



Your reference: SSI 6622
Our reference: DOC15/270139-26
Contact: Peter Morrall

Justin Woodhouse
Department of Planning and Environment
GPO BOX 39
SYDNEY 2001

Dear Mr Woodhouse

SSD 6622 – NORTHERN BEACHES HOSPITAL CONNECTIVITY AND NETWORK ENHANCEMENT WORKS STAGE 2 EIS

I refer to the request from the Department of Planning and Environment (DP&E) to the Environmental Protection Authority (EPA) dated 17 July 2015, to provide comments on the Environmental Impact Statement (EIS) for the above project.

The EPA has reviewed the EIS and provided comments and recommended conditions of consent in relation to the conditions of approval for the key issues of air quality, water quality and noise and vibration (see attached).

If you wish to discuss any of the issues raised in this letter, please contact Peter Morrall on 9995 6810.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'M. Sharpin', followed by the date '21-8-15'.

Mike Sharpin
Unit Head Metropolitan Infrastructure
NSW Environment Protection Authority

Encl. EPA's submission on the Environmental Impact Statement for the Northern Beaches Hospital Connectivity and Network Enhancement Works Stage 2 (SSI 6622)

EPA's submission on the Environmental Impact Statement for the Northern Beaches Hospital Connectivity and Network Enhancement Works Stage 2 (SSI 6622)

Water Quality

Water discharge criteria

The Proponent has proposed that groundwater and surface water discharges will be treated to meet either the ANZECC (2000) trigger values for slightly to moderately disturbed ecosystems or background water quality levels, whichever is highest.

The EPA notes that it has not been demonstrated that background water quality provides a suitable basis for developing discharge criteria. To establish site-specific trigger values an appropriate reference must be used consistent with the methodology in the ANZECC (2000) Guidelines. The reference condition should represent a substantial achievement in environmental protection, i.e. a slightly disturbed reference site if the water quality objective is for slightly to moderately disturbed. (see ANZECC (2000) section 3.1.4 *Defining a reference condition*). In the absence of an appropriate reference condition, the proponent must adopt the ANZECC (2000) default trigger values as the basis for assessing the detailed design and treatment options.

When considering the level of protection to be adopted the EPA have noted that while the 3 main waterways to receive discharge have a level of protection goal of slightly to moderately disturbed, they drain into Garigal National Park and Manly Dam Reserve. Given the short-term nature of the disturbance and existing impacts to receiving waters, the EPA considers that the trigger values for 'slightly to moderately disturbed' ecosystems can be adopted as the basis for assessment. The aim however should be to contribute to achieving a high conservation level of protection during the operation phase of the Project where discharges may not receive adequate dilution or attenuation before entering the protected areas.

Recommended Condition of Consent

- The Proponent shall not cause or permit any waters to be polluted, as defined under Section 120 of the *POEO Act*.

Erosion and sediment control

According to the Surface Water Assessment (GHD, July 2015, pg. 40) the rainfall erosivity and steep terrain of the site indicates potential high erosion hazards. It also states due to the confined nature of the works, the close proximity of existing development and relatively steep terrain (pg. 71) the installation of sediment basins is unlikely to be feasible.

Erosion and sediment control measures should be developed and managed in accordance with Managing Urban Stormwater Soils and Construction, 4th Edition published by Landcom (the 'Blue Book') and Volume 2D Main Road Construction published by DECC (2008). Volume 2D advises that main road construction requires a stronger emphasis on some management principles, particularly:

- *erosion control as a pollution prevention strategy*
- *runoff separation by diverting 'clean' stormwater runoff around the site or away from operational areas*
- *management and maintenance of long-term controls.*

For sites where sediment basins cannot be installed guidance is provided within sections 6.3.4(g) and 4.4.2 of the Blue Book.

Recommended Condition of Consent

- Erosion and sediment control measures must be developed and managed in accordance with Managing Urban Stormwater Soils and Construction, 4th Edition published by Landcom (the 'Blue Book') and Volume 2D Main Road Construction published by DECC (2008).

Noise and Vibration

Queuing and idling construction vehicles

Community concerns may arise from noise impacts associated with the early arrival and idling of construction vehicles at the development site and in the area surrounding the site.

Recommended Condition of Consent

- Construction vehicles must not arrive at the project site or in surrounding areas outside approved construction hours.

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. At other projects several contractors have undertaken safety risk assessments of alternatives to the traditional 'beeper' alarms. Each determined that adoption of 'quacker' type movement/reversing alarms instead of traditional beepers on all plant and vehicles would not only maintain a safe workplace but also deliver improved outcomes of reduced noise impacts on surrounding residents. Interim Construction Noise Guideline Appendix C provides additional background material on this issue.

Recommendation

The proponent be required to undertake 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.

Recommended Condition of Consent

Noise and vibration control measures must be developed and managed in accordance with:

- The Interim Construction Noise Guideline (2009);
- Assessing Vibration: a technical guideline (2006);
- NSW Road Noise Policy (2011)

Air Quality

The EPA notes the following recommendation made by Pacific Environment Limited (June 2015) in the Air Quality Assessment (pg. 35)

"An Air Quality Management Plan should be produced to cover the construction of the Stage 2 Project".

Recommended Condition of Consent

The proponent must develop and implement an air quality management plan that addresses all significant construction related emission sources. As a minimum, the air quality management plan must include the following parts:

- Key performance indicator(s);
- Monitoring method(s);
- Location, frequency and duration of monitoring;
- Record keeping;
- Response mechanisms; and
- Compliance reporting.

Off-Road Diesel Emissions

The environmental impacts associated with off road diesel equipment can be a major source of fine particles. The EPA recommends that the proponent assess the environmental impacts associated with heavy vehicles including off road diesel equipment and plant used in the construction of the project. This should include but is not limited to:

- Compliance with relevant and current emission standards as prescribed in Australian Design Rules for heavy duty engines and vehicles.
- Strategies for minimising air emissions from off road diesel equipment including but not limited to graders, bulldozers, loaders etc.
- Confirmation that all off road diesel equipment will meet best available diesel emissions standards or be fitted with an appropriate diesel exhaust treatment device where possible.