



# Arndell Park Clinical Waste Management Facility

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State Significant Development Assessment

SSD-6761

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# Glossary

Abbreviation	Definition
<b>Applicant</b>	Med-X Pty Ltd
<b>APR</b>	Amended Project Report
<b>CIV</b>	Capital Investment Value
<b>Council</b>	Blacktown City Council
<b>DA</b>	Development Application
<b>Department</b>	Department of Planning, Industry and Environment (DPIE)
<b>Development</b>	The development as described in the EIS and RtS for Arndell Park Clinical Waste Management Facility
<b>EIS</b>	Environmental Impact Statement titled <i>Environmental Impact Statement State Waste Services (NSW) Pty Ltd 9 Kenoma Place Arndell Park</i> prepared by National Integrated Solutions dated 8 January 2019
<b>EPA</b>	Environment Protection Authority
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>EP&amp;A Regulation</b>	Environmental Planning and Assessment Regulation 2000
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
<b>EPI</b>	Environmental Planning Instrument
<b>EPL</b>	Environment Protection Licence
<b>ESD</b>	Ecologically Sustainable Development
<b>LEP</b>	Local Environmental Plan
<b>Minister</b>	Minister for Planning and Public Spaces
<b>Planning Secretary</b>	Secretary of the Department of Planning, Industry and Environment
<b>RMS</b>	Roads and Maritime Services, TfNSW
<b>RtS</b>	Response to Submissions titled <i>Clinical Waste Management Facility, Arndell Park Response to Submissions and Amended Project Report for State Significant Development 6761</i> prepared by Arup dated 26 June 2020
<b>SEARs</b>	Planning Secretary's Environmental Assessment Requirements
<b>SEPP</b>	State Environmental Planning Policy

Abbreviation	Definition
<b>SRD SEPP</b>	State Environmental Planning Policy (State and Regional Development) 2011
<b>SSD</b>	State Significant Development
<b>TfNSW</b>	Transport for NSW
<b>WSLHD</b>	Western Sydney Local Health District

# Executive Summary

This report details the Department of Planning, Industry and Environment's (the Department's) assessment of a State significant development application (SSD 6761) for the Arndell Park Clinical Waste Management Facility at 9 Kenoma Place, Arndell Park in the Blacktown City local government area (LGA). Med-X Pty Ltd (the Applicant) has submitted a development application (DA) to increase the waste input rate at its existing facility from 600 tonnes per annum (tpa) to a maximum of 2,300 tpa including processing up to 2,000 tpa of clinical waste and storage of up to 300 tpa of related waste. The proposed development (the development) also includes use of 7 Vangeli Street, Arndell Park as a delivery vehicle parking depot and for storage of clean waste sharps containers. 7 Vangeli Street is located approximately 145 metres (m) north-east of 9 Kenoma Place.

Both sites are situated 36 kilometres (km) west of Sydney, are zoned IN1 General Industrial under the Blacktown Local Environmental Plan (LEP) and are located within an established industrial precinct. The nearest residential receivers are approximately 400 metres (m) north-east of the Kenoma Place site, in the suburb of Blacktown.

## Statutory Context

The development is classified as State significant development (SSD) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) because it involves operation of a medical waste management facility that meets the criteria in Clause 23(5) of Schedule 1 in State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP). Consequently, the Minister for Planning and Public Spaces (the Minister) is the consent authority for the development.

The types of waste being treated by the development are generally not suitable for direct disposal to landfill as they contain potential agents of contamination which can impact human health and the environment. NSW Health has strict procedures in place for the disposal of these clinical waste which require them to be incinerated or autoclaved at a licensed waste facility. The development would use an autoclave to treat clinical waste under high temperatures up to 140 degree Celsius (°C) and pressurised steam conditions to denature proteins through the saturation of heat and moisture and destroy microbial flora and fauna that is present. Following treatment, the clinical waste is suitable for disposal as general solid (non-putrescible) waste as landfill.

## Engagement

The Department exhibited the Environmental Impact Statement (EIS) for the development from Thursday 24 January 2019 until Friday 22 February 2019 (30 days). A total of nine submissions were received including four from government agencies, four from private businesses and one from the general public. Of the nine submissions received, five objected to the development. Key concerns raised in submissions related to odour, including concerns with the odour criteria identified in the Air Quality Impact Assessment (AQIA), traffic and parking impacts on the surrounding road network and waste management.

## Amended Development

The DA was initially lodged by State Waste Services Pty Ltd (SWS). Following exhibition, SWS merged with Med-X Pty Ltd, who then became the Applicant. Due to the technical nature of the concerns raised

in submissions, the Applicant engaged a new consultant (Arup) for the development which resulted in delays in submitting the Response to Submissions (RtS).

On 14 July 2020, the Applicant submitted an RtS and an Amended Project Report (APR) to address and clarify matters raised in the submissions. The Applicant also submitted a request to amend the development in accordance with Clause 55 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).

The amended DA sought to reduce the waste input rate originally proposed from 3,000 tpa to 2,300 tpa and limit the waste stored on site to 8 tonnes (t) of clinical and related waste at any given time, but no more than 450 kilograms (kg) of related waste stored outside operational hours. To address concerns regarding parking, the Applicant also sought to amend the DA to include the Vangeli Street site as a delivery vehicle parking depot and for storage of clean waste sharps containers.

The RtS and the APR were made publicly available on the Department's website and provided to key government agencies for review. Council, the Environment Protection Authority (EPA) and the NSW Health Western Sydney Local Health District (WSLHD) confirmed their concerns had been satisfactorily addressed by the amended development and provided recommended conditions of consent. The Department reviewed the request and considers it consistent with the requirements of Clause 55(1) of the EP&A Regulation and accepted the amended DA. Therefore, this report assesses the amended DA.

## Assessment

The Department's assessment of the application has fully considered all relevant matters under section 4.15 of the EP&A Act, the objects of the EP&A Act and the principles of ecologically sustainable development. The Department has identified the key issues for assessment are the potential odour impacts and hazards and risk.

The Department recognises the amended AQIA did not apply the correct odour unit criteria when assessing ground level odour concentrations at nearby receivers. Despite this, the Department, the EPA and WSLHD do not consider it necessary to require further information in this regard as the development would cause low odour concentration levels at or below the appropriate criteria of 2 odour unit (OU) at all sensitive receivers. One exception is receiver Ind-5 which currently exceeds the criteria but would remain unchanged at 3 OU. As such, the Department is satisfied the development would not have adverse odour impacts on nearby receivers.

The Department has recommended conditions requiring the Applicant to prepare and implement an Air Quality Management Plan (AQMP) for the development and undertake an odour audit within six months of operation to validate the odour impact predictions within the amended AQIA. The Department's assessment has concluded that with these measures in place, any odour impacts of the development would be adequately managed.

The Department has carefully considered the findings and recommendations of the Applicant's Preliminary Hazard Analysis and is satisfied the Applicant has adequately identified all the hazards associated with the development. One hazardous scenario has the potential for offsite impacts, associated with the LPG tank but this was found to be below the risk criteria outlined in HIPAP No. 4 "Risk Criteria for Land Use Planning". The Department is satisfied with the identified mitigation measures in place, including a firewall, exclusion zone and guard rails adjacent to the LPG tank, there would be no significant off-site consequences from the development. The Department has recommended a number of conditions to ensure the development would be carried out in a safe manner

including limiting the quantities of dangerous goods stored and requiring the preparation of an Emergency Plan and detailed emergency procedures.

## **Summary**

The development would increase the processing capacity of an existing clinical waste management facility to meet growing demands, and ultimately reduce the total volume of clinical waste directly delivered to landfills.

The Department's assessment concluded that the impacts of the development can be mitigated and/or managed to ensure an acceptable level of environmental performance, subject to implementation of stringent conditions of consent and a series of management and mitigation measures. Consequently, the Department considers the development is in the public interest and is recommended for approval, subject to conditions.

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# 1 Introduction

## 1.1 The Department's Assessment

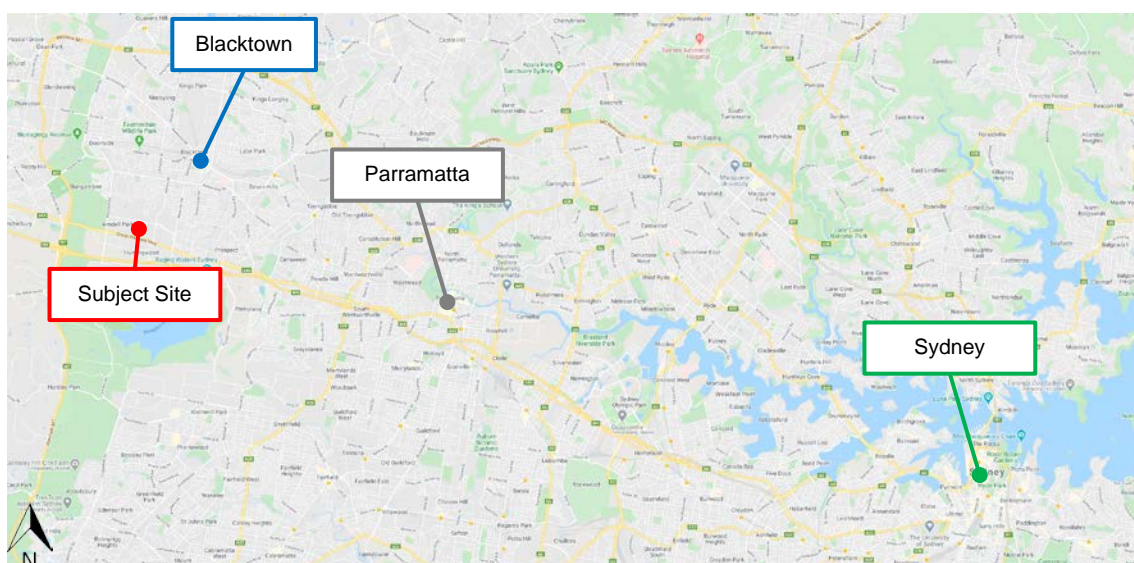
This report details the Department of Planning, Industry and Environment's (the Department's) assessment of the State significant development (SSD-6761) for the Arndell Park Clinical Waste Management Facility. The proposed development (the development) includes increasing the existing waste input rate from 600 tonnes per annum (tpa) to a maximum of 2,300 tpa including processing up to 2,000 tpa of clinical waste and storage of up to 300 tpa of related waste. The development also includes use of 7 Vangeli Street, Arndell Park as a delivery vehicle parking depot and for storage of clean sharps waste containers.

