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Department of Planning, Industry and Environment
Locked Bag 5022,
Parramatta NSW 2124

Email: david.schwebel@planning.nsw.gov.au

Dear Mr Schwebel,

ELIZABETH DRIVE, BADGERYS CREEK ELIZABETH ENTERPRISE PRECINCT - STAGE 1

I am writing in response to the Department of Planning, Industry and Environment's (DPIE's) request for the Environment Protection Authority (EPA) to provide key requirements for the preparation of Environmental Impact Statement (EIS) for the above proposed development.

The EPA has attached some guidance to assist DPIE in the development of Secretary Environmental Assessment Requirements for the above proposal (**Attachment A**). This guidance relates to the following key environmental issues:

- EPA Licensing and Regulation
- Water Quality
- Air Quality
- Noise and Vibration
- Traffic and Transport
- Waste Management
- Contaminated Land Management
- Emergency Response.

These issues should be assessed per the relevant guidelines/documents listed in **Attachment B**.

While the Western Sydney Aerotropolis Precinct Plans are still only draft and yet to be finalised, the use of information and approaches in the Plans should be encouraged to help inform the development of the EIS. In particular, the guiding sustainability and resilience framework should be consulted. In addition, the design of the precinct should also be informed by the Phase 1 Western Sydney Aerotropolis Development Control Plan (DCP) and its replacement Phase 2 DCP once released.

The EPA may have additional requirements or comments upon receipt and review of the EIS. If you have questions regarding the above, please contact Paul Wearne on (02) 4224 4100.

Yours sincerely

27/5/2021

GREG NEWMAN
A/Unit Head
Metropolitan South

Att A: Key Environmental Issues, B: Guidance Material

ATTACHMENT A - KEY ENVIRONMENTAL ISSUES

1. EPA Licensing and Regulation

The proponent should undertake a review of all activities associated with the development and document any EPA licensing requirements. The proponent should consult the EPA's *Guide to Licensing* to assess whether any activities undertaken at the premises will require licencing.

It is important that any licencing considerations should be assessed once more detailed understanding of the proposal is available. For example, warehousing and logistic facilities can potentially store a range of chemical substances. Where activities that involve the capacity to store more than 20 tonnes (pressurised gases), 200 tonnes (liquefied gases) or 2,000 tonnes (chemicals in any other form) would require licensing as "Chemical Storage" under *the Protection of the Environment Operations Act 1997* (POEO Act).

Section 47 of the *POEO Act* defines scheduled development work as *'work at any premises at which scheduled activities are not carried on that is designed to enable scheduled activities to be carried on at the premises'*. Under Section 47 of the POEO Act it is an offence for scheduled development work to be undertaken without an EPL.

2. Water Quality

The environmental outcome for the project should ensure:

- there is no pollution of waters (including surface & groundwater) except in accordance with an EPL
- provides development that maintains or restores the community's environmental uses and values of water through the achievement of the relevant NSW Water Quality and Flow Objectives
- promotes integrated water cycle management that optimises opportunities for sustainable water supply, wastewater and stormwater management and reuse initiatives where it is safe and practicable to do so
- bunding is designed in accordance with the EPA's *Bunding and Spill Management Guidelines*.

The EIS should document how the above outcomes will be achieved.

The EIS should also include but not necessarily be limited to the following matters:

- Details on proposed stormwater management at the site including integrated water cycle management/water sensitive urban design, first flush systems etc.
- Provide a description of the receiving waters including measures to ensure the achievement of the relevant NSW Water Quality and Flow Objectives in particular, how the proposal will support waterway health outcomes being sought for Winanamatta- South Creek including the siting and management of water detention and treatment measures.
- Provide information on any water discharges including location, volumes, water quality, monitoring programs and frequency of discharge.
- Describe the nature and degree of any likely impacts that the proposed project may have on the receiving environment. This should include a characterisation of potential water pollutants at the site and any associated mitigation and management measures.
- Demonstrate that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
- Information on any stormwater reuse, retention and detention strategies including measures to minimise impervious areas to minimise impacts on the hydrological (flow) regime of receiving waterways.

- Describe how stormwater will be managed during the construction phase. The proponent should provide a commitment in the EIS that a *Soil and Water Management Plan* will be developed and implemented prior to construction in accordance with the *Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B. Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries)* (DECC 2008).
- Identify any potential risks of salinity at the site and document appropriate management strategies to inform the design and construction of the proposal. This should include options including minimising any disturbance to the soil profile. Note: Salinity is a significant hazard in the area of the proposed development that requires careful planning and management especially where bulk earth works is proposed.

Sewage Management

There appears to be no information provided regarding connection of the proposed development to the existing Sydney Water sewerage system. The EPA recommends that the proponent document in the EIS discussions with Sydney Water regarding this connection and whether it can cater for any new loads. Information should also be sought on whether any additional load will impact the system's environmental performance especially in relation to sewage overflows from any existing sewage pumping stations and discharges from any associated sewage treatment plant. The EPA's policy is that for new systems there should be no pollution of waters as a result of overflows during dry weather and that overflows during wet weather should be avoided.

