



DOC18/35189-01
SSD 8614

Mr Navdeep Shergill
Department of Planning and Environment
GPO BOX 39
SYDNEY NSW 2001

Dear Mr Shergill

SSD 8614 – HURLSTONE AGRICULTURAL HIGH SCHOOL – ENVIRONMENTAL IMPACT STATEMENT (EIS)

I am writing to you in reply to your invitation to the EPA to make a submission concerning the above project EIS.

The EPA requests that this submission be read in conjunction with its letter dated 25 July 2017 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, has not reviewed any environmental management plan forming part of or referred to in the EIS.

The EPA notes that EIS section 3.3 indicates that site clearing, earthworks and associated early works are to be the subject of a separate development assessment process. Nevertheless, the EPA anticipates that any site preparation work undertaken by or on behalf of the proponent would be undertaken:

- (a) only during the recommended standard construction hours of 7.00 am to 6.00 pm with high noise impact activities not to commence before 8.00 am and to cease by 5.00 pm;
- (c) using other environment protection measures outlined in this submission for construction and construction-related activities, and
- (c) by such means as necessary to ensure a seamless transition of environmental impact mitigation measures between site preparation, bulk excavation, and construction stages of the project, particularly if different contractors are to be engaged for some or all of those stages of the project.

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,
- (e) construction phase erosion and sediment control and management;
- (f) 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);
- (g) 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;
- (h) the need to properly manage pesticides use, especially in the proposed 'agricultural field' within the school grounds;
- (i) the need to properly manage odours, especially in the proposed 'agricultural field';
- (j) the need to prevent water pollution including properly managing effluent, especially any effluent from the proposed 'agricultural field' and 'agricultural enterprise area';
- (k) practical opportunities to implement water sensitive urban design principles, including stormwater re-use; and
- (l) 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



JENNIFER SAGE
Unit Head, Metropolitan Infrastructure
NSW Environment Protection Authority

Attachment A

Contact officer: JOHN GOODWIN

ATTACHMENT A

- ENVIRONMENT PROTECTION AUTHORITY COMMENTS -

SSD 8614 HURLSTONE AGRICULTURAL HIGH SCHOOL

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 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 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

EIS Appendix X comprises a *Preliminary Site Investigation (PSI) Report* derived from a desktop study, site visit, and soil sampling. Whilst the EPA considers the site investigation methodology to be typical of a preliminary site assessment, sampling frequency is low and thus does not fully characterise the contamination status of the site.

Section 11 of EIS Appendix X suggests that despite the lower than expected sampling frequency mentioned above “... the risk of significant contamination being present, that prevents the redevelopment of the site without significant remediation, is low”. The EPA considers that given the sensitive nature of the proposed use, a detailed site investigation is warranted to ensure the site is suitable for that proposed use.

Appendix X of the EIS omits a procedure for unexpected finds of contamination that may be encountered during development activities, including site preparation and bulk excavation.

Recommendation

The proponent be required to :

- (a) (prior to commencing any work on the development site) ensure that a detailed site investigation is undertaken to fully characterise the contamination status of the site;
- (b) (prior to commencing any work on the development site) prepare and implement a procedure for identifying and dealing with unexpected finds of site contamination (including asbestos containing materials) and that the procedure includes details of who will be responsible for implementing the unexpected finds procedure and the roles and responsibilities of all parties involved;
- (c) ensure that it notifies the EPA under section 60 of the *Contaminated Land Management Act* of any contamination encountered on the development site which meets the triggers in the EPA's *Guidelines for the Duty to Report Contamination*; and
- (k) ensure that the processes outlined in State Environmental Planning Policy 55 - Remediation of Land (SEPP 55) are followed in order to assess the suitability of the land and any remediation required in relation to the proposed use.

2.2 Noise and vibration

The EPA anticipates that site preparation (including tree clearing), bulk earthworks, construction and construction-related activities are likely to have significant noise and vibration impacts on the adjoining Western Sydney University Village residences and Anglicare's Chesalon Nursing Home.