The Department's assessment considers all documentation submitted by Med-X Pty Ltd (the Applicant), including the Environmental Impact Statement (EIS), Response to Submissions (RtS), Amended Project Report (APR), and submissions received from government agencies, special interest groups and the public. The Department's assessment also considers the legislation and planning instruments relevant to the site and the development.

This report describes the site, the development, surrounding environment, relevant strategic and statutory planning provisions and the issues raised in submissions. The report evaluates the key issues associated with the development and provides recommendations for managing any impacts during construction and operation. The Department's assessment of the Arndell Park Clinical Waste Management Facility has concluded the development is in the public interest and should be approved, subject to conditions.

## 1.2 Development Background

The Applicant is seeking development consent to expand the existing clinical waste management facility at Arndell Park, in the Blacktown City Local Government Area (LGA) approximately 3.2 kilometres (km) south-west of Blacktown CBD (see **Figure 1**). The development would increase the waste input rate of the facility to a maximum of 2,300 tpa including processing up to 2,000 tpa of clinical waste and storage of up to 300 tpa of related waste.

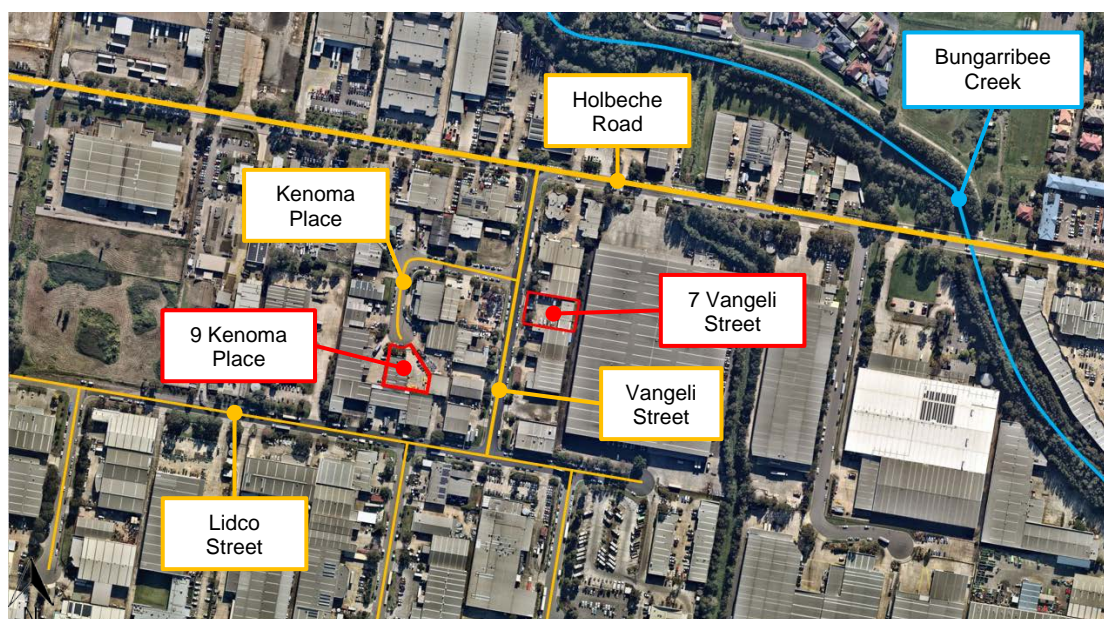


**Figure 1 | Regional Context Map**

The existing clinical waste management facility was approved by the former Sydney West Joint Regional Planning Panel in 2011. The Applicant also operates a number of other facilities across New South Wales, Queensland and Victoria which provide clinical waste and sharps disposal services.

### 1.3 Site Description

The development includes two sites, 9 Kenoma Place, the location of the existing clinical waste management facility and 7 Vangeli Street, Arndell Park which would be used as a delivery vehicle parking depot and for storage of clean sharps waste containers within an existing warehouse.



**Figure 2 |** Locations of 9 Kenoma Place and 7 Vangeli Street

The site at 9 Kenoma Place comprises 1,492 square metres (m<sup>2</sup>) of IN1 General Industrial zoned land (see **Figure 4**) and is legally described as Lot 14 in Deposited Plan (DP) 786328.



**Figure 3 |** 9 Kenoma Place, Arndell Park



The Kenoma Place site is currently occupied by a 570 m<sup>2</sup> warehouse building with a 151 m<sup>2</sup> office space and a hardstand area. Access to the site is provided via a driveway off Kenoma Place which is used by both light and heavy vehicles. The site has been cleared for the existing development except for a strip of vegetation along the Kenoma Place frontage.

The site at 7 Vangeli Street is approximately 145 m to the north-east of 9 Kenoma Place and comprises 1,513 m<sup>2</sup> of IN1 General Industrial zoned land (see **Figure 4**). The Vangeli Street site is legally described as Lot 1005 in DP 788155. Currently, the Vangeli Street site includes hardstand areas used as parking spaces and a storage warehouse. The majority of the site has been cleared, except for patches of vegetation along the Vangeli Street frontage.

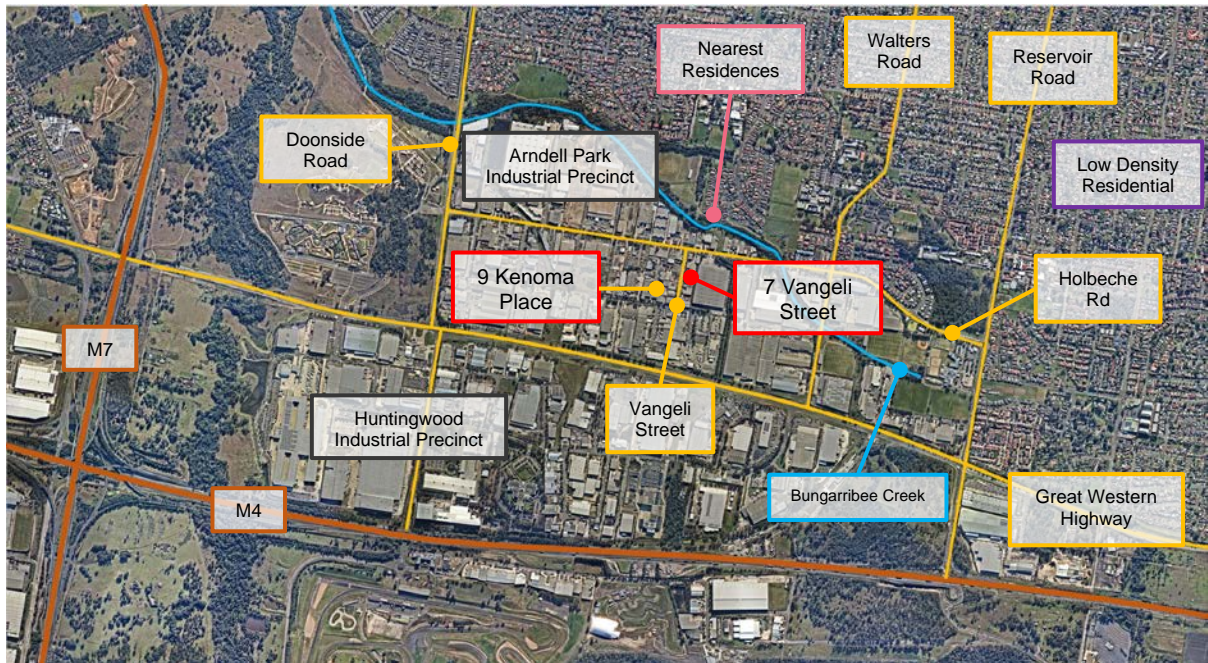


**Figure 4 | 7 Vangeli Street, Arndell Park**

## 1.4 Surrounding Land Uses

Both the Kenoma Place and Vangeli Street sites are located in the established industrial precinct of Arndell Park. Surrounding uses are predominantly industrial including warehousing and distribution facilities, motor vehicle repair shops and machine and plant hire places. The closest residential receiver is located approximately 400 m north-east of the Kenoma Place site within Mariko Place in the suburb of Blacktown. The nearest watercourse is Bungarribee Creek, approximately 360 m to the north-east of the Kenoma Place site.

Kenoma Place can be accessed from Vangeli Street, Holbeche Road and Walters Road which provide access to the Great Western Highway, M4 Western Motorway and M7 Westlink Motorway (see **Figure 5**).



**Figure 5 | Local Context Map**

## 1.5 Other Development Approvals

On 23 April 2012, the then Sydney West Joint Regional Planning Panel approved a development application (JRPP-11-1642) seeking to use the site as a waste management facility processing up to 650 tpa of clinical and quarantine waste. JRPP-11-1642 has been modified once (S 9612/1451) to upgrade equipment at the facility which was approved on 2 October 2012.

The site is also regulated through an Environment Protection Licence (EPL No. 20233) issued by the Environment Protection Authority.

## 2 Development

### 2.1 Amended Development

The Applicant initially sought consent to increase the processing capacity to 3,000 tpa. Following exhibition of the original EIS, the Applicant sought to amend the development to address the concerns raised in submissions and to improve environmental performance. The Applicant proposed to amend the development to reduce the proposed waste input rate from 3,000 tpa to 2,300 tpa Under Clause 55 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).

The amended development forms part of the Response to Submissions (RtS) and Amended Project Report (APR). The Department considered the amended development to be consistent with the requirements of Clause 55 of the EP&A Regulation and accepted the amended application.

### 2.2 Description of the Development

The Applicant proposes to increase the waste input rate of the facility from 600 tpa to a maximum of 2,300 tpa, including processing up to 2,000 tpa of clinical waste and storing up to 300 tpa of related waste, and use 7 Vangeli Street, Arndell Park as a delivery vehicle parking depot and for storage of clean sharp waste containers within the existing building.

The major components of the development are summarised in **Table 1** and shown in **Figure 7**, and described in full in the Environmental Impact Statement (EIS), RtS and APR reports included in **Appendix B** and **Appendix D**.

