



DOC18/878095-02

Department of Planning and Environment
(Attention: Krishti Akhter)
GPO Box 39
SYDNEY NSW 2001

Dear Ms Akhter,

Draft Revised Master Plan and Planning Controls for the Carter Street Precinct

I am writing to confirm discussions at a meeting on 16 November 2018 between the Environment Protection Authority (EPA) and Department of Planning and Environment (DPE) regarding the above.

The meeting provided an opportunity to discuss a range of environmental issues and the EPA's submission on this planning proposal. A key issue discussed was the operation of the Homebush Liquid Waste Treatment Plant (LWTP), its importance for NSW as critical infrastructure and the risk of land use conflict due to potential odour impacts if the planning proposal proceeds.

At the meeting, DPE sought suggested amendments to the Carter Street Precinct Development Control Plan to help strengthen controls if the revised Masterplan is approved. The EPA has attached recommended amendments and additional provisions (**Attachment A**) to help inform future development application stages. These relate to the following:

- Land Use Conflict
- Air Quality
- Noise
- Water Quality
- Contaminated Land Management; and
- Waste Management.

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

Yours sincerely,

A black rectangular box redacting the signature of Peter Bloem.

PETER BLOEM
Manager Regional Operations Illawarra
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Attachment A

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ATTACHMENT A

Land Use Conflict

The EPA has identified the potential risks of land use conflict in a range of letters relating to the rezoning of Carter Street and developments in the Precinct. Copies of these letters can be provided on request.

As previously advised, DPE should explore the use of notifications on planning certificates to provide a mechanism to advise landowners/developers of any potential pollution risks. For example, some Councils use such an approach where residential development encroaches upon existing agricultural activity to advise of potential risk for odour impact. Until a final solution is resolved and implemented, similar notifications could be used in relation to the operation of the Homebush LWTP. This approach could also address potential noise impacts from the operation of Sydney Olympic Park

Separately, the Sydney Growth Area Development Control Plans (DCP) include provisions that further elaborate on potential land use conflict risks, such as odour, where residential development is encroaching upon existing agricultural activities. These provisions also allow Councils to seek further information on potential odour impacts and mitigation measures if required. DPE should consider a similar approach for the Carter Street Precinct. The following modified words from the Blacktown North West Growth Area DCP is provided for DPE's consideration in relation to the management of odour.

Odour assessment and control

Odour is legislated by the Protection of the Environment Operations Act 1997. Currently odour is regulated by the NSW Government and Local Government.

Prior to the commencement of this DCP, the Carter Street Precinct was primarily commercial and industrial zoned land and provided a separation from existing industrial activities to residential uses. The nearby industrial lands, contain a number of existing industrial activities that have the potential to generate odour and other associated impacts that may affect the amenity of nearby urban areas. Even with the best pollution controls, unforeseen events can happen which can result in odour emissions. While some of these activities may cease operation at some point in the future, the timing of cessation of odour generating land uses is not known nor able to be controlled by Council or DPE. Developers and buyers of property within the Carter Street precinct should be aware that their property may be subject to odour impacts from these activities for an indeterminate period of time. Planning Certificates have been also noted that property maybe impacted by odours.

Where land is affected by odour generating activities, Council can require the applicant to provide additional supporting information with Development Applications if required.

Air Quality

The Greater Sydney Commission (GSC) Central District Plans states in relation to air quality: "*Past and present urban development and activities can also create urban hazards such as noise, air pollution and soil contamination. Compared to many cities around the world, Greater Sydney enjoys excellent air quality, which enhances its reputation as a sustainable and liveable city. However, the combined effect of air circulation patterns in the Sydney Basin, local topography, and proximity to different sources of air pollution such as wood-fire smoke, can lead to localised air quality issues*". These issues will only be compounded by climate change.

While the supporting information and DCP promotes measures such as public and active transport, it does not appear to include actions specific to protecting air quality and human health in the new precinct. Key issues in relation to air quality for the Carter Street Precinct (in addition to odour

discussed above) may include potential exposure to household and traffic emissions associated with increased population and traffic movements.