2.2.1 *General construction hours*

The EPA emphasises that site preparation, bulk earthworks, construction and construction-related activities should be undertaken during the recommended standard construction hours.

EIS section 6.16 indicates that despite acknowledging the recommended standard construction hours the "... Project Managers would like to undertake work outside of the standard hours.", including –

- (a) 7.00 am to 8.00 am as well as 1.00 pm to 6.00 pm on Saturdays
- (b) 7.00 am to 6.00 pm on Sundays,
- (b) fit-out between 6.00 pm to 11.00pm Monday to Friday,
- (c) fit-out between 1.00pm to 11.00 pm Saturdays, and
- (d) fit-out between 7.00 am to 11.00 pm on Sundays.

The EPA emphasises that the proponent is a 'public authority' within the meaning of the *Protection of the Environment Administration Act 1991*. And further, that the Environment Protection Authority 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 does not accept that productivity or the preference of Project Managers is adequate justification for undertaking site preparation, bulk earthworks, and construction and construction-related activities outside the standard hours recommended in Table 1 to the EPA's Interim Construction Noise Guideline.

Recommendation

The proponent be required to ensure that as far as practicable all site preparation, bulk earthworks, construction and construction-related activities likely to be audible 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 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 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 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 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 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 the adjoining Western Sydney University Village residences and Anglicare's Chesalon Nursing Home.

The EPA notes with concern the proximity of the surrounding noise sensitive receivers 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 plant and equipment; and
- (f) time restrictions on grounds maintenance using powered equipment (e.g. leaf blowers, brush cutters and lawn mowers).

The EPA also anticipates significant noise impacts from use of tractors and other powered agricultural plant and equipment including pumps.

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, those noise levels should be measured at the most affected or potentially most affected noise sensitive receiver locations. However, EIS Appendix T indicates that background noise monitoring was undertaken from midday on Wednesday 30 August 2017 through to midday Wednesday 6 September 2017. And, that approximately two days of this data is affected by wind speeds greater than 5 metres per second. Therefore, the EPA estimates that only about 5 days of valid data has been submitted and used to calculate background noise levels and this is not in accordance with the INP.

Figure 1 to EIS Appendix T shows the approximate location of background noise monitoring was undertaken at Western Sydney University residential village student accommodation.

EIS Appendix T does not report the background noise monitoring data in day to a page format necessary to enable a proper assessment of INP background noise levels.

Recommendation

The proponent be required to undertake background noise monitoring and to report the monitoring results in accordance with the guidance material provided in Chapter 3 and Appendix B to the New South Wales Industrial Noise Policy so as to provide at least a week's worth of valid noise monitoring data.

'Out of hours' community use of school facilities

Section 6.2 to EIS Appendix T under the heading 'Sporting/concert events' indicates that use of Building 04 (i.e. school hall/gymnasium) for sporting and concert events is proposed to be assessed during the detailed design stage of the project. Whilst the development site plan does not appear to indicate the location of any outdoor sports courts, the EPA nevertheless anticipates the provision of such 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/hall and any outdoor sports courts) outside normal school hours needs to be carefully managed to ensure noise impacts on nearby student accommodation and the Chesalon Nursing Home are minimised.

The EPA further considers that its recommended restrictions on community use of school facilities should only be relaxed following –

- (a) detailed noise impact assessment of use of the school hall/gymnasium for sporting, concert and other potentially high noise impacts events, especially events involving amplified sound equipment outside normal school hours, and

- (b) comprehensive noise compliance monitoring of representative community uses of the school hall/gymnasium and any outdoor sports courts.

Recommendation

The proponent be required to ensure that the school hall/gymnasium is not made available for community use other than for the purposes of undertaking noise compliance monitoring of representative potentially high noise impact uses, including sporting and concert events.

Recommendation

The proponent be required to ensure that any 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, or
- (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/gymnasium and any 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 Chesalon nursing home.
- (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,
 - any amplified sound during concerts or the like, and
 - post-event audience/spectator noise, including vehicle door slamming and departure noise.