**Table 1** | Main Components of the Development

Aspect	Description
<b>Development Summary</b>	<b>Operation of a clinical waste management facility at 9 Kenoma Place, Arndell Park processing up to 2,000 tpa of clinical waste and storing up to 300 tpa of related waste (including anatomical, cytotoxic, pharmaceutical and sharp wastes). Use of 7 Vangeli Street, Arndell Park as a delivery vehicle parking depot and for storage of clean sharps waste containers.</b>
<b>Continued Operation of Existing Infrastructure</b>	<ul style="list-style-type: none"><li>• warehouse building and office</li><li>• car parking spaces</li><li>• stormwater pipes and pits</li><li>• boiler</li><li>• condenser</li><li>• gas tanks</li><li>• water tanks</li></ul>
<b>Equipment</b>	<ul style="list-style-type: none"><li>• autoclave and autoclave cart</li><li>• bin lifter</li><li>• bin scale</li><li>• shredder</li><li>• compactor</li></ul>



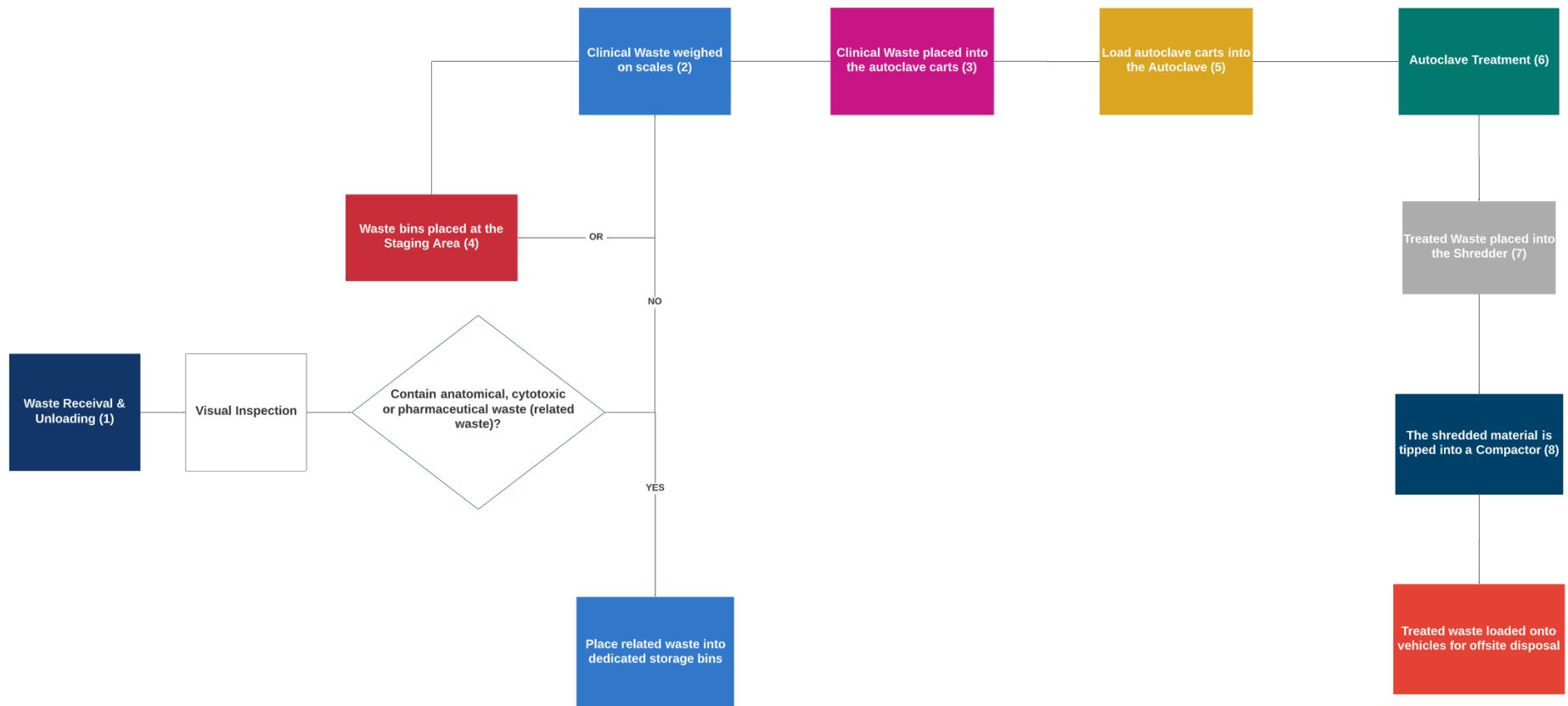
Aspect	Description
<b>Traffic and Parking</b>	<ul style="list-style-type: none"> <li>86 daily vehicle movements (43 in, 43 out) at 9 Kenoma Place and 68 daily vehicle movements (34 in, 34 out) at 7 Vangeli Street</li> <li>use of the existing 11 parking spaces at 9 Kenoma Place and 18 parking spaces at 7 Vangeli Street</li> </ul>
<b>Hours of operation</b>	<p><u>Clinical Waste Management Facility</u></p> <ul style="list-style-type: none"> <li>7 am – 7 pm, Monday to Saturday, including public holidays that fall on Saturday</li> </ul> <p><u>7 Vangeli Street Depot</u></p> <ul style="list-style-type: none"> <li>5 am – 7 pm, Monday to Saturday (3 Medium Rigid Vehicles would depart the depot between 5 am and 7 am)</li> </ul>
<b>Input Rate</b>	Up to 7.8 tonnes (t) of clinical and related waste per day
<b>Waste stored on-site</b>	Up to 8 t of clinical and related waste would be stored on-site at any given time, but no more than 450 kg of related waste stored outside the hours of operation
<b>Employment</b>	<p>27 operational employees including:</p> <ul style="list-style-type: none"> <li>a total of 11 clinical waste management facility operational employees including three additional processing employees and</li> <li>a total of 16 delivery vehicle drivers, including four additional drivers.</li> </ul>

## 2.3 Waste Streams

The development would not change the waste streams approved under DA JRPP-11-1642 and the site's EPL. The facility would accept and process up to 2,000 tpa of clinical waste which would be treated by the autoclave and 300 tpa of related waste would be temporarily stored on-site before disposal at a licensed facility off-site.

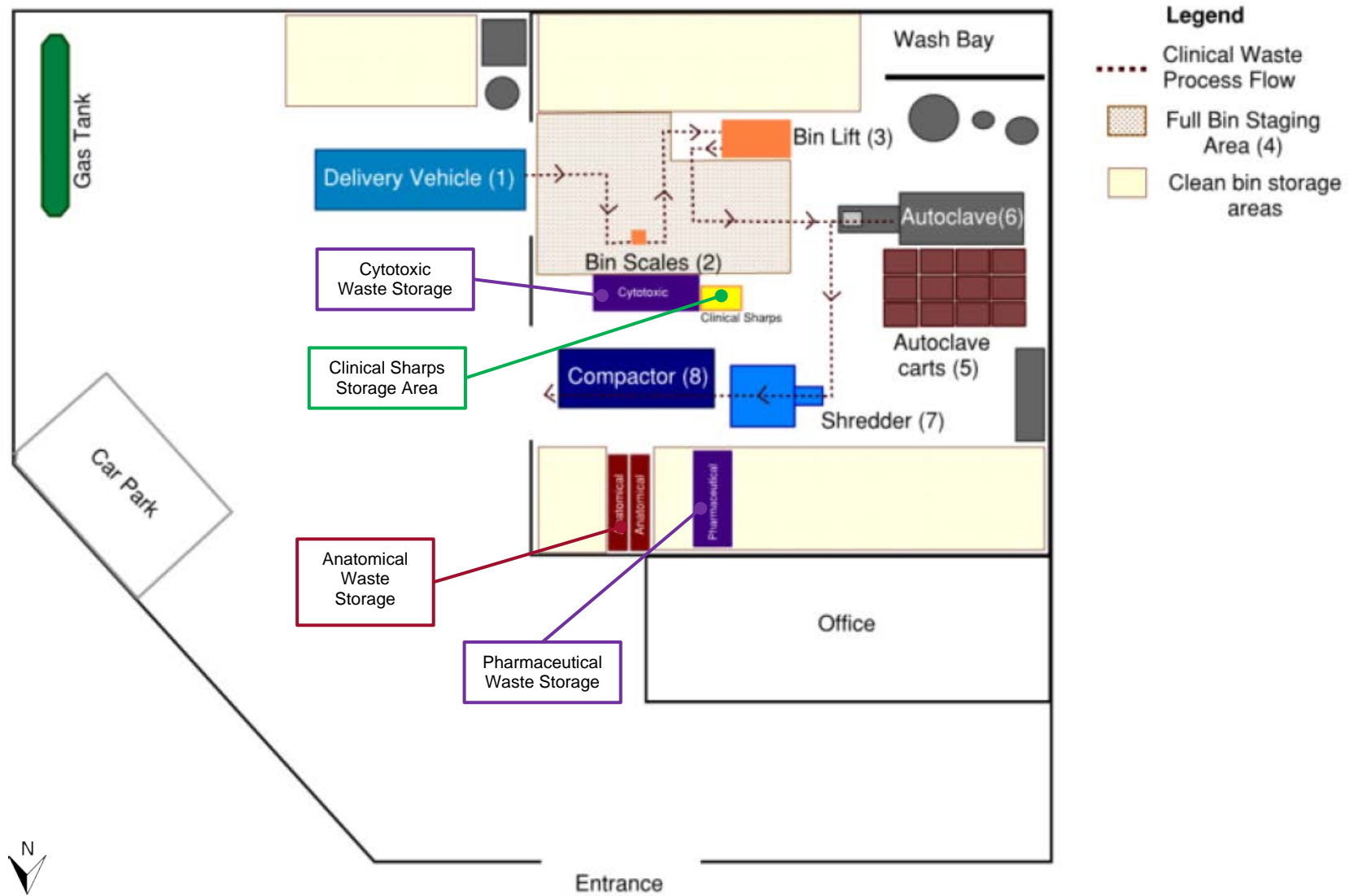
## 2.4 Description of the Treatment of Waste Materials

The primary purpose of the development is to sterilise and transform clinical waste into general solid waste (non-putrescible) prior to disposal off-site at a licensed facility. The treatment process is described below and summarised in **Figure 6**.



**Figure 6 | Processing Procedure**





**Figure 7 | Facility Floor Plan Denoting Processing Procedure**

## Waste Receival and Preparation

Waste would be packaged, transported and tracked in accordance with relevant NSW Health and EPA codes and guidelines. Waste would be transported from private hospitals, medical centres and related facilities via road using Medium Rigid Vehicles (MRVs) and vans owned by the Applicant.

### Receipt and Visual Inspection of Incoming Waste

On arrival at the facility, the delivery vehicle would reverse into the loading area within the processing building (see **Figure 6** (Stage 1) and **Figure 8**). Bins of various sizes (e.g. 60 litres (L), 120 L, 240 L, 660 L, and 1,100 L for clinical waste bins) containing bagged clinical and related wastes would be unloaded into the staging area (shown as Stage 4 area in Figure 7) where staff would visually inspect the bins. A temporary storage area is provided within the full bin staging area for received waste waiting for the next visual inspection, weighing and treatment (Stage 4).