The District Plan also recognises that transport movements along major roads and rail corridors generate noise and are a source of air pollution. The degree of noise or air pollution can be related to the volume of traffic and the level of truck and bus movements. The design of new buildings and public open space can help reduce exposure to noise and air pollution along busy road and rail corridors. To address this issue, the DCP should recognise that any new development next to busy roads should satisfy the [Development near Rail corridors and busy roads – Interim guideline, NSW Department of Planning](#) (DoP 2008).

In addition, to help strengthen the DCP in relation to managing air quality and help deliver key sustainability actions in the District Plan, the following additional objective should be included in Section 6 titled “Sustainability”.

- O5. *Support actions that reduce harmful air emissions and help to avoid exposure of the community to elevated concentrations of air pollution.*

To support this objective, the DCP should include the following additional controls in relation to managing sensitive land uses such as residences, child care and aged care facilities next to busy roads.

C8. *Development shall comply with:*

- a) *Minimum separation distances from the kerb as outlined in the Table 1; or*
- b) *Where minimum separation distances are not achievable, ducted mechanical ventilation for the supply of outdoor air in compliance with AS 1668.2: The use of ventilation and air conditioning in buildings - Mechanical ventilation in buildings. Mechanical ventilation outdoor air intakes must be located at least the minimum distance from the kerb specified in Table 1, measured in the horizontal and vertical planes from the kerb. Filtration of outdoor air must be to a minimum Australian Standard performance rating of F6 or minimum efficiency reporting value (MERV) 9.*

Table 1: Minimum setback required

Road classification	Residential type buildings	Child care centres hospitals, aged care facilities, schools
Motorway	30m	80m
High volume: more than 60,000 AADT; and 40,000–60,000 and 5% or more Heavy Vehicles	20m	80m
Moderate 20,000-40,000	n/a	40m
Intermediate Roads: 40,000–60,000 AADT ; and 30,000–40,000 and 10% or more Heavy Vehicles	10m	40m
High volume intersection	30m	60m

2. *When roads are flanked by continuous walls of buildings, the air pollution from vehicles may become trapped, exposing the users of roads and buildings to higher levels of air pollution. Development in mixed use areas zoned for four floors or more shall:*
 - a. *Use horizontal and vertical articulation on the street frontages.*
 - b. *Vary roof forms between adjacent buildings.*

The above approach has been helping to guide housing next to busy roads including the Parramatta Road Corridor Urban Transformation Strategy. Measures include:

- Using architectural and design approaches that provide separation from major roads and ensuring only non-habitable rooms of future developments face busy roads.
- Where development includes mechanical ventilation (such as air conditioning), ensuring that the air intakes for the ventilation are situated away from pollution sources.

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 DCP also provides an opportunity to require best practice management to minimise diesel emissions at all stages of development. For example, construction activities are known to cause nuisance dust emissions, while diesel and gas-powered equipment used in construction also cause significant air pollution. In addition, there is also interest in adoption of distributed power generation, including cogeneration and back-up power generation in the Sydney area. These technologies usually employ combustion of gas or diesel fuel. It is anticipated that the adoption of these technologies will increase over time in Sydney.

The DCP should require environmental assessments accompanying development applications to document:

- *strategies to minimise the adverse impact of air pollution upon human health, the environment and community amenity by minimising emissions of particles, oxides of nitrogen and volatile organic compounds at all stages of development.*
- *strategies to minimise emissions and impacts from non-road diesel equipment used in construction; and*
- *measures that minimise or prevents dust emissions from sites.*

The following note is also recommended in relation to distributed power generation:

Note: Distributed power generation for example gas-fired cogeneration and trigeneration need to meet best available techniques (BAT) emission control for the management and control of emissions including ozone and particle precursors (NO_x, sulfur oxides, VOC and particulates). See the EPA's: [Interim Nitrogen Oxide Policy for Cogeneration in Sydney and the Illawarra](#).

