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Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Dear Sir/Madam

SYDNEY OLYMPIC PARK MASTER PLAN REVIEW 2030

I am writing to provide comment on the Sydney Olympic Park Master Plan Review 2030 and supporting information received by the Environment Protection Authority (EPA) on 20 October 2016.

The EPA has undertaken a review of the submitted information and has provided the attached comments (Attachment A) to assist the Department of Planning and Environment (DPE) in their review of the Master Plan. They relate to:

- Air quality
- Water quality
- Noise
- Contaminated Land Management
- Waste Management

The EPA is available to meet at a mutually convenient time to discuss any of the attached comments if required. Should you require any further information, please contact Mr Paul Wearne on (02) 4224 4100.

Yours sincerely

01/12/16

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Acting Regional Director Metropolitan Branch
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Attachment A & B

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ATTACHMENT A

1. Air Quality

The Master Plan review appears to discuss odour issues in relation to the existing Homebush Bay Liquid Waste Treatment Plan (LWTP) and the Auburn Resource Recovery Centre and their relationship to the Haslams Precinct. The review does not appear to include a discussion on air quality in relation to future growth at Sydney Olympic Park.

A *Plan for Growing Sydney 2014* states that 'urban development has implications for air quality, with exposure to air pollution associated with the incidence of respiratory problems, heart and lung disease and risks to children and the elderly. Through urban layout, we can improve air quality in residential areas to improve our health and wellbeing.'

The Master Plan review provides an opportunity to raise awareness of air quality issues, build air quality information into planning processes and deliver actions that maintain or improve air quality as part of future growth. While some of the components in the Masterplan such as active transport will have air quality benefits, a range of approaches are required to deliver improved air quality outcomes over time.

The recently released NSW Governments *Clean Air for NSW consultation paper* provides information on air quality including priorities to reduce emissions and exposure. It also recognises the importance for planning for clean air as Sydney grows. A copy of this discussion paper can be obtained at: http://www.epa.nsw.gov.au/resources/air/clean-air-nsw-160415.pdf

Activating Sydney Olympic Park should provide sustainable growth that delivers the following key air principles:

- Ensures air quality is maintained or improved and that the exposure of populations to air pollution emissions is reduced.
- New potential sources of air emissions use best practice controls.
- Prevent land use conflict.

There are a range of approaches that could be delivered to support the above principles including:

- Integrated land use and transport planning at strategic and precinct level to minimise transport emissions.
- Implementing planning and design principles that avoid or reduce population exposure to emissions (including dust and odour) from transport, industry and businesses.
- Planning and design approaches that support energy efficiency and cleaner technologies in homes and businesses.
- Improved valuation of the air quality impacts of transport and land use proposals, to better inform and guide planning and development decision-making.

Any future residential growth should be appropriately planned next to major roadways or future major roads or rail corridors that avoid or reduce population exposure to emissions from transport. The *Infrastructure SEPP* and *Development near Rail Corridors and Busy Roads - Interim Guideline* provides guidance on development adjacent to a major roads and rail corridors.

The approaches being applied in the Parramatta Road Corridor Urban Transformation Strategy should also be considered. A copy of these measures can be obtained at:
http://www.urbangrowth.nsw.gov.au/assets/Projects/Parramatta-Road/Publications-161109/Strategy-Documents/6.-Implementation-Tool-Kit-Planning-and-Design-Guidelines-November-2016.pdf.

The US EPA *Best Practices for Reducing Near-Road Pollution Exposure at Schools* provides guidance on reducing exposure of schools to air pollution along major roads. This guideline was developed by the US EPA Office of Children's Health Protection in 2015. A copy of this guidelines can be obtained at:
https://www.epa.gov/sites/production/files/2015-10/documents/ochp_2015_near_road_pollution_booklet_v16_508.pdf

The Master Plan should also provide approaches for the management and control of ozone and particle precursors (NOx, SOx, VOC and particulates). This includes the following:

- There has been interest in adoption of distributed power generation, including cogeneration and back-up power generation in Sydney. These technologies usually employ combustion of gas or diesel fuel. Gas-fired cogeneration can be one of the most greenhouse-friendly forms of electricity generation using fossil fuels. However, gas and liquid fired distributed generation has the potential to adversely affect local and regional air quality as it can emit significant amounts of NOx, which reacts in the air to form harmful nitrogen dioxide and ozone. Some guidance can be found in the following EPA guideline: http://www.epa.nsw.gov.au/air/cogentrigen.htm.
- Wood heaters are a major contributing source of elevated particle levels in Sydney. Approaches undertaken in Sydney's Growth Centres have included restricting installation of wood heaters and open fire places.
- Diesel and gas powered equipment used in construction can cause air pollution. The proposal should provide for best management practices at the construction stage. Please refer to information available on the EPA website at: http://www.epa.nsw.gov.au/air/managenonroaddiesel.htm.

The Methodology for Valuing the Health Impacts of Changes in Particle Emissions, supported by an Air Quality Appraisal Tool can be used to estimate the increased health impacts as a result of either increased population (hence exposure) or increased air pollution emissions. The tool is designed for application in assessing the impacts and costs of new land use and transport proposals. The Methodology and Appraisal Tool is available at: http://www.epa.nsw.gov.au/air/costcurves.htm.