Should any related wastes be identified in clinical waste bins, the entire contents of that clinical waste bin would be treated as contaminated and be transferred to the designated related waste storage area prior to dispatch to a licensed facility for processing. The delivery vehicle would then be loaded with clean empty bins for the next delivery.

### Preparation for Autoclave Treatment

Uncontaminated clinical waste bins and related waste bins would be weighed on electric scales and their weights would be recorded (Stage 2). After weighing the related waste bins would be moved to designated storage areas within the processing building. The clinical waste bins would be manually wheeled directly to a bin lift to consolidate the bin's contents and placed it into one of the four autoclave carts which would contain up to 150 kg of clinical waste (Stages 3, 4 and 5) (see **Figure 9**).



**Figure 8 | Waste Receival (left) and Waste Scaling (right)**



**Figure 9 | Bin Lifter at the Facility**

## **Waste Treatment and Dispatch**

### Autoclave Treatment

Each full autoclave cart would be manually wheeled onto the autoclave lifter which would then move the cart into the autoclave. Once there are four full carts in the autoclave, and the door is locked, the treatment commences (Stage 6).

Within the autoclave, clinical waste would be treated under high temperatures being approximately 140 degree Celsius (°C) and pressurised steam conditions. These conditions would denature proteins through the saturation of heat and moisture and destroy microbial flora and fauna that is present. The treated waste is deemed safe for disposal as general solid waste (non-putrescible). The autoclave could treat up to 13 cycles per day. The Applicant advised that although each of the four autoclave carts would contain 150 kg of clinical waste for a total of 600 kg, the density of clinical waste is such that each cycle would treat up to 648 kg and would take approximately 55 minutes.



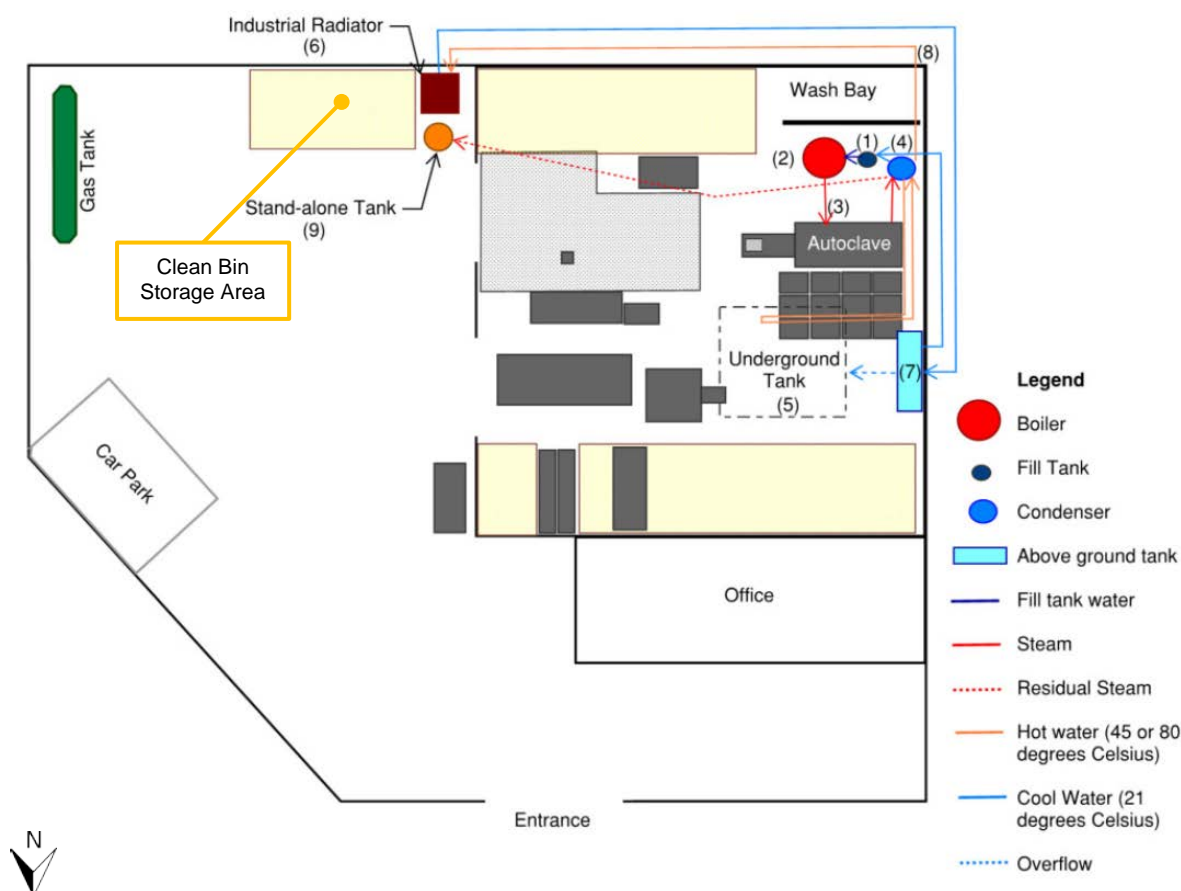
**Figure 10 | Autoclave Cart with untreated waste (left) and Loading into Autoclave (right)**

## Shredding and Dispatch

The treated clinical waste would be then transferred and tipped into a shredder (Stage 7) using a forklift where the material would be shredded and collected in a shredder bin. Forklifts would then tip the treated waste from the shredder bin to a compactor (Stage 8). Treated waste would be transported to a licensed landfill for disposal on a daily basis. Related waste would be transferred to a licensed incineration facility for thermal treatment. The related waste dispatch would also occur daily.

## 2.5 Autoclave Water System

The current operation includes a closed-loop water system which would continue to service the autoclave without the need for a capacity upgrade. The autoclave water system comprises nine components which are shown in **Figure 11** and described below.



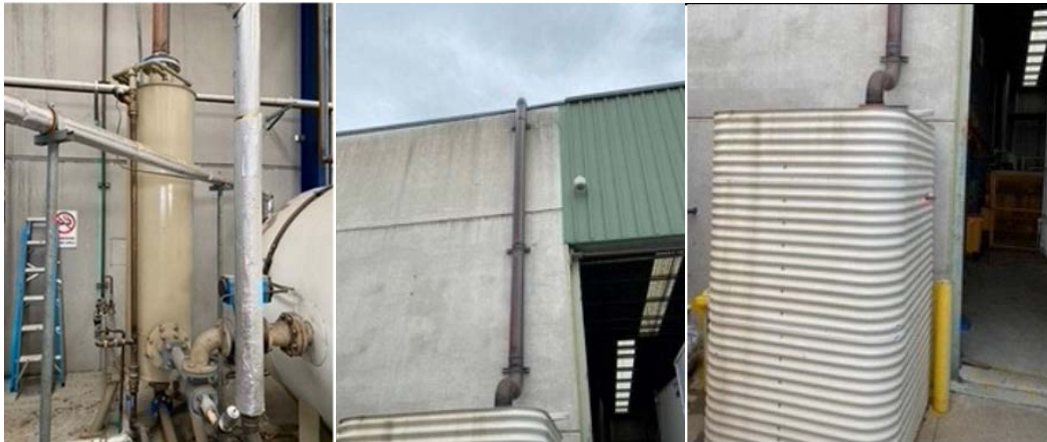
**Figure 11 | Autoclave Water System**

The fill tank (1 in **Figure 11**) would be filled with water supplied by Sydney Water at the start of daily operations. The water in the fill tank would be chemically treated to remove any impurities. The fill tank water is connected to a boiler (2) where water would be converted to steam and transferred to the autoclave (3). The pressure would be increased to ensure the required temperature (140 °C) for treatment is reached in the autoclave. Once the autoclave treatment is complete, the steam would be discharged to a condenser (4) for conversion to hot water at approximately 80 °C.

Hot water from the condenser would be pumped to an underground tank (5) for temporary storage, then it would travel through a cooling fan and a filter back to the condenser (4) where the water is cooled to approximately 45 °C. Steam generated during the cooling process would exit via pipes on the roof



(shown as dashed red line in **Figure 11**) which is connected to a standalone tank located adjacent to the loading area (see **Figure 12**). The standalone tank (9) would capture any residues remaining in the steam when it condenses. The remaining water in the standalone tank would be filtered and then discharged to sewer.



**Figure 12 | Condenser (left), Rooftop Pipe (middle) and Standalone Tank (right)**

Cooled water in the condenser (4) would then be pumped to an industrial radiator (6) where it would be further cooled to approximately 21 °C before being pumped to an above ground tank (7). Any overflow would be directed back to the underground tank (5). The water in the above ground tank would be circulated back to the fill tank (1) for filtration so that it could be used again for additional treatment cycles during the day.

## **2.6 Storage of Waste, Bin Washing and Storage**

### **Storage of Waste**

The development includes storage of up to 8 t of clinical (treated and untreated) and related waste on-site during operational hours.

#### Clinical Waste

Clinical waste would be processed upon receipt and dispatched off-site once treated. Should any clinical waste not be processed by the end of day due to a late delivery, it would be stored overnight for treatment during the first autoclave cycle on the next operating day. The maximum volume of clinical waste stored overnight would be 450 kg, equivalent to one MRVs worth of waste. It is anticipated that late deliveries would occur around 3-5 times per month. To minimise occurrence of late delivery, the Applicant would strictly implement a vehicle scheduling roster to ensure that fleet arrival times at the clinical waste management facility would be appropriately staggered and delivery vehicle movements would be distributed evenly throughout an operating day.