Noise

A provision that validates achievement of noise criteria in Table 5 of the DCP should be required as part of the construction and occupation certificate. This process would ensure that acoustic design considerations have been addressed as part of the construction certificate and validation of the noise criteria is delivered as part of the Occupation Certificate. The following additional provision is recommended:

- C3 *To ensure the noise criteria in Table 5 are achieved the construction certificate should include certification by an appropriately qualified acoustical consultant that any acoustic design measures have been satisfactorily incorporated into the development. While validation of the criteria in Table 5 should be provided by an appropriately qualified acoustical consultant and included as part of the Occupation Certificate.*

Water Quality

The DCP refers to generic per cent load reductions (that is, gross pollutants 90%, TSS 85%, TP 65%, TN 45%). Water quality targets should be based on outcomes not generic per cent load reductions derived from ambient water quality targets for the receiving waters. These generic targets do not reflect contemporary integrated water cycle management performance nor will help the

delivery of key sustainability actions in the *Central City District Plan*. This includes the delivery of initiatives such as the Swimmable Parramatta River.

The NSW Water Quality Objectives (WQO) provide a framework and benchmarks for the community uses and values of waterways and the water quality that is needed to support these. They are the NSW Government endorsed environmental values and long-term goals for NSW's surface waters. The EPA recommends that appropriate water quality targets are developed supporting the NSW WQOs and the benefits of proposed mitigation measures including WSUD.

A risk-based approach should be adopted to assess the link between urban development, waterway health and the community's waterway values. This approach can then consider infrastructure needed to achieve desired outcomes. To help support this, OEHL and the EPA has developed a risk-based decision framework for integrating water quality outcomes in the strategic planning process. The framework can be accessed at: <https://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning>.

This approach combines existing NSW government policy and processes with contemporary catchment and ecosystem response modelling in a structured, risk-based decision-making framework that delivers ecological sustainable development. The framework helps planning authorities:

- gauge the potential impact on waterways of land use scenarios and assess trade-offs.
- inform and support community and government decision making by providing a structured approach to considering waterway outcomes in planning decisions.
- identify locations that are more suited to particular development types and densities, and where landscape conditions could minimise any resulting impacts on water quality.
- drive cost-effective delivery of environmental outcomes; and
- support healthy communities by maintaining natural assets.

The above framework is recognised in the *Greater Sydney Regional Plan* and underpins actions in the supporting *District Plans*. To support these actions it is recommended that C9 and C10 under Section 6.3 of the section titled Stormwater (Water Sensitive Urban Design) be amended for environmental assessments accompanying development applications to document:

C9. Develop ambient water quality targets for the receiving waters to support the NSW WQOs and compare the benefits of proposed mitigation measures including WSUD for adequacy.

C10 Use the OEHL and EPA's risk-based decision framework (2017) to assess the link between urban development, waterway health and the community's waterway values and design infrastructure to achieve the desired waterway health outcomes.

To address any interception of any potential groundwater in basement areas and underground carparks and potential risk for this water to be contaminated, it is recommended that the following further provision be required.

C11 Implement measures to collect, treat and manage any seepage waters from basement or underground car parking areas in order to prevent pollution of waters.

Contaminated Land Management

The Carter Street Planning Report prepared for the original Carter Street Lidcombe Urban Activation Precinct (UAP) appears to consider contaminated land management matters on a high-level. Table 5 of the Report acknowledges that future developments will need to comply with the relevant provisions of *SEPP 55 – Remediation of Land* (SEPP 55). The Report also notes that DPE commissioned preliminary contamination investigations for both sides of Carter Street before the Precinct's existing planning controls commenced in 2015. It appeared that these investigations included studies for the:

- south side of Carter Street including both sides of Hill Road and Birnie Avenue which concluded that further detailed site investigations are required to clarify the presence of any contaminants and
- north side of Carter Street which found that with appropriate remediation strategies the area is suitable for multi-level residential development with basement car parking.

The EPA advised in its response on the UAP, that the Report did not include the north side investigation study while several supporting appendices were missing in relation to the south side study. The EPA advised DPE that contamination assessment of the precinct land should be undertaken in accordance with SEPP55.

Land within the precinct has not been previously notified to the NSW EPA in relation to Section 60 of the *Contaminated Land Management Act* (the Act) and is not regulated under the Act. The precinct is in proximity to Sydney Olympic Park which contains a number of landfills regulated under the Act, and the nearby Homebush LWTP which is regulated by the EPA.

The planning proposal does not appear to include any new contaminated land management information or confirm that further contamination assessments have been undertaken to address matters previously raised by the EPA. It is also uncertain if these matters were addressed in relation to development proposals being undertaken in the Precinct.

