to assess the nature and extent of any contamination arising from organochlorine and organophosphate pesticide application but not herbicide or fungicide application likely to be associated with market garden activities.

The EPA is unclear whether an EPA accredited site auditor has been engaged for the project at this point in time. The EPA considers that as the site is to be redeveloped for a more sensitive land use (i.e. child care facility), the involvement of a site auditor who has experience in similar projects (i.e. determining site suitability for a child care facility) is warranted.

Recommendation

The proponent be required to:

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

(b) provide a site audit statement for the whole of the development site by an EPA accredited site auditor determining site suitability for the proposed land uses, especially for the proposed child care facility.

asbestos

The EPA is aware of a number of asbestos cement clad structures on the development site. And, notes that site investigations revealed asbestos cement sheeting fragments in fill on 195 Fifteenth Avenue.

The EPA notes that EIS Appendices 17 and 18 recommend that an unexpected finds protocol be adopted for asbestos.

EPA guidance material concerning the handling, transport and disposal of asbestos wastes is available via the following link to its web-site

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

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 should be required to consult with Workcover NSW concerning the handling of any asbestos waste.

2.2 Noise and vibration

The EPA understands that the proposal includes demolition of a number of existing structures, removal of at least one underground petroleum storage tank and a bus wash collection well, site preparation, clearing, bulk earthworks, road construction, stormwater infrastructure and services installation.

The EPA understands that the 2 residences to the immediate east of the former bus depot are owned by Western Sydney Parklands Trust. And, notes a callout on the aerial photograph on page 5 of EIS Appendix 22 indicates that both dwellings are to be demolished. However, should neither or only one of the aforesaid residences be demolished, the noise impact assessment will need to be revised as those residences would clearly be the most affected by noise and vibration impacts arising from the development.

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 and vibration impacts on surrounding residences during the activities outlined above. And, further noise impacts during operation of the various uses comprising Stage 1 of the project.

2.2.1 general construction hours

The EPA notes that EIS (p.86) proposes that construction be undertaken between the hours of 7.00 am to 6.00 pm Monday to Friday, and 7.00 am to 6.00 pm on Saturdays. However, the EPA emphasises that the recommended standard construction hours on Saturdays are between 7.00 am and 1.00 pm. The EPA anticipates that demolition, site preparation, site clearing, bulk earthworks, road construction, stormwater infrastructure and services installation will be undertaken during standard hours..

Recommendation

The proponent be required to undertake all demolition, site preparation and clearing, bulk earthworks, and other civil construction activities during standard construction hours as recommended in Table 1 Chapter 2 of the Interim Construction Noise Guideline, July 2009

2.2.2 intra-day respite periods

ICNG section 4.5 specifies construction activities proven to be particularly annoying and intrusive to nearby residents. The EPA anticipates that those 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 tourism destinations.

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 demolition, site preparation and clearing, 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 should commit to undertaking a safety risk assessment of construction 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.

2.3 Dust control and management

The EPA notes the close proximity of Upper Canal being an integral part of Sydney's water supply

The EPA considers dust control and management to be an important air quality issue during site preparation and clearing, bulk earthworks and other civil construction activities. And, anticipates that those works and activities will 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 earthmoving or vegetation removal until appropriate 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.

Recommendation

The proponent be required to identify how it will implement erosion and sediment control measures consistent with the practices and principles in –

- Managing Urban Stormwater Soils and Construction, Volume 1, 4th Edition, 2004, and
- Managing Urban Stormwater Soils and Construction Volume 2A Installation of Services.

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.

2.5 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 West Hoxton commercial precinct is developed can largely be averted by responsible environmental management practices, particularly with regard to water quality impact avoidance and minimisation.

3.1 Sewerage

The EPA would not support any commercial or business development on the site until it is adequately serviced by reticulated sewerage connected to a licensed sewerage system. The EPA understands that adequate sewerage is not currently available. However, Section 3.2 to EIS Appendix 10 states "Sydney Water noted that the construction of the Austral Precinct Gravity Wastewater main is due for completion in June 2016 and should the proposed development proceed prior to the completion of these works a lead-in main could be constructed prior to or concurrently to these works."

Recommendation

The proponent be prohibited from developing the site until the Department satisfies itself that either:

(a) adequate sewerage is available to service the proposed uses; or

(b) adequate guarantees are available for the timely provision of adequate sewerage reticulation to serve proposed uses on the site prior to occupation of those uses.

3.2 Stormwater

Section 8.1 to EIS Appendix 10 states "There is a need to provide design which incorporates the principles of Water Sensitive Urban Design (WSUD) and to target pollutants that are present in the stormwater so as to minimise the adverse impact these pollutants could have on receiving waters ..."

The Commonwealth Department of Environment's "Introduction to Urban Stormwater Management in Australia" 2002 cites Dowsett, Brigid "*The management of stormwater: from a problem to a resource", 1994* in recognising that –

"Traditionally in Australia, stormwater has been transported separately from the sewerage system. Unlike sewage, stormwater has received little, if any, treatment. The aim has been to channel the stormwater as rapidly and invisibly as possible from within our urban areas to the nearest waterway, …" and "The necessity to deal with both the quantity and quality of runoff is now recognised. The 'hard' engineering strategy for the management of stormwater is being modified by an increase in the application of Water Sensitive Urban Design (WSUD)."