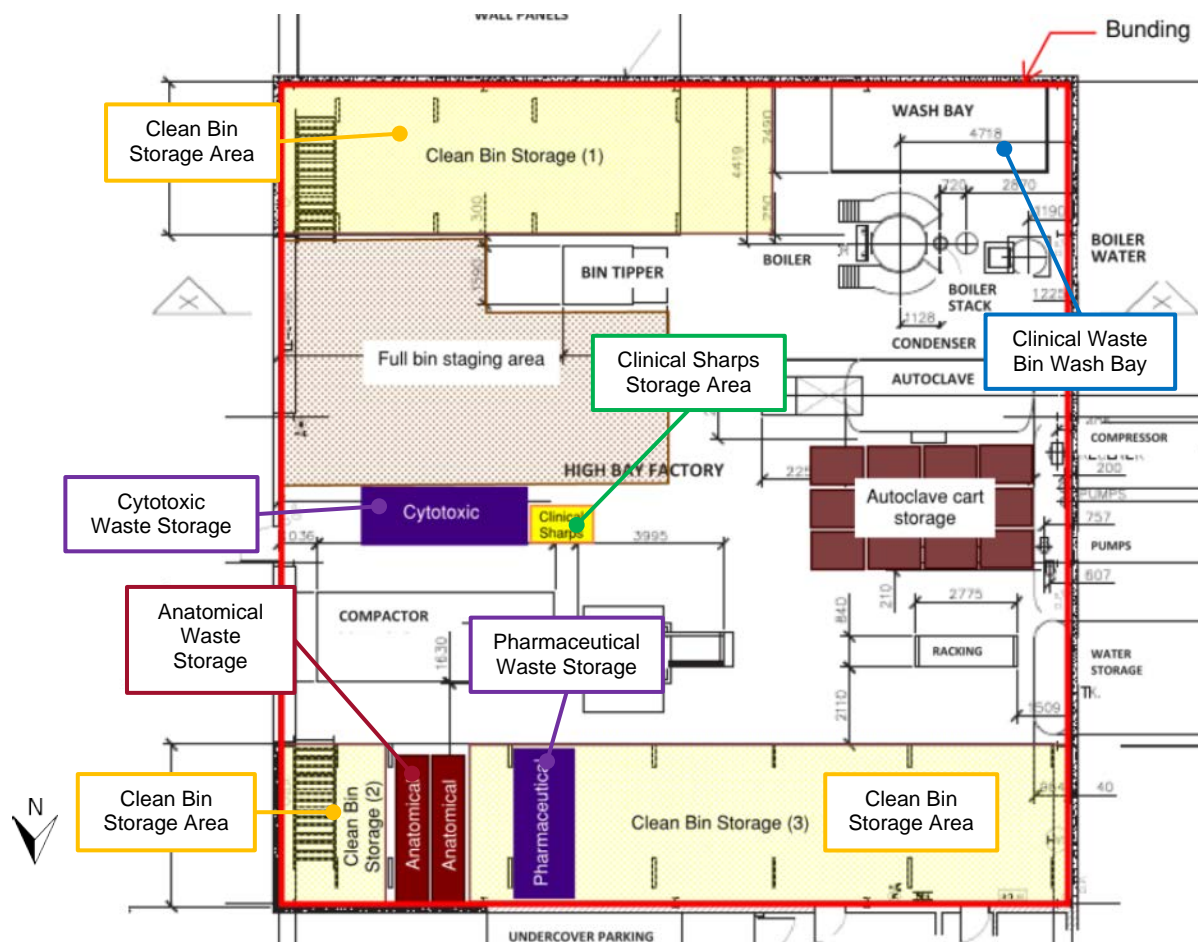
#### Related Waste

Related waste (anatomical, cytotoxic, and pharmaceutical wastes) may be incorrectly disposed of in clinical waste bins at the waste's source and would be treated as non-conforming waste during visual inspection. The non-conforming waste would be contained in specifically coloured bags (anatomical: orange, cytotoxic: purple, pharmaceutical: red, see **Figure 14**), which would therefore be easily identifiable during the visual inspection. Once identified, the entire contents of the clinical waste bin would be treated as contaminated and as a related waste, being anatomical, cytotoxic or

pharmaceutical waste. The contaminated clinical waste bin would then be stored in the respective dedicated areas within the processing warehouse (see **Figure 13** for the storage areas).

Clinical sharps are also a related waste that may be delivered to the facility. Upon arrival, sharp waste containers would be weighed and then immediately placed in 900 L clinical sharps tubs for storage (see **Figure 13**) prior to disposal of at a licensed facility off-site.

All related wastes would be removed daily and disposed by a licensed waste contractor. These wastes would then be transported to a licenced facility for incineration. Licensed facilities include Weston Thermal Solutions at Kurri Kurri and Cleanaway Medical Waste Management Facility at Silverwater.



**Figure 13** | Related Waste Storage Areas and Clinical Bin Wash Bay within the Processing Warehouse



**Figure 14** | Clinical Waste Bin (left), Cytotoxic Waste Bin (middle) and Pharmaceutical Waste Bin (right)

Once bins containing untreated clinical waste have been emptied, they would be transferred to the wash bay (see **Figure 13**) where the bins would be manually cleaned and sanitised in accordance with the NSW Health requirements. Following the wash, the bins would be inspected. If they comply with the NSW Health requirements, then they would be transferred to the appropriate clean bin storage area (see **Figure 13**). If the bins are deemed faulty or below standard, they would be removed from the work area and stored at a designated location for faulty product and subsequently removed off site.

## 2.7 Delivery Vehicle Depot and Clean Sharp Containers Storage

[illegible]

### Delivery Vehicle Depot

Arndell Park Clinical Waste Management Facility (SSD 6761) | Assessment Report

### **Clean Sharps Bin Storage**

The Vangeli Street site includes an existing building with a total area of approximately 175 m<sup>2</sup> for storage of clean sharps containers. Before a delivery vehicle departs the parking depot to start the daily collection, all clean sharps containers required for that day would be loaded into the vehicle.

## **2.8 Applicant's Need and Justification for the Development**

The Applicant states that the population of NSW is steadily growing and increasing the demand for health services and medical facilities. As such, there is a growing market demand for medical waste management facilities to treat an increasing amount of medical waste. The Applicant noted that the existing processing capacity could not meet the increasing demand effectively and expansion would be required.



## 3 Strategic Context

### 3.1 A Metropolis of Three Cities

The Greater Sydney Region Plan, A Metropolis of Three Cities, seeks to transform Greater Sydney into a metropolis of three cities: the Western Parkland City, the Central River City and Eastern Harbour City. The development is located within the Central River City and is consistent with the directions and principles outlined in the Greater Sydney Region Plan and the Central City District Plan, specifically the planning priorities of growing investment, business opportunities and jobs in strategic centres and managing energy, water and waste efficiently. The development would process up to 2,000 tpa of clinical waste which would support the effective collection and management of medical waste.

### 3.2 NSW Waste Avoidance and Resource Recovery Strategy 2014-2021

The NSW Government developed the state-wide Waste Avoidance and Resource Recovery Strategy 2014-21 (WARR Strategy) that sets out waste recovery targets for construction and demolition (C&D), commercial and industrial (C&I) and municipal solid waste (MSW) material. By 2021-22, the WARR Strategy requires an increase in recycling rates as follows:

- C&I from 57% (in 2010-11) to 70%
- C&D from 75% (in 2010-11) to 80%
- MSW from 52% (in 2010-11) to 70%
- increase in the waste diverted from landfill from 63% (in 2010-11) to 75%.

The Department considers the development is consistent with the principal aim of the WARR Strategy, as the development would increase the facility's processing capacity, which would ultimately reduce the total volume of clinical waste directly delivered to landfills.

### 3.3 NSW Health Policy Directive: Clinical and Related Waste Management for Health Services 2017

This policy provides minimum standards for waste management that must be met by health services to ensure appropriate handling and containment of specific waste streams in line with NSW legislation and licensing. Table 1 of the policy sets out the procedures for how clinical, cytotoxic and pharmaceutical waste types are to be processed in NSW. The procedures to be followed during the operation of the development are described in **Section 2** of this report. NSW Health have been consulted and advised with mitigation measures in place, the development could comply with the NSW Health Policy Directive.

## 4 Statutory Context

### 4.1 State significance

The development is State significant development pursuant to section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) because it involves receiving up to 2,300 tpa of clinical waste which meets the criteria in Clause 23(5) of Schedule 1 in State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).

### 4.2 Permissibility

Both sites are zoned IN1 General Industrial under the Blacktown Local Environment Plan 2015 (BLEP). Waste management facilities are permissible with consent in the IN1 zone. As such, the Minister for Planning and Public Spaces (the Minister) or delegate may determine the carrying out of the development.

### 4.3 Consent Authority

The Minister is the consent authority for the development under section 4.5 of the EP&A Act. On 9 March 2020, the Minister delegated the functions to determine SSD applications to the Executive Director, Regions, Industry and Key Sites where:

- the relevant local council has not made an objection and
- there are less than 50 unique public submissions in the nature of objections and
- a political disclosure statement has not been made.

Of the nine submissions received, five objected to the development. Council did not object to the development. No reportable political donations were made by the Applicant in the last two years and no reportable political donations were made by any persons who lodged a submission.

Accordingly, the application can be determined by the Executive Director, Regions, Industry and Key Sites under delegation.

### 4.4 Other approvals

Section 4.42 of the EP&A Act requires further approvals to be obtained, considered or determined in a manner that is consistent with any Part 4 approval for SSD projects under the EP&A Act. The existing operation is subject to an Environment Protection Licence (EPL No. 20233) issued by the Environment Protection Authority under the *Protection of the Environment Operations Act 1997*. The development would require an updated EPL in line with the increased processing capacity.

### 4.5 Mandatory Matters for Consideration

Section 4.15 of the EP&A Act sets out matters to be considered by a consent authority when determining a development application. The Department's consideration of these matters is set out in **Section 6** and **Appendix C**. In summary, the Department is satisfied the proposed development is consistent with the requirements of section 4.15 of the EP&A Act.

Under section 4.15 of the EP&A Act, the consent authority, when determining a development application, must take into consideration the provisions of any environmental planning instrument (EPI) and draft EPI (that has been subject to public consultation and notified under the EP&A Act) that apply to the development.

The Department has considered the development against the relevant provisions of several key EPIs including:

- State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- State Environmental Planning Policy No 33 – Hazardous and Offensive Development (SEPP 33)
- State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55)
- Sydney Regional Environmental Plan No 20 – Hawkesbury-Nepean River (SREP 20)
- Blacktown Local Environmental Plan 2015 (BLEP).

Development Control Plans (DCPs) do not apply to SSD under Clause 11 of the SRD SEPP. However, the Department has considered the relevant provisions of the Blacktown DCP 2015 in its assessment of the development in **Section 6** of this report.

Detailed consideration of the provisions of all EPIs that apply to the development is provided in **Appendix F**. The Department is satisfied the development would comply with the relevant provisions of these EPIs.

## 4.6 Public Exhibition and Notification

In accordance with section 2.22 and Schedule 1 to the EP&A Act, the development application and any accompanying information of an SSD application are required to be publicly exhibited for at least 28 days. The application was on public exhibition from Thursday 24 January 2019 until Friday 22 February 2019 (30 days). Details of the exhibition process and notifications are provided in **Section 5.1** of this report.

## 4.7 Objects of the EP&A Act

In determining the application, the consent authority should consider whether the development is consistent with the relevant objects of the EP&A Act. The Department has fully considered the objects of the EP&A Act, including the encouragement of Ecologically Sustainable Development (ESD), in its assessment of the application (see **Table 2**).