Mechanical plant and equipment

Section 6.1 to EIS Appendix T incorrectly suggests that "... classroom buildings forming part of the development would be considered the nearest sensitive receivers". However, the purpose of any noise impact assessment is to determine the degree of noise impact that might interfere unreasonably with the comfort of repose of any person not on the premises from which the noise is emitted. Section 1.3 to the New South Wales Industrial Noise Policy states that the "Internal or occupational noise within any workplace is a separate issue ...".

Section 6.1 to EIS Appendix T indicates that mechanical plant and equipment noise would be limited to a number of rooftop fans. However, the EPA notes that –

- the project ground floor plan indicates a plant room in Building 01, and
- EIS section 3.1 indicates that the development includes a workshop shed building.

Similarly, the EPA anticipates that mechanical plant and equipment would include tractors and other powered agricultural machinery including fixed and mobile pumps.

Recommendation

The proponent be required to:

- (a) provide a comprehensive quantitative assessment of operational noise impacts on surrounding noise sensitive receivers, especially the adjoining aged care facility and residences;
- (b) ensure mechanical plant and equipment (including pumps, plant rooms and workshop 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 boundaries 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.

Agricultural field management using powered equipment

The EPA understands that it is not unusual for farms to operate tractors and other powered farm machinery during the evening (6.00 pm to 10.00 pm) and night periods (10.00 pm to 7.00 am) and on weekends.

The EIS does not appear to assess noise impacts of tractor and other powered machinery being operated other than during the day period Monday to Friday.

Recommendation

The proponent be required to ensure that tractors and other powered agricultural machinery are only operated between 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 Agricultural activities (water pollution)

The EPA notes that the development site is within the Hawkesbury-Nepean River catchment area, albeit about 4 kilometres from the Hawkesbury River.

The EIS site plan (i.e. drawing HASH-00-DD-AR-DR-1001 Revision G) indicates areas proposed to be allocated for an 'agricultural field' and 'agricultural enterprise area'. The EPA anticipates –

- (a) the application of fertiliser and pesticides to the agricultural field, and
- (b) that the agricultural enterprise area is likely to be used in part for the keeping of livestock and associated localised deposits of animal wastes in livestock pens and enclosures.

EIS Appendix K *Civil Engineering and Stormwater Management Plan* provides an assessment of stormwater quality control measures, including retention ponds and wetlands presumably sited within the area designated 'stormwater detention basin' of the project site plan. The EPA reaffirms that it does not review or endorse environmental management plans or the like for reasons of maintaining regulatory 'arms length'. And accordingly, has not reviewed Appendix K.

Recommendation

The proponent be required to ensure that runoff from the agricultural field and agricultural enterprise area does not pollute waters, including artificial watercourses such as stormwater drainage channels.

3.4 Agricultural activities (odours)

The EIS indicates that the western side of the development would be developed for an 'agricultural field' operated in conjunction with the school. The EPA notes that the proposed agricultural field adjoins Western Sydney University Village residences and Anglicare's Chesalon Nursing Home.

The EPA acknowledges that agricultural activities would be expected to generate odours consistent with a rural setting. However, the EPA is aware from long experience that certain agricultural activities (e.g. pig keeping, application of processed poultry manure) carried on in an 'environmentally unsatisfactory manner' are likely to generate significant odour emissions on school premises adjoining residences are likely to generate significant odour emissions.

The EPA anticipates that livestock pens and enclosures would be regularly mucked out and accumulated manure and food waste stored in weather and vermin proof bins for later composting or other re-use.

Recommendation

The proponent be required to ensure that livestock are housed in such a manner and at such distance from the adjoining Western Sydney University Village residences and Anglicare's Chesalon Nursing Home as may be necessary to minimise the emission of odours at the development site.

