

DOC2017/0465798-01 SSI 8256

> Senior Planner **Transport Assessments** Department of Planning and Environment 320 Pitt St SYDNEY NSW 2000

> > 27 October 2017

Attention:

Dear

SSI 8256 - Sydney Metro City & Southwest (Sydenham to Bankstown) - Environmental Impact **Statement - Request for EPA Comment** 

I refer to your letter dated 12 September 2017 requesting comment from the NSW Environment Protection Authority (EPA) on the Environmental Impact Statement for the proposed Sydney Metro City & Southwest (Sydenham to Bankstown) rail project.

The EPA has reviewed the Environmental Impact Statement and has provided comment in Attachment 1 and recommended conditions of consent in Attachment 2. If you have any questions regarding this letter, please contact Claire Miles, Senior Operations Officer Metropolitan Infrastructure on 9995 5167 or at Claire.miles@epa.nsw.gov.auKind regards,

**JACINTA HANEMANN** 

Manager Regional Operations, Metropolitan Infrastructure **NSW Environment Protection Authority** 

(from outside NSW)

# Attachment 1

# 1.0 Water

#### 1.1 Water Quality Impact Assessment

1.1.1 The EIS, in table 1.2 of Technical Paper 8 – Hydrology, flooding and water quality assessment, identifies the relevant Water Quality Objectives (protection of aquatic ecosystems, visual amenity, secondary contact recreation, primary contact recreation and aquatic foods cooked) and most of the indicators and trigger values for the receiving waters' environmental values, listing both the lowland rivers and estuarine values.

The EIS has identified hydrocarbons, heavy metals and other chemicals as potential pollutants but these have not been included as indicators for the protection of aquatic ecosystems. Table 21.4 in the main report provides incorrect water quality trigger values for total phosphorus, total nitrogen and chlorophyll-a. WTAU also noted that trigger values have not been provided for chemical contaminants or toxicants.

#### Recommendations:

- The water quality trigger values for total phosphorus, total nitrogen and chlorophyll-a values should be consistent with those identified in Technical Paper 8; and
- Trigger values should be provided for chemical contaminants and toxicants.
- 1.1.2 An assessment of the potential impacts on the relevant Water Quality Objectives is not provided. The EIS states 'the intention is that assessment against ANZECC guidelines would be undertaken during the detailed design'. In exercising its licensing functions, the EPA must take into consideration the environmental values of water affected by an activity or work and the practical measures that could be taken to restore or maintain those environmental values (section 45 POEO Act).

**Recommendation:** Further assessment of the potential impacts on the relevant Water Qualty ity Objectives should be undertaken as part of the scope of the EIS.

#### 1.2 Disturbance of contaminated land

The EIS states that a preliminary environmental site assessment has identified a risk of contamination along the length of the project area, albeit a low to medium risk for the majority of the project area, with potential contamination sources being historical rail activities, and commercial and residential land use in surrounding areas. Several sections of the project are suspected to have a medium to high risk of contamination with potential contaminants, including hydrocarbons and heavy metals, being present in both soil and groundwater. No quantitative information on contamination is provided in the EIS.

If not appropriately managed disturbance of the contaminated soil and groundwater could potentially impact the receiving environment. The EIS states that further site investigation would be carried out in areas of medium to high risk to identify appropriate management responses.

Recommendation: A quantitative assessment of contamination should be undertaken.

## 1.3 Work in waterways

The EIS states that the project would involve works in and around watercourses, including the Cooks River and Cup and Saucer Creek. These works could disturb the bed and banks, and potentially lead to localised erosion and sediment transport downstream. The EIS states 'works within or near watercourses (including the Cooks River) would be undertaken with consideration given to the NSW Office of Water's guidelines for controlled activities'.

No detail was provided on the proposed mitigation measures for in-channel sediment disturbance, including measures for protecting water quality associated with construction/modification activities within and adjacent to the Cooks River.

**Recommendation**: Mitigation measures for in-channel disturbance, including measures for protecting water quality associated with construction/modification activities within and adjacent to the Cooks River, should be provided in the EIS.

### 1.4 Construction Mitigation Measures

The EIS proposes that soil and water management measures would be developed and implemented in accordance with Soils and Construction - Managing Urban Stormwater Volume 1 (Landcom, 2004) and Volume 2A (DECC, 2008).

The EIS states that 'discharges from construction water treatment devices would be monitored to ensure compliance with the discharge criteria in the environment protection licence'. No information has been provided about the type or location of the construction water treatment devices or the potential quality or quantity of the discharges.

**Recommendation**: Information and assessment about the type or location of the construction water treatment devices or the potential quality or quantity of the discharges should be provided.

#### 2.0 Noise & Vibration

## 2.1 Work Outside of Standard Construction Hours

The EPA notes that there is a significant proportion of work required to be undertaken outside of standard construction hours; the EIS indicates this will be limited to those works requiring rail possessions. Whilst the EPA generally considers local rail possessions to be a reasonable justification for work undertaken outside of standard construction hours, the large number of rail possessions scheduled for the duration of the project may translate to significant noise impacts for the local community.

Considering this, it is unlikely that the EPA will support any additional works being undertaken outside of standard construction hours under the provisions of an EPL unless there are extenuating or exceptional circumstances that act to justify any such provisions.