**Table 2 | Considerations Against the Objects of the EP&A Act**

Object	Consideration
<b>1.3(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,</b>	The development would promote the social and economic welfare of the community and a better environment by facilitating the proper management of clinical and other types of waste that are not suitable to be disposed by other means.
<b>1.3(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,</b>	The development includes several measures to deliver ESD, including autoclave water recycling and reuse. The development would divert 2,000 tpa of clinical waste from being directly delivered to landfills. The Department's assessment has considered all socio-economic and environmental considerations in a holistic

Object	Consideration
	<p>approach and is satisfied the development could avoid potentially serious or irreversible environmental damage whilst providing tangible socio-economic and environmental benefits. The Department is satisfied that the development could be carried out in a manner that is consistent with the ESD principles.</p>
<p><b>1.3(c) to promote the orderly and economic use and development of land,</b></p>	<p>The development would continue to use the land for industrial purposes consistent with IN1 zoning objectives.</p>
<p><b>1.3(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,</b></p>	<p>The Department's assessment in <b>Section 6</b> of this report demonstrates that by implementing the recommended conditions of consent and the proposed mitigation measures, the development's impacts could be mitigated and/or managed to ensure an acceptable level of environmental performance.</p>
<p><b>1.3(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,</b></p>	<p>The Department has recommended a number of conditions to ensure that maintenance is undertaken in accordance with applicable legislation, guidelines, policies and procedures. The expanded operation would continue applying a number of work health and safety measures to protect the health and safety of waste processing employees and delivery vehicle drivers in accordance with the relevant legislation and NSW Health requirements.</p>
<p><b>1.3(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,</b></p>	<p>The Department has assessed the development in consultation with and given due consideration to the technical expertise and comments provided by Council and State government agencies which is consistent with the object of sharing the responsibility for environmental planning between the different levels of government.</p>
<p><b>1.3(j) to provide increased opportunity for community participation in environmental planning and assessment.</b></p>	<p>The Department publicly exhibited the application as outlined in <b>Section 5</b>, which included notifying adjoining landowners, placing a notice in the press and displaying the</p>

Object	Consideration
	application on the Department's website, at the Department's Sydney office and Council's office.

## 4.8 Ecologically Sustainable Development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- (a) *the precautionary principle*
- (b) *inter-generational equity*
- (c) *conservation of biological diversity and ecological integrity*
- (d) *improved valuation, pricing and incentive mechanisms.*

The potential environmental impacts of the development have been assessed and, where potential impacts have been identified, mitigation measures and environmental safeguards have been recommended.

As demonstrated by the Department's assessment in **Section 6** of this report, the development is not anticipated to have any adverse impacts on native flora or fauna, including threatened species, populations and ecological communities, and their habitats. As such, the Department considers that the development would not adversely impact on the environment and is consistent with the objectives of the EP&A Act and the principles of ESD.

## 4.9 Biodiversity Development Assessment Report

Section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act) requires all applications for SSD to be accompanied by a Biodiversity Development Assessment Report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the development is not likely to have any significant impact on biodiversity values.

However, under the transitional arrangements, SSD can be considered under the previous legislation if environmental assessment requirements were issued before 25 August 2017 and the application is made before 25 February 2019.

As the SEARs for the development were issued on 3 December 2014 and the application was made on 24 January 2019, therefore the application can be considered under previous legislation.

## 4.10 Commonwealth matters

Under the EPBC Act, assessment and approval is required from the Commonwealth Government if a development is likely to impact on a matter of national environmental significance (MNES), as it is considered to be a 'controlled action'.

The EIS for the development included a preliminary assessment of the MNES in relation to the development and concluded the development would not impact on any of these matters and is therefore not a 'controlled action'. As such, the Applicant determined a referral to the Commonwealth Government was not required.

## 5 Engagement

### 5.1 Consultation

The Applicant, as required by the Planning Secretary's Environmental Assessment Requirements (SEARs), undertook consultation with relevant local and State agencies as well as the community. The Department undertook further consultation with these stakeholders during the exhibition of the EIS and throughout the assessment of the application. These consultation activities are described in detail in the following sections.

#### Consultation by the Applicant

The Applicant undertook a range of consultation activities throughout the preparation of the EIS, including:

- meetings with the Department, key State government agencies and Blacktown City Council
- letter box drops at businesses in the Arndell Park industrial precinct
- letter box drops at residences in the suburb of Blacktown to the north-east of the site.

#### Consultation by the Department

The Department consulted with relevant public agencies during the preparation of the Planning Secretary's environmental assessment requirements (SEARs). After accepting the SSD application and the EIS, the Department:

- made it publicly available from **Thursday 20 January 2019** until **Friday 22 February 2019**:
  - on the Department's website
  - at the Department's then Sydney office (320 Pitt Street, Sydney)
  - at all Service NSW Centres
  - at Blacktown City Council (62 Flushcombe Road, Blacktown)
- notified landowners in the vicinity of the site about the exhibition period by letter
- notified and invited comment from relevant State government agencies and Blacktown City Council by letter
- advertised the exhibition in the Blacktown Advocate.

### 5.2 Summary of Submissions

During the exhibition period, the Department received a total of nine submissions on the development, including five objections. Of the submissions received, four were from Council and government agencies, four objections were from special interest groups and one objection was from a member of the community.

#### Council and Government Agencies

**Blacktown City Council (Council)** did not object to the development subject to the implementation of conditions to ensure the hours of operation would be consistent with what was approved under JRPP-11-1642 and all vehicles associated with the development would be parked on-site.

**Environment Protection Authority (EPA)** raised no objection to the development but requested the Applicant provide an amended air quality impact assessment (AQIA) for the expanded operation identifying all pollutants of concern, additional meteorological data, justification for using the AERMOD

modelling system, adoption of a single odour criterion of 2 odour units and a cumulative assessment. The EPA also raised concerns with the Preliminary Hazard Analysis, emergency response procedures and water management.

**NSW Health Western Sydney Local Health District (WSLHD)** did not object to the development but requested further information on the maintenance of plant and equipment, storage of untreated waste overnight and the AQIA. WSLHD required an efficiency check of each autoclave cycle using bioindicator strips and a temperature pressure check prior to the treated waste from each cycle leaving the site to ensure inappropriately treated waste is not disposed of as general waste. It also requested information on the likelihood of pathogens escape, an assessment of the development against NSW Clinical and Related Waste Management for Health Services Policy Directive 2017, and the Applicant to reapply to NSW Health for approval of the treatment process for clinical waste.

**Transport for NSW – Roads and Maritime Services (TfNSW – RMS)** made no specific comments.

### Special Interest Groups

Four objections were received from nearby businesses who raised concerns regarding the traffic impacts of the development on the safety and capacity of the Holbeche Road and Vangeli Street intersection, including cumulative impacts of other development and congestion resulting from the existing kerbside parking spaces opposite the intersection.

### Public Submission

One public objection was received which raised concerns regarding odour from the existing operations and traffic impacts on Kenoma Place.

## 5.3 Response to Submissions and Amended Development

The DA was initially lodged by State Waste Services Pty Ltd (SWS). Following exhibition, SWS merged with Med-X Pty Ltd, who then became the Applicant. Due to the technical nature of the concerns raised in submissions, the Applicant engaged a new consultant (Arup) for the development which resulted in delays in submitting the Response to Submissions (RtS).

On 14 July 2020, the Applicant submitted an RtS on the issues raised during the exhibition of the development and an APR (see **Appendix B**). The APR details amendments to the development including a reduction in the waste input rate to 2,300 tpa and inclusion of 7 Vangeli Street, Arndell Park as a delivery vehicles depot and for the storage of clean sharps waste bins.

The RtS and the APR were made publicly available on the Department's website and were provided to key government agencies to consider whether it adequately addressed the issues raised. A summary of the government authority responses is provided below.

The **EPA** stated the RtS and APR have adequately addressed the issues raised and recommended conditions of consent.

**WSLHD** stated the RtS and APR had largely addressed its request for further information and recommended conditions regarding ongoing monitoring and response mechanisms.

**Council** reiterated the two matters raised in its submission, which can be addressed as conditions of consent.

The Department has considered the issues raised in submissions, the RtS, the APR and the supplementary concerns raised, in its assessment of the development.



## 6 Assessment

The Department has considered the EIS, the issues raised in the submissions, the Applicant's RtS and APR in its assessment of the development. The Department considers the key assessment issues are:

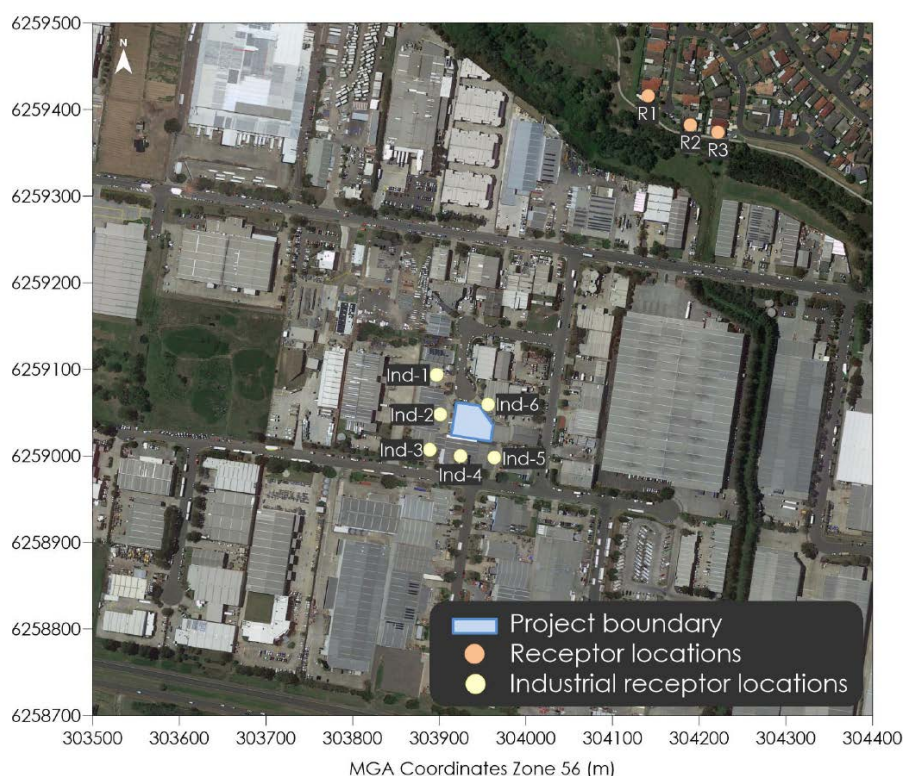
- odour impacts
- hazards and risks.

A number of other issues have also been considered. These issues are considered to be minor and are addressed in **Table 3** under **Section 6.3**.