2. Water Quality

The EPA considers that water quality is an important environmental issue for the future sustainable growth of Sydney Olympic Park. The Review should include updating current water management strategies for the Park with contemporary information. For example, activation of Sydney Olympic Park should provide sustainable growth that delivers the following key water principles:

- Promote development that protects, maintains or restores waterway health and the community's environmental values and uses of waterways.
- Promote integrated water cycle management that holistically considers and drives investment in sustainable water supply, reuse, wastewater and stormwater infrastructure. The EPA understands that integrated water cycle management is already applied at Sydney Olympic Park and considers this should be extended to any future development.
- Promote development that fosters the relationship between water, landscapes and urban living, to enhance human and social wellbeing and promote community co-design and governance in urban water strategies.

The Parramatta River Catchment Group is currently embarking on a range of studies to inform the development of a Parramatta River Catchment Masterplan. This Masterplan will guide future growth in the catchment to deliver the *'Our Living River'* initiative. It is important that future growth associated with Sydney Olympic Park compliments this work.

3. Noise

The Noise Management Guideline that supports the revised Master Plan recommends 'in principle treatments' for buildings and states that *'Each proposed development should be subject to a detailed acoustic assessment to be submitted with the development application'*. Developers should be required to demonstrate compliance with the proposed criteria at the detailed design stage and that any approval (planning instrument or consent etc) is contingent on validating compliance prior to occupation.

The Guideline also states that noise impacts from events are not expected to coincide with the business hours of commercial developments. It further states that "*planning controls are recommended to ensure the continued use of entertainment activities at ANZ Stadium is not inhibited*". While the risk of conflict between commercial use and entertainment is low, commercial development should be developed to comply with the relevant criteria identified in the Guideline with approval contingent on validation.

4. Contaminated Land Management

Most (but not all) of the waste containment areas in Sydney Olympic Park are regulated by an EPA Maintenance Order under s28 of the CLM Act. The EPA has attached (**Attachment B**) a site plan that shows the waste containment areas within the Sydney Olympic Park and is an extract from SOPA's RLMP 2009 (Remediated Land Management Plan 2009).

The EPA recommends that all the waste containment areas identified in the attached site plan should not be redeveloped for sensitive land uses, particularly if the development involves underground structures such as basement carpark. This is because the waste containment areas contain putrescible wastes that are still in active decomposition phase and are generating considerable amount of landfill gas (primarily methane).

While proposed growth appears to be concentrated in Stadia, Central and Parkview precincts and appear to be clear from the waste containment areas, Sydney Olympic Park nevertheless was used for uncontrolled waste emplacement over a very long period of time. As such, land outside the waste containment areas should be considered as potential contaminated land and the requirements of SEPP 55 should apply. This means that land proposed for a use(s) more sensitive than its current use should be subject to a preliminary contamination assessment as part of the Development Application. For certainty, the planning authority should require certification from an EPA-accredited site auditor on the suitability of the land for the proposed use(s).

The EPA also recommends that current SOPA contaminated land information such as the fact sheet on "Remediation" should be updated with contemporary contaminated land information including the location of the waste containment areas. This will allow an assessor to gain an immediate picture if the proposed redevelopment is within the EPA-regulated waste containment areas or not.

5. Waste Management

The Masterplan Review provides an opportunity to update any supporting guidance information in relation to waste management. In particular, the Masterplan should identify:

- *Identify and implement waste management strategies to achieve NSW Government's Waste Avoidance and Resource Recovery Strategy 2007 (WARR) and compliments the NSW Government's Waste Less, Recycle More initiatives and EPA waste and recycling programs.*

The EPA has developed information to improve waste management associated with new residential development. In this regard, the *Waste Not Development Control Plan (DCP) Guideline* (EPA 2008) should be consulted to assist in guiding the development of suitable provisions in relation to the development or updating any development controls. A copy of the guideline can be obtained at the following site: http://www.epa.nsw.gov.au/resources/warr/08353SiteWasteMin2.pdf.

The above DCP guideline provides suggested planning approaches and conditions for planning authorities to consider at the development application phase, in relation to waste minimisation and resource recovery. This includes consideration of demolition and construction waste and the provision of facilities and services to allow the ongoing separation, storage and removal of waste and recyclables. A key component of this guideline includes the requirement of developers to submit a plan showing estimates of waste generation during demolition, construction and ongoing use of the site, as well as details on how these wastes will be sorted, stored and removed for recycling and/or disposal.

The following guidelines should also be consulted for new development:

- The EPA's Multi-Unit Development Guidelines offers guidance to developers to address waste and recycling requirements for multi-Unit Residential developments. This guide can be accessed at: http://www.epa.nsw.gov.au/warr/BetterPracticeMUD.htm.

- The EPA *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities* (DEC 2012) provides guidance for commercial development proposals. It can be accessed at: http://www.epa.nsw.gov.au/warr/BPGuideCIFacilities.htm

- The *Better Practice for Public Place Recycling* (DEC 2005) provides guidance on how to set up standard recycling systems in public places, such as parks, shopping centres, footpaths, bus-stops, etc. This guide can be accessed at: http://www.epa.nsw.gov.au/warr/publicrecycling.htm.

ATTACHMENT B

SITE PLAN FROM SOPA'S RLMP 2009 (REMEDIATED LAND MANAGEMENT PLAN 2009)