3. Air Quality

The environmental outcome for the project should ensure:

- emissions do not cause adverse impact upon human health or the environment
- no offensive odour beyond the boundary of the premises
- compliance with the requirements of the POEO Act and its associated regulations
- maintains or improves air quality to ensure National Environment Protection Measures for ambient air quality are not compromised
- any dust emissions are prevented or minimised.

The EIS should document how the above outcomes will be achieved.

The EPA recommends that an Air Impact Assessment must be prepared in accordance with the *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales*. A thorough assessment needs to be undertaken of the proposed activities at the site to assess the impact of any air emissions and the adequacy of proposed air pollution controls. This should include but not necessarily be limited to information on the following matters:

- characterization of any emissions (including any fugitive emissions) for example NOx, VOCs, particles and odours
- best practice management measures to control emissions
- any cumulative impacts.

In particular back up power generation of electricity with diesel equipment can also be a source of PM10, PM2.5 and NOx. In this regard if the proposal involves back up power generation of electricity with diesel equipment that has the capacity to burn more than 3 megajoules of fuel per second, the EIS should document a best practice review of reasonable and feasible diesel emission reduction technology.

Off road transport sources (particularly diesel engines) can be a source of PM10, PM2.5 and NOx. Opportunities that involve the adoption of best practices to achieve the lowest possible emission standard for these pollutants should be assessed. The EPA recommends that any off road equipment or plant should achieve the specifications or be consistent with the specifications listed on page 16 of the *NSW Government Resource Efficiency Policy*, (OEH 2019).

The EIS should detail measures to prevent or minimise air pollution during construction and operation. The EIS should include a commitment that the proponent will develop and implement an Air Quality Management Plan prior to construction. This plan should include but not necessarily be limited to the following requirements:

- Identify all major sources of air emissions and associated mitigation measures to ensure air pollution is prevented or minimised
- Describe protocols for regular maintenance of plant and equipment
- Outline procedures for monitoring and reporting air emissions
- Describe measures to regularly review the effectiveness of air pollution control measures.

4. Noise and Vibration

The environmental outcome of the project should be to minimise adverse impacts due to noise and vibration from the development. The EIS must clearly outline the noise mitigation, monitoring and management measures the proponent intends to apply to the project to minimise noise and vibration impacts during construction and development of the site.

The assessment should be undertaken in accordance with the *NSW Noise Policy for Industry* (NPfI). In particular the assessment should include, but not necessarily limited to the identification and assessment of all potential noise sources associated with the development, the location of all sensitive receptors, proposed hours of operation and proposed noise mitigation measures. The assessment should also take into account adverse weather conditions including temperature inversions. Sound power levels measured or estimated for all plant and equipment should be clearly stated and justified. It should also include an assessment of cumulative noise impacts, having regard to existing surrounding industrial activities and development.

The proposal appears to involve a nine-lot subdivision on employment land and the potential development of multiple noise sources in each lot. The NPfI has a number of guidelines, including the concept of Noise Management Precincts (s. 2.8) and the process to derive amenity noise levels in areas near an existing or proposed cluster of industry (s 2.4.1) that could be drawn on to develop a mechanism to ensure that the land is developed in a manner that minimises noise to adjoining or nearby sensitive receiver locations in a structured and equitable manner.

The EIS should also identify the transport route(s) to be used, the hours of operation and assess any potential road traffic noise impacts in accordance with the "*NSW Road Noise Policy*".

Any construction noise should also be assessed and any proposed noise mitigations measures identified and documented in the EIS in accordance with the *Interim Construction Noise Guideline* (2009) or if superseded by the Draft Construction Noise Guideline currently being exhibited.

5. Traffic and Transport

The EPA would support a proposal that delivers an environmental outcome that minimise air and noise emissions due to heavy vehicle movements from the project. In this regard the EIS should include predictions of expected traffic volumes likely to be generated during the construction and operation of the project, including proposed transport routes and details of any upgrades to road or shipping infrastructure.

The supporting information should include a feasibility assessment of Best Management Practices for all on-road diesel trucks associated with the project. Best Management Practices could include, but not necessarily be limited to:

a) The development and implementation of a truck noise auditing program to confirm trucks achieve noise standards for engine brake noise; and
b) All on-road diesel trucks associated with the project should:

- Conform with relevant and current emission standards as prescribed in Australian Design Rules for heavy-duty engines and vehicles (EURO IV); or
- Where the vehicle is older than the 2006 model year (that is, EURO I, EURO II or EURO III standards), the vehicle should be fitted with a diesel exhaust treatment device.
- Consider emission reduction options in the diesel NEPM.

5. Waste Management

The goal of the development should be to ensure:

- it is in accordance with the principles of the waste hierarchy and circular economy
- the handling, processing and storage of all materials used at the premises does not have negative environmental or amenity impacts
- the beneficial reuse of all wastes generated at the premises are maximised where it is safe and practical to do so
- no waste disposal occurs on site except in accordance with an EPL.