### 6.1 Odour Impacts

The treatment of clinical waste has the potential to cause odour impacts if not appropriately managed. Following concerns raised during exhibition by the Department, EPA and WSLHD, the Applicant engaged a new consultant (Todoroski Air Sciences) to prepare an amended Air Quality Impact Assessment (AQIA) which was included in the RtS and APR. The amended AQIA assessed odour impacts of the development, using the amended waste input rate of 2,300 tpa, in accordance with the EPA *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (EPA, 2017) (the Approved Methods).

The amended AQIA combined the CALPUFF modelling system and The Air Pollution Model (TAPM) to predict the potential odour impacts caused by the handling and treatment of clinical waste. The model identified a range of odour sources including untreated and treated waste, waste received in broken bags, operation of the autoclave and residual steam generated during the water-cooling process in the condenser following each autoclave treatment. Nine sensitive receivers were identified in the vicinity of the site, including six industrial receivers and three residential receivers (see **Figure 16**):



**Figure 16 | Sensitive Receivers Shown in the Amended AQIA**

The amended AQIA identified three major odour sources for the development including:

- fugitive odour emissions from temporarily opening the roller doors for access to the processing building
- fugitive odour emissions from the external standalone tank connected to the condenser used during the water-cooling process
- dispersion of odour from the rooftop vent pipe also connected to the condenser used during the water-cooling process.

The amended AQIA adopted 6 odour units (OU) as the criteria for the dispersion modelling when assessing ground level odour concentrations at the identified sensitive receivers. Despite the increase in processing capacity, the modelling found the estimated odour concentration levels at the receivers would be generally unchanged from the existing scenario with concentration levels of between 0 OU and 3 OU. This was attributed primarily to the proposed vent pipe which would divert approximately half of the existing odour released as fugitive emissions from gaps in the top of the external standalone tank at ground level to be dispersed above the roof of the building at a significant velocity.

One receiver, Ind-1 (see **Figure 16**) would experience an increase in odour concentration level from 0 OU to 1 OU, which is well below the adopted criteria. The AQIA concluded any additional odour from the development would not be discernible from the odour of existing operations and concentration levels at the identified receivers would range between 0 OU and 3 OU and therefore be below the adopted criteria. Furthermore, it is noted the estimations are conservative as they assume the odour emission from the vent pipe on the roof would be constant, rather than only for approximately eight minutes per hour at the end of an autoclave cycle and assumes the roller doors accessing the building remain open rather than closed during operation.

To mitigate potential odour impacts, the Applicant committed to implementing a series of mitigation measures. This includes operating in an enclosed warehouse, ensuring no stockpiling of waste outside the processing warehouse, implementing spill management procedures, maintaining an odour complaint register and ensuring waste stored overnight would be kept in a closed container within the processing warehouse. The amended AQIA noted by operating within an enclosed warehouse with the roller doors shut during operation except for when access is required, odour effects at the receivers would be avoided.

The EPA reviewed the amended AQIA and confirmed the CALPUFF modelling system was suitable to apply to the development and the Applicant provided a robust assessment. The EPA reiterated its earlier comments, noting a criteria of 2 OU should have been adopted but were satisfied with the assessment as the predicted odour levels at adjacent receivers would be low and would only result in a marginal increase of 1 OU at one receiver which would not cause an exceedance of the 2 OU criteria. As such with mitigation measures in place, the EPA considered the development posed a low risk of any discernible level of odour at nearby sensitive receivers.

WSLHD reviewed the amended AQIA and were satisfied the matters previously raised in relation to odour criteria and mitigation measures had been addressed. WSLHD recommended conditions requiring regular odour monitoring and preparation and implementation of an odour management plan.

The Department has reviewed the information provided by the Applicant, including the amended AQIA and recognises it did not apply the correct odour unit criteria when assessing ground level odour concentrations at nearby receivers. Despite this, the Department does not consider it necessary to require further information in this regard as the development would not cause odour concentrations at

any receiver to exceed the correct criteria of 2 OU, noting receiver Ind-5 currently exceeds the criteria but would remain unchanged at 3 OU. Furthermore, the development would only result in a marginal increase in odour concentration at one receiver (Ind-1) from 0 OU to 1 OU. The Department is also satisfied the modelling undertaken by the Applicant is conservative, noting the odour emission from the roof vent pipe would occur for a far shorter period than modelled and doors of the processing building would remain closed during operation rather than open, except when opened temporarily to grant access.

The Department considers the mitigation measures proposed by the Applicant would be adequate to minimise odour emissions. To formalise these mitigation measures, the Department has recommended preparation and implementation of an Air Quality Management Plan (AQMP) as part of the Operational Environmental Management Plan (OEMP). The Department has also recommended an odour audit is completed within six months of operation to validate the odour impact predictions within the amended AQIA, as per the recommendations of WSLHD.

The Department's assessment concludes the potential odour impacts of the development are manageable, subject to the Applicant's proposed mitigation measures and the Department's recommended conditions of consent, including the completion of an odour audit to validate the odour impact predictions of the amended AQIA.

## 6.2 Hazards and Risks

The development has the potential to pose hazards and risks to the surrounding environment from the storage, transport and treatment of clinical and related waste.

A preliminary risk screening was undertaken by the Applicant and reviewed against the dangerous goods threshold of *Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (Applying SEPP 33 Guidelines)*. The preliminary risk screening identified the proposed storage quantities of dangerous goods, being Class 6.2 (infectious substances), would be above the threshold quantities in SEPP 33 and therefore the development is classified as potentially hazardous.

Following concerns raised during submissions regarding discrepancies between the Preliminary Hazards Analysis (PHA) and existing management plans, the Applicant engaged Arup to prepare a new PHA. The ARUP PHA was prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper (HIPAP) No. 6 – Guidelines for Hazard Analysis*. A qualitative risk analysis (Level 1 risk assessment) was undertaken based on the Department's *Multi-Level Risk Assessment* which was supplemented with consequence modelling of LPG fires. The Department considers the selected level of analysis to be appropriate for the development given:

- the site is in an industrial zoned area with no sensitive or residential land uses within 400 m
- operations associated with the development are not complex and are well understood
- the proposed storage quantities of dangerous goods are relatively low compared to other potentially hazardous developments.

The Arup PHA identified a range of potential key hazardous scenarios including:

- loss of containment of clinical waste during handling
- loss of containment of cytotoxic waste
- loss of containment of anatomical waste

- partial or total failure of the sterilisation process
- loss of containment of the LPG storage tank
- fire.

It then assessed the likely off-site risk of the above scenarios while taking into consideration the consequences, autoclave design and operational safeguards including:

- the use of double bagging and mobile containers to limit the potential for loss of containment
- staff trained in handling cytotoxic waste
- the recent validation of the autoclave which has an automatic control system designed to ensure the specified temperature is maintained for the specified time
- a tracking system to monitor and schedule the arrival of vehicles
- guard rails and a 2 m high firewall adjacent to the LPG storage tank
- a proposed 6 m exclusion zone around the LPG tank
- unloading of waste inside the bunded building
- Incident Response and Emergency Management Plans and a Safety Management System which includes a range of operational procedures.

The PHA identified only one hazardous scenario which would have the potential for off-site impacts, being the storage of LPG and associated tank filling, which is associated with explosion risks from fire and pipe fracture by vehicles leading to loss of containment. However, the risk matrix determined that risks would be low due to the high level of environmental controls on-site including the above-mentioned fire wall adjacent to the LPG storage tank, the proposed 6 m exclusion zone around the tank and the guard rail which would reduce the likelihood of both fire and pipe fractures. The Applicant identified that with the implementation of the existing and proposed safeguards any off-site risk from the potential hazardous scenarios would be unlikely.

The Department has reviewed the EIS and RtS, including the Arup PHA, and concludes the Applicant has adequately identified all the hazards associated with the operation of the autoclave, the steam boiler, the LPG storage tank and the waste storage area and undertaken an appropriately conservative consequence modelling of LPG fires to verify on-site LPG incidents would not result in significant off-site impacts.

The Department considers the risks from the development on surrounding land uses would satisfy the risk criteria outlined in HIPAP No 4 'Risk Criteria for Land Use Planning' and with the identified mitigation measures in place, there would be no major off-site consequences from the development.

However, to ensure the development continues to be operated in a safe manner, the Department has recommended conditions requiring the Applicant:

- ensure that the autoclave does not treat more than 648 kg of clinical waste per operating cycle and 2,000 tonnes of clinical waste per year
- ensure the quantities of dangerous goods stored on-site or transported to and from the site do exceed the screening threshold quantities listed in the Department's Applying SEPP 33 Guidelines at all times, except for dangerous goods Class 6.2 Packing Group III infectious substances (DG Class 6.2 PG III). However, the storage of DG Class 6.2 PG III within the site must not exceed 1,200 kg at any one time.

- develop and implement a comprehensive Emergency Plan (EP) and detailed emergency procedures for the development prior to the commencement of operations. The EP must include consideration of the safety of all people outside of the development who may be at risk from the development and must be prepared in accordance with the Department's HIPAP No. 1, 'Emergency Planning'.

The Department has carefully considered the findings and recommendations of the Arup PHA and concludes there would be no significant off-site consequences from the development provided the Applicant implements the proposed safeguards and recommended conditions.

### 6.3 Other Issues

The Department's assessment of other issues is provided in **Table 3**.