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# **Attachment 2**

## **Recommended Conditions of Consent**

#### Water

- (1) Prior to works commencing the Proponent must prepare a Surface Water Management Plan. The Surface Water Management Plan must include but not be limited to:
  - a) address construction monitoring, management and response arrangements
  - b) specifications and design details of the water treatment devices
  - c) identification and estimation of the quality and quantity of all pollutants that may be introduced into the water cycle by source and discharge point for the construction phase
  - d) an assessment of the potential impact of discharges on receiving waters and human health
  - e) specifications and design details of the mitigation measures for in-channel sediment disturbance associated with construction/modification activities within and adjacent to the Cooks River and contingency actions for risk factors
  - f) the type, location and size of the proposed water sensitive urban design systems
  - g) a Surface Water Quality Monitoring Program (SWQMP)
  - h) a Soil and Water Management Plan (SWMP) to cover soil erosion and sediment control measures for any areas that may be disturbed.
- (2) The identification and estimation of the quality and quantity of all pollutants that may be introduced into the water cycle by source and discharge point must also include consideration of pollutants associated with contaminated land.
- (3) The assessment of the potential impact of discharges on receiving waters should include but not be limited to:
  - a) baseline data on current water quality in any receiving waters that could be affected by the project
  - b) a statement of the ambient Water Quality Objectives (WQOs) and the environmental values for the receiving waters relevant to the proposal
  - c) a statement of the indicators and associated trigger values or criteria for the identified environmental values
  - d) assessment of the significance of any identified impacts on surface waters including consideration of the relevant ambient water quality outcomes. Demonstration of how the proposal will be designed and operated to:
    - i. protect the WQOs for receiving waters where they are currently being achieved;
      and

- ii. contribute towards achievement of the WQOs over time where they are not currently being achieved.
- e) demonstration that any discharge water quality is consistent with at least the 95% protection level for freshwater and/or marine ecosystems during the construction and operation phases. Contaminants that bio-accumulate should have a 99% protection level.
- (4) The SWQMP should be prepared by a suitably qualified and experienced person and include but not be limited to:
  - a) a statement of the ambient Water Quality Objectives and environmental values for the receiving waters relevant to the proposal
  - b) a statement of the indicators and associated trigger values or criteria for the identified environmental values
  - c) trigger values for action and associated actions or mitigation measures if trigger values are exceeded
  - a water quality monitoring program with relevant analytes and a sampling distribution and frequency appropriate to the nature and extent of potential pollution and activities being conducted onsite
  - e) location of discharge points and monitoring locations.
- (5) The SWMP should be prepared by a suitably qualified and experienced person and include but not be limited to:
  - a) soil erosion and sediment control measures that are consistent with the practices and principles contained in Managing Urban Stormwater – Soils and Construction, Volume 1 (the Blue Book) and Volume 2A
  - soil erosion and sediment control measures appropriate for contaminated land that ensure stormwater from contaminated areas are not permitted to contaminate clean areas or cause non-trivial harm to receiving waters
  - c) design calculations and sizing for all clean water diversion bunds and sediment basin(s)
  - d) plan drawings showing the locations for soil erosion and sediment control practices for the project
  - e) written text detailing the installation, monitoring and maintenance requirements for all of the soil erosion and sediment control practices
  - f) drawings of any engineering structures such as sediment basin(s) and clean water diversion structures, including design standards and management regimes to return the system to design capacity following rainfall events.

#### **Noise**

The EPA supports the inclusion of Conditions of Approval that are consistent with the Chatswood to Sydenham component of the City & Southwest project, including:

- (1) An independent Environmental Representative to oversee compliance with the conditions of approval and the environmental performance of the proponent and project, for the Department of Planning and Environment;
- (2) An independent Acoustics Advisor who will review and advise on the noise and vibration components of the project for the Department of Planning and Environment;
- (3) A compliance tracking program and reporting, to monitor compliance with the conditions of approval;
- (4) An environmental auditing program and reporting, to assess compliance of the project with the conditions of approval:
- (5) A requirement to notify incidents to the Department of Planning and Environment, in addition to the EPA's notification requirements;
- (6) An independent community complaints commissioner to follow up on complaints not resolved by the proponent to the complainant's satisfaction;

The EPA recommends the following additional Conditions of Approval:

- (1) Preparation and implementation of a community communication strategy;
- (2) Preparation and implementation of a complaints management system
- (3) Preparation and implementation of a Construction Noise and Vibration Strategy (CNVS) specific to this proposal. The CNVS for this proposal should incorporate measures specifically considerate of the construction noise impacts outside of standard construction hours for rail possessions and road openings;
- (4) Preparation and implementation of a construction environmental management plan detailing how performance outcomes, commitments and mitigation measures will be implemented;
- (5) Preparation and implementation of a noise and vibration sub-plan, in consultation with relevant local government authorities;
- (6) Construction noise and vibration impact statements for each construction site, specifying mitigation measures identified through consultation with affected noise sensitive receivers;
- (7) Limit construction to standard construction hours other than for rail possessions and for road openings permitted only outside of standard construction hours;
- (8) Implementation of the proponent's construction noise and vibration strategy;
- (9) Construction noise and vibration monitoring programs;
- (10) An operational environmental management plan, including a noise and vibration sub-plan;
- (11) An operational noise and vibration monitoring program to confirm that operational levels meet the rail noise criteria;
- (12) a Utility Management Coordination Agency to oversee development and implementation of a Utility Management Strategy to avoid out-of-hours works by utility agencies on nights when the proponent had planned respite.