To address the above inadequacies in information and to ensure that contamination land management is appropriately addressed at the development application stage, it is recommended that the DCP include the following section on Contaminated Land Management.

Contaminated Land Management

Objectives

- O1 *To minimise the risks to human health and the environment from the development of potentially contaminated land.*
- O2 *To ensure that potential site contamination is addressed at the subdivision stages.*
- O3. *To ensure that remediation and management of contaminated land incorporates ecological sustainable development principles including protection and enhancement of the environment for future generations.*

Controls

1. *All subdivision Development Applications shall be accompanied by a Stage 1 Preliminary Site Investigation prepared in accordance with State Environmental Planning Policy 55 – Remediation of Land and guidelines made or approved by the NSW Environment Protection Authority (EPA) under the Contaminated Land Management Act, 1997. The investigation should also be informed by information provided at the time of rezoning the land including any supporting Stage 1 or Stage 2 Investigation.*
2. *Where the Stage 1 Investigation identifies potential or actual site contamination a Stage 2 Detailed Site Investigation must be prepared in accordance with State Environmental Planning Policy 55 – Remediation of Land and guidelines made or approved by the NSW EPA under the Contaminated Land Management Act, 1997. The stage 2 Detailed Site Investigation must include at minimum, an assessment of soil and groundwater, and where required, assessment of other environmental media.*
3. *A Remediation Action Plan (RAP) will be required for areas where contamination has been identified or contains contaminants at levels that may pose a risk to human health and the environment. If necessary, the consent authority can require or engage a NSW contaminated site auditor accredited by the EPA to review the works including the RAP and prepare a Part B Site Audit Statement and Site Audit Report to certify if the land will be suitable for the intended use subject to any remediation plans.*

4. All investigation, reporting and identified remediation works must be undertaken in accordance with the following policy and guidelines. This include but should not be limited to the following:
 - a) Councils protocols/Policies – Management of Contaminated Lands (if there is one, DPE should check ???)
 - b) State Environmental Planning Policy 55 – Remediation of Land
 - c) EPA Sampling Design Guidelines (NSW EPA, 1995)
 - d) Guidelines for the NSW Site Auditor Scheme (3rd edition) (NSW EPA, 2017)
 - e) Guidelines for Consultants Reporting on Contaminated Sites (NSW OEH 2011)
 - f) Guidelines for the Assessment and Management of Groundwater Contamination (NSW DEC 2007)
 - g) The National Environment Protection (Assessment of Contamination) Measure 1999 (as amended 2013, NEPC 2013)
 - h) [Australian and New Zealand Guidelines for Fresh and Marine Water Quality](#) (ANZG 2018)
 - i) [Australian and New Zealand Guidelines for Fresh and Marine Water Quality - Water Quality for primary industries](#) (ANZECC 2000)
5. Prior to granting development consent, the Consent Authority must be satisfied that the site is suitable, or can be made suitable, for the proposed use. Remediation works identified in any RAP will require consent from the consent authority prior to the works commencing.
6. Council should require or engage a NSW contaminated site auditor accredited by the EPA to produce a Part A Site Audit Statement and Report following the completion of remedial works to certify that the land will be suitable for the intended use following the proposed construction works. An occupation certificate cannot be issued unless such a statement has been provided.
7. Applicants should refer to, and ensure applications are consistent with this Development Control Plan.

Note: All applicants should consider and assess contamination hazards on their land in accordance with the Contaminated Land Management Act, 1997 and State Environmental Planning Policy 55 – Remediation of Land, both of which override any controls in this DCP.

Waste Management

The DCP includes waste information in Section 6 titled “Sustainability”. These controls should be made contemporary to help deliver the sustainability actions in the District Plan and circular economy principles for the broader GOP. The following waste provisions are recommended.

Waste Management

Objectives:

- O.1 To ensure development is contributing to the Waste Avoidance and Resource Recovery (WARR) Strategy 2014–21 which sets targets for diverting waste away from landfill and increasing recycling rates.
- O.2 To promote circular economy principles that help deliver environmental sustainability, protects and enhances liveability in the urban and built form.

