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SSD 8980

27/9/18

Ms Teresa Gizzi
Department of Planning and Environment
GPO BOX 39
SYDNEY NSW 2001

Dear Ms Gizzi

SSD 8980 – BOWRAL HOSPITAL REDEVELOPMENT – ENVIRONMENTAL IMPACT STATEMENT (EIS)

I am writing to you in reply to your invitation to the 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 22 December 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 'arm's length'. As such, the EPA has not reviewed any environmental management plan forming part of or referred to in the EIS.

The EPA further notes that the development includes -

(a) a 3 storey in-patient building,

(b) a new emergency department, and

(c) engineering services including a new back-up emergency generator.

The EPA notes with concern:

(a) the proximity of the development to the adjoining Southern Highlands Private Hospital and surrounding residences; and

(b) that it is unable to provide informed comments on the noise impacts of the proposed development as the EIS does not provide the minimum equivalent of ''... one week's worth of valid data ...'' required to properly establish background noise levels measured at the reasonably most or potentially most affected residences.

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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, infrastructure and underground utilities following their demolition;

(b) construction phase noise and vibration impacts (including recommended standard construction hours and intra-day respite periods for highly intrusive noise generating work) on noise sensitive receivers such as surrounding residences;

(c) construction phase dust control and management,

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

(e) operational noise impacts on noise sensitive receivers (especially surrounding residences and the adjoining private hospital) arising from operational activities such as goods delivery, waste collection services and mechanical services (especially air conditioning plant);

(f) the need to assess feasible and reasonable noise mitigation and management measures to minimise operational noise impacts on surrounding residences and the adjoining private hospital;

(g) operational management at the development site of 'regulated material' within the meaning of the Radiation Control Act and Regulation (including the need to vary the existing radiation management licence held by South Western Sydney Local Health);

(h) operational assessment, storage, handling, transport and disposal of 'clinical and related wastes';

(i) design, installation and operation of any underground petroleum storage system proposed to serve back-up generators;

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

(k) 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

SARAH THOMSON
Unit Head, Metropolitan Infrastructure
NSW Environment Protection Authority

Attachment A

Contact officer: JOHN GOODWIN
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ATTACHMENT A

- ENVIRONMENT PROTECTION AUTHORITY COMMENTS –

SSD 8980 BOWRAL HOSPITAL REDEVELOPMENT

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 (hazardous building materials)

The EPA anticipated that given the age of some of the structures on the development site, asbestos containing materials, lead-based paints and polychlorinated biphenyls (PCBs) (associated with electrical equipment and lighting fixtures) are likely to be encountered during demolition.

EIS Appendices 22. 34 and 35 indicate fragments of asbestos containing material were detected on the development site during site investigations. Section 5 (4th dot point) to EIS Appendix 22 refers to a *Feasibility Pre-Demolition Hazardous Building Materials Report* that indicates that "... asbestos containing materials and other hazardous building materials ..." were observed in existing buildings. The EPA is unclear whether the existing buildings referred to in Appendix 22 are proposed for demolition and notes the EIS does not appear to include a copy of the aforementioned Hazardous Building Materials Report.

Since late 2015, clause 79 of the Waste Regulation has required transporters of loads of asbestos waste to provide certain details of the loads to the EPA using the "WasteLocate" system. These details include details of the source site, date of proposed transport, details of the proposed destination site and the approximate weight of asbestos waste in the load. The information must be provided to the EPA before transportation of the load commences.

WasteLocate is an online tool that allows the EPA to track the transport of asbestos waste. Transporters are required to use WasteLocate to report the movement of more than 100 kilograms of

asbestos waste or more than 10 square metres of asbestos sheeting within NSW. The details can be reported on WasteLocate by using an app on a mobile phone or tablet or by using a computer.

Recommendations

1. The proponent be required (prior to commencing any work on the development site) to prepare and implement a revised procedure for identifying and dealing with unexpected finds of site contamination (including asbestos containing materials, lead-based paint and PCBs) and that the revised procedure includes details of who will be responsible for implementing the unexpected finds procedure and the roles and responsibilities of all parties involved.