Recommendation

The proponent be required to ensure that any highly odorous fertilisers (e.g. aged/processed poultry manure) are applied by such means as may be necessary to:

- (a) minimise the emission of odours at the development site, and
- (b) prevent the emission of odours from the development site.

3.5 Agricultural activities (pesticides)

The EPA anticipates that the school is likely to apply pesticides from time to time, particularly to that part of the school grounds designated on the site plan as 'agricultural field'.

A pesticide includes any –

- (a) agricultural chemical product (within the meaning of the Agvet Code), and
- (b) veterinary chemical product (within the meaning of the Agvet Code) for the external control of ectoparasites of animals.

The proponent should be aware that pesticide use includes -

- (a) applying, spraying, spreading or dispersing the pesticide by any means,
- (b) storing the pesticide, and
- (c) preparing the pesticide for use.

The EPA anticipates that pesticide use on the grounds of the development site would be undertaken by such means as may be necessary to avoid –

- (a) injury to any person
- (b) damage to the property of another person,
- (c) harm to a non-target animal, or
- (d) harm to a non-target plant.

The EPA emphasises that the grounds of the development site are a 'prescribed public place' in respect of the use of any pesticide and that the proponent as a public authority has particular obligations concerning the notification of use of any pesticide on those grounds. The EPA is aware that the proponent has finalised a Pesticide Use Notification Plan to ensure that those who have a potentially high sensitivity to exposure to pesticide are appropriately notified so as to avoid or minimise risk of exposure.

Whilst the EPA is aware that the proponent has adopted a Pesticide Use Notification Plan for the grounds of all its schools, the EPA remains concerned about the potential risk to human health of unnotified pesticide use within 20 metres of the common boundary with -

- Chesalon Nursing Home, or

- any existing or future school, pre-school, kindergarten or child care centre that may operate on that part of Western Sydney University immediately adjoining the development site.

Recommendation

The proponent be required to ensure that any pesticide, including any insecticide, herbicide, fungicide, and any veterinary chemical used for external control of ectoparasites of animals, is only stored, prepared for use or used on the development site in such manner as may be necessary to prevent –

- (a) injury to a person,
- (b) damage to the property of any person other than the proponent,
- (c) harm to a non-target animal, and
- (d) harm to a non-target plant.

Recommendation

The proponent be required to ensure that any use of a pesticide on the grounds of the development site is not undertaken within 20 metres of the common boundary with Chesalon nursing home or any school, pre-school, kindergarten or child care centre, unless it has given 5 days prior notice of the proposed pesticide use to the management of that nursing home, school, pre-school, kindergarten or child care centre.

Recommendation

The proponent be required to ensure that all pesticides on the development site are stored and prepared for use in a dedicated weather-proof structure designed and constructed –

- (a) to prevent unauthorised access to any stored pesticide,
- (b) to prevent overheating of any stored pesticide,
- (c) to prevent any spilled pesticide being released to the environment, and
- (d) to be adequately ventilated for pesticide storage in accordance with relevant material safety data sheets and pesticide labelling, and
- (e) to be adequately ventilated for pesticide preparation in accordance with relevant material safety data sheets and pesticide labelling.

3.6 Agricultural activities (fuel storage)

The development site appears to be located on land within an Underground Petroleum Storage System (UPSS) environmentally sensitive zone. The EPA anticipates that the proponent is likely to store fuel on the development site for re-fuelling tractors and other powered agricultural plant and equipment.

Should the proponent store any type of fuel in an underground storage system, they must design, install and operate any such Underground Petroleum Storage System with regard to Guidelines issued by the EPA and available via the following link –

<http://www.epa.nsw.gov.au/your-environment/contaminated-land/preventing-contaminated-land/upss>

Recommendation

The proponent be required to design, install and operate any underground petroleum storage system in accordance with the requirements of the Protection of the Environment Operations (Underground Petroleum Storage System) Regulation 2014.

3.7 Water sensitive urban design and energy conservation and efficiency

The EPA acknowledges that EIS Appendix V 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; and
- (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 solar photovoltaic arrays