The Office of Environment and Heritage cites the Landcom Water Sensitive Urban Design (WSUD) Policy booklet which states that the "… guiding principles of WSUD are centred on achieving integrated water cycle management solutions for new urban release areas and urban renewal developments aimed at:

- Reducing potable water demand through water efficient fittings and appliances, rainwater harvesting and wastewater reuse;
- Minimising wastewater generation and treatment of wastewater to a standard suitable for effluent reuse opportunities and/or to release to receiving waters;
- Treating urban stormwater to meet water quality objectives for reuse and/or discharge to receiving waters; and
- Using stormwater in the urban landscape to maximise the visual and recreational amenity of developments."

Recommendation

The proponent be required to integrate Water Sensitive Urban Design (WSUD) principles and objectives into:

(a) design and construction of the subdivision, including stormwater management; and

(b) development encompassed by the concept plan.

3.3 Underground Petroleum Storage Systems Regulation

The EPA understands from the EIS that the concept plan encompasses the development of a service station with frontage to Fifteenth Avenue.

The EPA draws the proponent's attention to the provisions of the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2014 and the guidance material on the EPA's web site via the following link –

http://www.epa.nsw.gov.au/clm/upss.htm

the EPA notes the proximity of the proposed service station development to the WaterNSW owned and operated Upper Canal. The UPSS Regulation aims to ensure that UPSS management follows industry best practice to prevent land and groundwater contamination caused by leaking UPSS.

Recommendation

The proponent be required to ensure implementation of industry best practice in the development of any underground petroleum storage systems on the development site.

3.4 Noise

The EPA anticipates that operational activities of Stage 1 uses proposed as part of the Concept Plan are likely to have significant noise impacts on surrounding noise sensitive receivers, unless operational noise impacts are properly assessed and appropriate measures implemented to avoid or mitigate those impacts.

Section 4 to EIS Appendix 10 indicates that background noise monitoring was undertaken "... between 18 and 24 May 2015 ...". The Bureau of Meteorology Badgery's Creek automatic weather station indicates that-

(a) rain was recorded each day from 19 May 2015 to 23 May 2015 inclusive,

(b) wind gusts were recorded in excess of 18 kilometres per hour on each day from 18 May 2015 to 23 May 2015 inclusive (with gusts in excess of 18 kilometres per hour at 9:56 pm on 19 May 2015 and 12.49 am on 21 May 2015), and

(c) wind speeds in excess of 18 kilometres per hour were recorded at 9.00 am and 3.00 pm on 22 May 2015 and again at 9.00 am on the following day.

Accordingly, the EPA considers that some of the noise monitoring data obtained between 18 and 24 May 2015 should be excluded for the purposes of establishing background noise levels, which would result in there being less than the 7 days of valid monitoring recommended in the NSW Industrial Nosie Policy (INP). Thus, the proponent should undertake further noise monitoring to obtain not less than 7 days of valid noise monitoring data as the basis for establishing background noise levels (especially night-time levels) in the locality. Alternatively, the proponent may adopt a night-time background noise level of 30 dBA.

The EIS does not appear to provide any explicit statement that the 2 dwellings located on lot 344 and immediately east of the development site will be demolished. Instead, page 5 to EIS Appendix 10 (aerial photograph) includes a call out suggesting both of those dwellings are to be demolished. Should either or both the aforementioned dwellings not be demolished, the noise impact predictions in Appendix 10 may not be reliable.

The EPA further understands that some of the uses (example: service station) proposed in the concept plan are likely to operate 24 hours per day. And, anticipates potential sleep disturbance associated with such uses. However, the EIS operational noise impact assessment does not appear to adequately take account of noise impacts associated with –

(a) 24 hour per day operation of the service station, supermarket and other businesses,

(b) mechanical handling of goods (including reversing alarms) at the proposed loading docks, and

(c) waste collection services, especially those undertaken during evening or 'night-time'

Recommendation

The proponent be required to adopt a night-time background level of 30 dBA or undertake further noise monitoring to obtain 7 days of valid data under acceptable meteorological conditions, (as described in section 3.4 of the NSW Industrial Noise Policy) for the purpose of –

(a) revising the evening and night-time background noise levels in the locality, and

(b) re-assessing predicted noise impacts.

Recommendation

The proponent be required to confirm whether the 2 dwellings located on the land adjoining the eastern boundary of the development site are to be demolished prior to Stage 1 proceeding.

Recommendation

The proponent be required to revise the noise impact assessment to take into account noise impacts arising from -

(a) any proposed 24 hour per day operation of the service station, supermarket and other businesses,

(b) mechanical handling of goods by forklifts (including reversing alarms) at the proposed loading docks, and

(c) waste collection services, especially those undertaken during evening or 'night-time'.

Recommendation

The proponent be required to design, select and maintain noise generating mechanical services (especially air handling plant and equipment) installed in conjunction with the proposed uses of Stage 1 lots 1 to 8, so that the LAeq (15 minute) noise level generated by those mechanical services does not exceed the night-time background noise level in the locality by more than 5 dBA measured at the most affected residence.