2. The proponent be required to ensure that following demolition of any existing structures, infrastructure and in ground utilities, further investigation be undertaken of soil contamination within the footprint of those structures and utilities prior to undertaking any construction.

3. 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.

4. 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 Site contamination (general)

EIS Appendix 34 *Environmental Site Assessment* reports on the detailed site investigation recommended following the preliminary investigation. However, the EPA notes the following data gaps:

(a) soils samples were not tested for Organophosphorus Pesticides (OPPs), and

(b) groundwater samples were not tested for PCBs despite testing for PCBs in soil samples, the presence of a potential source being the electricity substation and intersection of groundwater at 1.1 metres.

Section 4.4 to EIS Appendix and section 9.2 to EIS Appendix 34 indicate that an Underground Petroleum Storage System (UPSS) referred to as 'UST' was previously operated on the site adjacent to the current aboveground storage tank. EIS Appendix 34 indicates that the UPSS was de-commissioned in 1996 but is unclear whether the diesel storage tank and related pipe and fittings were abandoned or removed.

EIS Appendix 35 *Remediation Action Plan* (RAP) proposes:

(a) that the precise extent of the remediation works will not be fully defined until completion of remediation works and successful validation data has been obtained;

(b) that site remediation should continue until Contaminants of Potential Concern (CoPC) do not pose a risk to receptors;

(c) in section 3, that all fill on the development site should be considered as asbestos contaminated fill for waste classification purposes;

(d) in section 5, that a pre-remediation investigation be undertaken although the nature of that investigtation is unclear; and

(e) in section 9, that the development site could be made suitable for the proposed development subject to implementation of the RAP.

The proponent should note that the EPA requires all contamination assessment and validation reports submitted to the EPA to comply with the requirements of the *Contaminated Land Management Act 1997* and to be prepared, or reviewed and approved, by a certified consultant.

Recommendations

1. The proponent be required to ensure that following demolition of any existing structures, road pavement and infrastructure, electricity substations/transformers and in ground utilities, further investigation is undertaken of soil and groundwater, including within the footprint and immediate surrounds of those demolished structures, infrastructure, substations/transformers and utilities prior to undertaking any construction.

2. The proponent be required to -

   (a) undertake further site assessment and report on contaminants of potential concern not tested for previously, including –

      (i) organophosphate pesticides in soils, and

      (ii) PCBs in groundwater;

   (b) revise the RAP having regard to the results of required post-demolition investigation and additional soil and groundwater sampling;

   (c) validate that the de-commissioned underground petroleum storage systems (i.e. diesel tank) was decommissioned and removed in accordance with the Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2014;

   (d) provide a validation contamination assessment report following remediation action, including recommendations for any further remediation that may be required together with a statement on the suitability of the land for the proposed use.

3. The proponent be required to consider the guidance material provided in the *National Environment Protection (Assessment of Site Contamination) Measure* as well as the following EPA documents when undertaking further site assessment and validation -

   - Technical Note: Investigation of Service Station Sites, 2014,
   - NSW EPA Sampling Design Guidelines,
   - Guidelines for the NSW Site Auditor Scheme (3rd edition) 2017, and
   - Guidelines for Consultants Reporting on Contaminated Sites, 2011.

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

5. The proponent be required to ensure that 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.

6. The proponent be required to notify the EPA should any contamination of the development site be identified which meets the triggers in the *Guidelines for the Duty to Report Contamination*.

2.3 Noise and vibration

The EPA anticipates that demolition, site preparation (including tree clearing), bulk earthworks, construction and construction-related activities are likely to have significant noise and vibration impacts on surrounding residences and the adjoining private hospital.

However, EIS Appendix 25 'Acoustic Report' does not include a quantitative assessment of construction phase noise impacts on the Southern Highlands Private Hospital, surrounding residences or surrounding active and passive recreation areas.