The EIS should document waste management strategies that will ensure any waste generated during construction and operation is classified and managed in accordance with the latest version of EPA's *Waste Classification Guidelines*.

The EIS should also provide details of how waste will be handled and managed both onsite and offsite to minimise pollution. This should include information on the procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment.

Details of bulk earth work should be documented in the EIS including the quantity, source and quality of any fill material brought to the site. If any fill is imported to the site it should be only Virgin Excavated Natural Materials (VENM) or Excavated Natura Material (ENM) or other soils under a specific resource recovery order and exemption.

In addition, any fill received for this purpose must be validated by a suitably qualified independent person to demonstrate that it is VENM or meets the requirements of the relevant resource recovery order/exemption and is fit for its intended purpose.

The EPA recommends the proponent consult the following guidelines:

- The *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities* (EPA December 2012).

6. Contaminated Land

State Environmental Planning Policy (SEPP) 55 will apply and a contaminated land assessment will need to be undertaken and included in the EIS. SEPP 55 states that as part of the development process the following key considerations should be addressed:

- Whether the land is contaminated
- If the land is contaminated whether it is suitable in its contaminated state (or will be suitable, after remediation) for all the purposes to which the land will be used
- If the land requires remediation; will be made suitable for any purpose for which the land will be used.

In cases where land is potentially contaminated, the investigation and any remediation and validation work is to be carried out in accordance with the guidelines made or approved by the EPA under Section 105 of the *Contaminated Land Management Act 1997* and be in accordance with the requirements and procedures in the following:

- *Contaminated Land Management Act 1997*
- *Contaminated Land Management Regulation 2013*

- *State Environmental Planning Policy 55 – Remediation of Land*.

7. Emergency Response

The EIS should document systems and procedures to deal with all types of emergencies. This includes incidents (for example, spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. This should also include appropriate measures to protect the environment during these emergencies such as on-site containment measures for fire water and communication strategies that involves reporting of any incidents to appropriate regulatory authorities.

ATTACHMENT B: RELEVANT GUIDELINES AND DOCUMENTS

Title	Web address
Licensing	
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
EPA Guide to Licensing	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/licensing/licensing-guide-160369.pdf
Air	
Approved Methods for Modelling and Assessment of Air Pollutants in NSW (2005)	http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf
Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (2007)	http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf
Technical Notes - Assessment and Management of Odour from Stationary Sources in NSW	http://www.epa.nsw.gov.au/air/odour.htm
POEO (Clean Air) Regulation 2010	http://www.austlii.edu.au/cgi-bin/viewdb/au/legis/nsw/consol_reg/poteoar2010601/
National Environment Protection (Diesel Vehicle Emissions) Measure	http://www.scew.gov.au/nepms/diesel-vehicle-emissions
The Assessment and Management of Odour from Stationary Sources in NSW: Technical Notes	http://www.environment.nsw.gov.au/resources/air/20060441notes.pdf
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2018)	https://www.waterquality.gov.au/guidelines/anz-fresh-marine
Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006	https://www.environment.nsw.gov.au/research-and-publications/publications-search/using-the-anzecc-guidelines-and-water-quality-objectives-in-nsw
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.epa.nsw.gov.au/resources/legislation/approvedmethods-water.pdf
Stormwater Management	https://www.environment.nsw.gov.au/research-and-publications/publications-search/managing-urban-stormwater-soils-and-construction-volume-1-4th-editon

Title	Web address
Noise and Vibration	
Interim Construction Noise Guideline (2009) or if superseded by the Draft Construction Noise Guideline currently being exhibited	http://www.epa.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (2006)	http://www.epa.nsw.gov.au/noise/vibrationguide.htm
Noise Policy for Industry (EPA, 2017)	https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017)
NSW Road Noise Policy (2011)	https://www.epa.nsw.gov.au/~/media/EPA/Corporate%20Site/resources/noise/2011236nswroadnoisepolicy.ashx
Noise Policy for Industry (EPA, 2017)	https://www.epa.nsw.gov.au/publications/noise/17p0524-noise-policy-for-industry
Waste	
Waste Classification Guidelines (DECC, 2008)	https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines
Resource Recovery Exemptions	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
Circular Economy Policy	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/response-to-china-national-sword/circular-economy-policy
Managing Industrial Waste	https://www.epa.nsw.gov.au/your-environment/waste/industrial-waste
Contaminated Land	
State Environmental Planning Policy 55 – Remediation of Land.	http://www.planning.nsw.gov.au/assessingdev/pdf/gu_contam.pdf
Bunding and Spill Management	
Storing and Handling Liquids: Environmental Protection - Participants Manual	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/licensing/2007210liquidsmanual.pdf?la=en

Title	Web address
	&hash=F58F9A86A4293434464AC43554AEEEB7FDCF6E01
Environmental Compliance Report: Liquid Chemical Storage, Handling and Spill Management - Part B Review of Best Practice and Regulation	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/licensing/ecrchemicalsb05590.pdf?la=en&hash=5BDC31AB157E52F9F3098E663F6808709DEBE76F