Controls

C5. A Waste and Resource Recovery Plan (Plan) should be developed by a specialist in environmental and/or waste management. The Plan should include a vision and strategy for how waste and recycling can be managed in an integrated way across the development. This includes

construction through to the operation stage. The types of issues the plan should be considered include but not necessarily be limited to the following:

- a) Precinct-wide waste and recycling infrastructure such as the use of advanced automatic collection systems.
- b) The type and size of waste collection and storage equipment available to manage the expected quantity of waste and recyclable materials that will be generated by residential multi-unit and commercial buildings such as compactors, or paper balers which need to be considered in the footprint of the building design.
- c) Opportunities for locating infrastructure within the town centre to help people return unwanted beverage containers under the NSW Governments' container deposit scheme such as reverse vending machines.
- d) Opportunities for people to manage organic waste on site through the use of home composting units or roof top gardens or community gardens.
- e) The specifications of the Council's waste and recycling collection fleet and its ability to access and service multi-unit dwelling residential buildings (if basement servicing is an option), and to service bins from the streets and service lanes within the new subdivision areas that is, are the road widths and service lanes wide enough for a heavy ridge vehicle to access safely to perform the services.
- f) Waste and recycling generated from the new community will need to be processed or recycled and disposed of. This development will add more waste to an already stretched waste and recycling infrastructure network in Sydney. The waste and recycling plan also needs to consider:
 - quantities of different waste streams generated during construction and operation stages
 - the potential location of the facilities that can receive these materials
 - the capacity of these facilities to accept these materials and possible future needs for waste and recycling processing facilities.

The Plan should be informed by the following principles which should guide and underpin the planning and design of waste and resource recovery systems.

Design objective 1: Environmental sustainability and best practice

Developments meet requirements for long-term sustainability and best practice when:

- systems are designed to maximise waste separation and resource recovery.
- innovative and best practice waste management collection systems and technologies are considered and supported where appropriate.
- flexibility in design allows for future changes in waste generation rates, materials collected and methods of collection.

Design objective 2: Effective waste and resource management

Developments achieve effective waste and resource management when:

- waste services can occur in a seamless and timely manner.
- collection points, street widths and street configurations, especially in new subdivisions and precinct developments, allow for waste to be removed safely and conveniently.
- the distance residents have to travel to dispose of waste is minimised.
- functional and convenient storage spaces are provided for waste and recycling, including temporary storage areas for bulky materials like cardboard boxes and bulky household waste.

Design objective 3: Clean, safe and healthy living environments

Developments protect and enhance the quality of life for the community when:

- negative impacts on amenity for residents, neighbours and the public, such as visually unpleasant waste storage areas, noise from waste collection including traffic noise and bad odours, are minimised.
- illegal dumping and litter from bins are minimised through good planning and installation of adequate storage and waste recovery infrastructure.
- safe and easy to access waste and recycling storage areas are provided for residents, tenants, building managers and collection contractors.

Design objective 4: Affordability

Developments provide affordable living and working when:

- *careful design and construction prevents costly retrofits.*
- *operational waste management is cost-effective for residents and tenants.*

There are a range of waste management guidelines and information available to assist in delivering the above principles. These can be obtained at: <http://www.epa.nsw.gov.au/waste/index.htm> these include but not necessarily limited to:

- The NSW EPA's '[Better Practice Guide for waste management in multi-unit dwellings](#)'. This document provides guidance and information on a range of waste management issues that relate to the design of new communities and buildings and how waste management services are delivered by councils. This guide is currently being updated. Publication of the updated version will be in late 2018.
- 2017 updates to the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 supported by the [EPA Design Guide](#). The EPA Design Guide provides a design and operational guidance to ensure the location, design and siting of the recycling equipment and facilities (to support the NSW container Deposit scheme) is appropriate.
- The Waste Avoidance and Resource Recovery Strategy 2014-2012. Please visit: www.epa.nsw.gov.au/wastestrategy/warr.htm.
- The EPA has funded and supported groups of councils to develop regional waste strategies. The proposed development site is located in the Western Sydney Regional Organisation of Councils (WSROC) area and the WSROC Regional Waste Strategy can be viewed on the [EPA website](#). The WSROC regional waste strategy, together with the local council waste management strategy should be consulted when preparing the above Plan and designing waste infrastructure for the proposed development.