2.3.1 general construction hours

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

EIS section 9.15.2 proposes the following extended construction hours, being –

- 7.00 am to 6.00 pm Monday to Friday, and
- 8.00 am to **5.00 pm** Saturdays.

The EPA notes that NSW Health and South Western Sydney Local Health District are each a 'public authority' within the meaning of the *Protection of the Environment Administration Act 1991*. Further, that the EPA has general responsibility under that Act for amongst other things:

(a) ensuring that the best practicable measures are taken for environment protection in accordance with the environment protection legislation and other legislation, and

(b) coordinating the activities of all public authorities in respect of those measures.

For instance, Table 1 to the EPA's Interim Construction Noise Guideline clearly 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).

The EIS offers no justification for working during extended hours on Saturdays (1.00 to 5.00pm).

Recommendation

The proponent be required to ensure that as far as practicable all demolition, site preparation, bulk earthworks, construction and construction-related activities likely to 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.

2.3.2 intra-day respite periods

The EPA anticipates that those demolition, 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 demolition, site preparation, bulk earthworks, construction and construction-related activities that do not generate noise with particularly annoying or intrusive characteristics.

Recommendation

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

2.3.3 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.

2.3.4 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, Barangaroo Delivery Authority/Lend Lease and Leighton Contractors (M2 Upgrade project) have undertaken safety risk assessments of alternatives to the traditional 'beeper' alarms. Each determined that adoption of 'quacker' type movement/reversing alarms instead of traditional beepers on all plant and vehicles would not only maintain a safe workplace but also deliver improved outcomes of reduced noise impacts on surrounding residents. Interim Construction Noise Guideline Appendix C provides additional background material on this issue.

Recommendation

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

2.4 Dust control and management

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

Recommendation

The proponent be required to:

(a) minimise dust emissions on the site, and

(b) prevent dust emissions from the site.

2.5 Sediment control

Managing Urban Stormwater Soils and Construction, 4th Edition published by Landcom (the so-called 'Blue Book') provides guidance material for achieving effective sediment control on construction sites. The proponent should implement all such feasible and reasonable measures as may be necessary to prevent water pollution in the course of developing the site.

The EPA emphasises the importance of –

(a) not commencing demolition, site preparation, bulk earthworks, construction and construction-related activities until appropriate and effective sediment controls are in place, and

(b) daily inspection of sediment controls which is fundamental to ensuring timely maintenance and repair of those controls.

2.6 Waste control and management (general)

The proponent should manage waste in accordance with the waste management hierarchy. The waste hierarchy, established under the Waste Avoidance and Resource Recovery Act 2001, is one that ensures that resource management options are considered against the following priorities:

Avoidance including action to reduce the amount of waste generated by households, industry and all levels of government

Resource recovery including reuse, recycling, reprocessing and energy recovery, consistent with the most efficient use of the recovered resources

Disposal including management of all disposal options in the most environmentally responsible manner.

All wastes generated during the project must be properly assessed, classified and managed in accordance with the EPA's guidelines to ensure proper treatment, transport and disposal at a landfill legally able to accept those wastes.

The EPA further anticipates that, without proper site controls and management, mud and waste may be tracked off the site during the course of the project.

Recommendation

The proponent be required to ensure that:

1. all waste generated during the project is assessed, classified and managed in accordance with the EPA "*Waste Classification Guidelines Part 1: Classifying Waste*", November 2014 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.

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) radiation control;

(c) general waste management in accordance with the waste management hierarchy;

(d) clinical and related waste management;

(e) underground petroleum storage system serving the back-up emergency generation;

(f) water sensitive urban design; and

(g) energy conservation and efficiency.

3.1 Noise and vibration impacts

The EPA anticipates the proposed development may have significant operational noise impacts on nearby sensitive receivers, especially the adjoining Southern Highlands Private Hospital and nearby residences in Mona Road, Bowral Street and Sheffield Road.

background noise measurement

The EPA emphasises that properly establishing background noise levels in accordance with guidance material in the New South Wales Noise Policy for Industry is fundamental to a consistent approach to the quantitative assessment of noise impacts of development.

The NPI specifies that at least one 'week's worth' of valid monitoring data is required to establish background noise levels at each monitoring location and that noise levels measured during adverse meteorological (i.e. rainfall or wind velocities exceeding 5 metres per second) should be excluded when deriving those background levels. However, the EPA notes that EIS Appendix 25 '*Acoustic Report*':

(a) indicates that unattended background noise monitoring was undertaken over seven and one half days between 1 November 2017 and 8 November 2017;

(b) rain was recorded during 5 of the 7 ½ days of background noise monitoring;

(c) 24.8 millimetres of rain was recorded at the Bureau of Meteorology Moss Vale weather station on Monday 6 November 2017 with wind speeds in excess of 5 metres per second (i.e. 18 kilometres per hour) at both 9.00 am and 3.00 pm suggesting that day's data was also likely to be wind affected;

(d) a further 4.8 millimetres was also recorded on Tuesday 7 November 2017;

(e) does not include required daily logger graphs (i.e. a day per page) of unattended monitoring results thus precluding a proper assessment of that data; and

(f) Figure 2 indicates that unattended background noise monitoring was not undertaken at the reasonably most or potentially most affected residences in Mona Road and Bowral Street but instead in Sheffield Road.

Accordingly, the EPA is unable to provide informed comments on the operational noise impacts of the proposed development.

Recommendation

The proponent be required to undertake background noise monitoring at the reasonably most or potentially most affected residences in Bowral Street and Mona Road and to report on the results of that monitoring in accordance with the guidance material provided in Fact Sheets A and B to the Noise Policy for Industry.

noise policy for industry

The text of EIS Appendix 25 appears to have mis-used terms (linked to underlying impact assessment concepts) derived from the superseded Industrial Noise Policy instead of the proper terms used in the current Noise Policy for Industry. For instance –

- Table 5 states that Modifying Factor Corrections are provided "... as per the NSW NPI", however, the text is from the Industrial Noise Policy and is an incorrect reference, and

- section 5.2.2 (p.13) uses the term 'Project Specific Noise Levels' instead of 'Project Noise Trigger Levels' which should be determined by re-measuring the background noise monitoring in the residential areas surrounding the Hospital precinct.

Recommendation

The proponent be required to revise EIS Appendix 25 to reflect the required background noise monitoring results, the terms and the underlying assessment principles of the Noise Policy for Industry and to re-submit the revised acoustic report for further consideration.

mechanical plant and equipment

Section 7.2.1 to EIS Appendix 25 indicates that details of mechanical services, plant and equipment (including rooftop mechanical ventilation and air conditioning plant) are not yet available and thus a quantitative noise impact assessment is unable to be undertaken until the "... Detailed Design phase to ensure noise levels from the plant do not exceed limits outside the plant room."

Recommendation

The proponent be required to:

(a) provide a comprehensive quantitative assessment of operational noise impacts on surrounding noise sensitive receivers, especially nearby residences and the adjoining Southern Highlands Private Hospital;

(b) ensure mechanical plant and equipment installed on the development site does not generate -

  (i) noise that exceeds 5 dBA above the rating background noise level (day, evening and night) measured at the boundary of the development site, and

  (ii) noise that exhibits tonal or other annoying characteristics.

waste collection services

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

Recommendation

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

goods delivery and loading dock operations

The EPA notes reports of community concern arising from goods delivery and loading dock operations undertaken during evening and night times. The EPA anticipates that goods delivery would intensify apace with the increased capacity of the hospital associated with its redevelopment.

Recommendation

The proponent be required to ensure goods delivery is not undertaken outside the hours of 7.30 am to 6.00 pm.

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) 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 Radiation control

The EIS does not appear to address radiation control at the existing hospital or any implications for the radiation management licence held by South Western Sydney Local Health District.

The EPA understands that whilst Bowral hospital provides diagnostic imaging services, it does not provide either nuclear medicine or radio-therapy services. And, further understands that existing diagnostic imaging services would not be transferred to or supplemented by services to be provided in the proposed facilities.

The EPA administers the *Radiation Control Act 1990* (and Radiation Control Regulation 2013) and anticipates that 'regulated material' will be stored and possessed on the hospital campus. 'Regulated material' means -

(a) radioactive substances,

(b) ionising radiation apparatus,

(c) non-ionising radiation apparatus of a kind prescribed by the regulations, and

(d) sealed source devices.

Recommendations

1. The proponent be required to clarify whether diagnostic imaging facilities are to be located in the new emergency department, or continue to be provided in their existing location on the hospital campus.

2. The proponent be required to apply for and obtain any necessary amendment to the 'radiation management licence' currently held under the name of the South Western Sydney Local Health District in respect of 'regulated material' at the new facilities and the management and handling of any waste containing radioactive material.

3.3 Underground petroleum storage system

The EPA understands that the water table is intersected at about 1.1 metres below the natural surface and that the development site is located within an Environmentally Sensitive Zone defined under the Protection of the Environment Operations (Underground Petroleum Storage System) Regulation 2014.

EIS section 9.10.2 under the heading 'Electricity' indicates that a new 440kVA back-up emergency generator is to be installed in a built for purpose external acoustic enclosure but is unclear about whether fuel storage required serve that generator would consist of an Underground Petroleum Storage System (UPSS). The proponent may only use a UPSS in accordance with the requirements of the Protection of the Environment Operations (Underground Petroleum Storage System) Regulation 2014. And, any such UPSS must be designed, installed and operated with regard to Guidelines issued by the EPA.

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.

3.4 Waste management (general)

The proponent should manage waste in accordance with the waste management hierarchy as mentioned above.

Recommendation

The proponent be required to identify and implement feasible and reasonable opportunities for the re-use and recycling of waste, including food waste.

3.5 Waste management (clinical and related waste)

The EPA anticipates that the development will generate 'clinical and related waste' which are defined under the Protection of the Environment Operations Act 1997, as follows -

'Clinical and related waste' includes clinical waste; cytotoxic waste; pharmaceutical, drug or medicine waste; and sharps waste.

"Clinical waste means any waste resulting from medical, nursing, dental, pharmaceutical, skin penetration or other related clinical activity, being waste that has the potential to cause injury, infection or offence, and includes waste containing any of the following:

(a) human tissue (other than hair, teeth and nails),
(b) bulk body fluids or blood,
(c) visibly blood-stained body fluids, materials or equipment,
(d) laboratory specimens or cultures,
(e) animal tissue, carcasses or other waste from animals used for medical research,

but does not include any such waste that has been treated by a method approved in writing by the Director-General of the Department of Health."

The occupier of any premises comprising a hospital, day procedure centre, pathology laboratory, mortuary or medical research facility where clinical and related waste is generated, must ensure that there is a waste management plan, in respect of that waste, for the premises. And, should prepare that plan with due regard to the relevant provisions of clause 113 of the Protection of the Environment Operations (Waste) Regulation 2014.

Recommendations

1. The proponent be required to properly classify and manage clinical and related waste in accordance with the EPA's Waste Classification Guidelines.

2. The proponent be required to ensure that the occupier of the hospital prepares and implements a revised waste management plan, in respect of clinical and related waste generated at the development site in accordance with NSW Health policy directive 2017_026 titled "*Clinical and Related Waste Management for Health Services"*, dated August 2017.

3.6 Water sensitive urban design and energy conservation and efficiency

The EPA acknowledges that EIS Appendix 26 comprises an environmentally sustainable development statement that broadly commits to measures intended to minimise the consumption of potable water, and measures to maximise energy efficiency and minimise energy consumption.

However, EIS section 9.10.2 under the heading *Integrated Water Management* states that rainwater form roof areas will not be collected, stored and re-used.

Similarly, the EIS architectural drawings (roof plan) do not appear to indicate installation of rooftop photovoltaic panels for the generation of electricity.