**Table 3 | Assessment of Other Issues**

Findings	Recommendations
<b>Traffic</b>	
<ul style="list-style-type: none"> <li>• The development would generate additional vehicle movements to and from 9 Kenoma Place (clinical waste management facility site) and 7 Vangeli Street (parking depot) which have the potential to impact on the safety, capacity and efficiency of the local road network. The vehicles accessing the sites are a combination of the Applicant's 16 delivery vehicles (8 Medium Rigid Vehicles, 8 vans) and employee vehicles (27, 1 per employee).</li> <li>• The amended Traffic Impact Assessment (TIA) stated the development would generate a total of 86 daily vehicle movements (43 in, 43 out) at the clinical waste management facility, which is an additional 26 movements (13 in, 13 out) compared to the existing operation and a total of 68 daily vehicle movements (34 in, 34 out) at the parking depot, which is an additional 16 movements (8 in, 8 out).</li> <li>• It was estimated during both AM and PM peak, 19 vehicle movements (15 in, 4 out) would occur at the clinical waste management facility and 32 vehicle movements (16 in, 16 out) would occur at the parking depot.</li> <li>• The amended TIA noted the Applicant would strictly implement a vehicle scheduling roster to ensure that fleet arrival times at the clinical waste management facility are appropriately staggered. As such, delivery vehicle movements would be distributed evenly throughout an operational day. The Applicant would monitor the delivery vehicle movements through an electronic fleet tracker system.</li> <li>• SIDRA modelling was undertaken for the Holbeche Road and Vangeli Street intersection to the north of the both sites, as all vehicles would travel through this intersection. It found the intersection performance would reduce from a Level of Service</li> </ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>• prepare and implement an OTMP.</li> </ul>



Findings	Recommendations
<p>(LoS) A (good operation) to LoS B (acceptable delays and spare capacity) during AM peak and from LoS B to LoS C (satisfactory) during PM peak.</p> <ul style="list-style-type: none"> <li>• The amended TIA concluded the development would not impact on the surrounding road network and the key intersections would continue operating satisfactorily without significant delays.</li> <li>• The EPA recommended a condition requiring the Applicant implement an electronic fleet tracking system while submissions from private businesses and the public raised concerns about traffic impacts on the safety and capacity of the Holbeche Road and Vangeli Street intersection.</li> <li>• The Department considers the increase in vehicle movements would not impact the efficiency and safety of nearby road networks or the key intersection, noting the site benefits from good access to the regional road network without requiring travel through residential areas and while there would be a reduction in the LoS at both the AM and PM peak, a satisfactory LoS would be maintained.</li> <li>• The Department has recommended a condition requiring the Applicant to prepare and implement an Operational Traffic Management Plan (OTMP) as part of the Operational Environmental Management Plan (OEMP). The OTMP would detail the measures to ensure road safety and network efficiency during operation, the electronic fleet tracking system, heavy vehicle routes, access and parking, as well as the monitoring program.</li> <li>• The Department's assessment has concluded the local and regional road network could accommodate the predicted traffic volumes generated by the expanded operation and the development would not impact the on safety and efficiency of the network, subject to the recommended conditions.</li> </ul>	
<p><b>Parking</b></p> <ul style="list-style-type: none"> <li>• The expanded operation would require a total of 27 employees, including 11 at the clinical waste management facility and 16 delivery drivers. This represents an increase of three staff at the clinical waste management facility and four additional delivery drivers.</li> <li>• The clinical waste management facility currently has 11 parking spaces (including one disabled parking space). As there would be up to 11 operational employees requiring parking at the clinical waste management facility, the existing parking provision would be sufficient for the development.</li> </ul>	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>• provide sufficient parking spaces at the clinical waste management facility and the parking depot.</li> </ul>

Findings	Recommendations
<ul style="list-style-type: none"> <li>The Applicant amended the DA to include the Vangeli Street site which has 18 parking spaces. During operating days, the 16 delivery vehicle drivers would park their cars in place of the delivery vehicles at the commencement of each delivery shift.</li> <li>At the completion of a shift, drivers would return the delivery vehicle and pickup their private vehicle. As there would be 16 drivers and 18 parking spaces are provided, sufficient parking provision would be available at the depot.</li> <li>Council requested the Applicant to ensure any parking spaces for the additional employees be made available on-site.</li> <li>The Department considers the Applicant has demonstrated adequate parking will be provided to meet the requirements of the additional employees and delivery vehicles.</li> <li>The Department has recommended a condition to provide to formalise the proposed car parking spaces and to ensure vehicles are not parked on surrounding streets.</li> <li>The Department's assessment has concluded the development would provide appropriate parking arrangements for the expanded operation.</li> </ul>	

## Waste Management

<ul style="list-style-type: none"> <li>Inappropriate waste management on site has the potential to cause adverse impacts on the surrounding area.</li> <li>The development would accept up to 2,000 tpa of clinical waste and 300 tpa of related waste from health and medical service facilities primarily in Sydney.</li> <li>The proposed receipt, storage and handling procedures have been detailed in Sections 2.3 and 2.5 of this report.</li> <li>Clinical waste would be treated as it comes in, with no waste left overnight except in rare circumstances (estimated up to 5 times per month) where delivery arrives too late to be treated that day.</li> <li>Related waste would also be removed daily meaning only a small volume of untreated waste would be onsite at any one time.</li> <li>The Applicant has a range of procedures in place to manage day to day waste handling. The Department has also recommended the preparation of emergency procedures for any emergency situations.</li> <li>The EPA and WSLHD raised initial concerns over waste management, however, these were addressed by the RtS.</li> <li>The Department has reviewed the Applicant's waste management procedures and conclude they, along with the recommended conditions requiring waste monitoring, the preparation of a Waste</li> </ul>	
	<p>Require the Applicant to:</p> <ul style="list-style-type: none"> <li>prepare and implement a waste monitoring program and a waste management plan</li> <li>undertake waste processing and handling in the enclosed processing building</li> <li>secure and maintain waste in dedicated areas.</li> </ul>

Findings	Recommendations
Management Plan, and measures to ensure waste is stored and processed in dedicated areas, appropriately manage waste.	



## 7 Evaluation

The Department's assessment of the application has fully considered all relevant matters under section 4.15 of the EP&A Act, the objects of the EP&A Act and the principles of ecologically sustainable development. The Department consulted with key agencies including Council, the EPA, and WSLHD. The Department considers impacts of the development have been satisfactorily addressed and can be mitigated through compliance with the Department's recommended conditions of consent and implementation of a series of management measures.

The development would increase in the processing capacity of an existing clinical waste management facility to meet growing demands and ultimately reduce the total volume of clinical waste directly delivered to landfills. The development is consistent with the directions and principles outlined in the Greater Sydney Region Plan and the Central City District Plan, specifically the planning priorities of growing investment, business opportunities and jobs in strategic centres and managing energy, water and waste efficiently.

The Department's assessment identified two key assessment issues, including potential odour impacts and hazards and risks.

The Applicant provided an amended Air Quality Impact Assessment (AQIA) demonstrating the development would cause low odour concentration levels at or below the appropriate criteria of 2 odour units (OU) at all sensitive receivers, with the exception of one receiver which currently exceeds the criteria but would remain unchanged at 3 OU. The Department notes the AQIA was conservative, with odour emitted from the roof vent pipe to occur for a far shorter period than modelled and doors of the processing building to remain closed during operation rather than open, except when opened to grant access. The Department has reviewed the AQIA and advice from the EPA and WSLHD and is satisfied the development would not have adverse odour impacts. The Department has recommended conditions requiring the Applicant prepare and implement an Air Quality Management Plan to further mitigate any odour impacts and undertake an odour audit within six months of operation to validate the odour impact predictions.

The Applicant provided a Preliminary Hazards Analysis (PHA) which adequately identified all the hazards associated with the development. The PHA found one hazardous scenario which would have the potential for off-site impacts, however this was found to be below the risk criteria outlined in HIPAP No 4 'Risk Criteria for Land Use Planning'. The Department is satisfied with the identified mitigation measures in place, including a firewall, exclusion zone and guard rails adjacent to the LPG tank, there would be no major off-site consequences from the development. The Department has recommended a number of conditions to ensure the development would be carried out in a safe manner including limiting the quantities of dangerous goods stored and requiring the preparation of an Emergency Plan and detailed emergency procedures.

The Department's assessment of other issues concluded the development could be carried out with acceptable levels of impact. The Department has recommended a range of conditions to address the residual impacts of the development in consultation with government agencies and Council.

The Department concludes the impacts of the development can be appropriately managed through implementation of the recommended conditions of consent. Consequently, the Department considers the development is in the public interest and should be approved, subject to conditions.

## 8 Recommendation

For the purpose of section 4.38 of the *Environmental Planning and Assessment Act 1979*, it is recommended that the Executive Director, Regions, Industry and Key Sites, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application
- **agrees** with the key reasons for approval listed in the notice of decision
- **grants consent** for the application in respect of SSD 6761, subject to the conditions in the attached development consent
- **signs** the attached development consent and recommended conditions of consent (see **Appendix E**).

Prepared by  
Bruce Zhang, Emma Barnet  
Industry Assessment

**Recommended by:**



**William Hodgkinson**  
Team Leader  
Industry Assessments

**Recommended by:**



**Chris Ritchie**  
Director  
Industry Assessments

## 9 Determination

The recommendation is **Adopted** by:

A handwritten signature in blue ink that reads "Sargeant". The signature is written in a cursive style with a large, stylized 'S'.

28/09/2020

**Anthea Sargeant**

Executive Director

Regions, Industry and Key Sites Assessment

# Appendices

## Appendix A – List of referenced documents

The Department's assessment has referred to the following key documents:

### Environmental Impact Statement

Environmental Impact Statement State Waste Services (NSW) Pty Ltd 9 Kenoma Place, Arndell Park, prepared by National Integrated Creative Solutions, dated 8 January 2019

### Submissions

All submissions received from the government agencies, private businesses and the public

### Response to Submissions and Amended Project Report

Clinical Waste Management Facility, Arndell Park Response to Submissions and Amended Project Report for State Significant Development 6761, prepared by Arup, dated 26 June 2020

All above documents can be viewed on the Department's website at <https://www.planningportal.nsw.gov.au/major-projects/project/10896>

## Appendix B – Considerations under Section 4.15 of the EP&A Act

Section 4.15 of the EP&A Act sets out matters to be considered by a consent authority when determining a DA. The Department's consideration of these matters is set out in **Table 4**. In summary, the Department is satisfied the development is consistent with the requirements of section 4.15 of the EP&A Act.

**Table 4 |** Consideration under Section 4.15 of the EP&A Act

Object	Consideration
<p>a) the provision of:</p> <p>(i) any environmental planning instrument, and</p> <p>(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and</p> <p>(iii) any development control plan, and</p> <p>(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and</p> <p>(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph).</p>	<p>Detailed consideration of the provisions of all environmental planning instruments (including draft instruments subject to public consultation under this Act) that apply to the development is provided below.</p> <p>The Applicant has not entered into any planning agreement under section 7.4.</p> <p>The Department has undertaken its assessment of the development in accordance with all relevant matters as prescribed by the regulations, the findings of which are contained within this report.</p>
<p>b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts on the locality,</p>	<p>The Department has considered the likely impacts of the development in detail in Section 6 of this report. The Department concludes that environmental impacts can be appropriately managed and mitigated through the recommended conditions of consent.</p>
<p>c) the suitability of the site for the development,</p>	<p>The development would continue to use the land for industrial purposes consistent with IN1 zoning objectives.</p>
<p>d) any submissions made in accordance with this Act or the regulations,</p>	<p>All matters raised in submissions have been summarised in Section 5 of this report and given due consideration as part of the assessment of the development in Section 6 of this report.</p>

Object	Consideration
<p><b>e) the public interest.</b></p>	<p>The development would require seven additional employees would contribute to the provision of local jobs. The environmental impacts of the development would be appropriately managed via the recommended conditions. On balance, the Department considers the development is in the public interest.</p>



## **Appendix C – Statutory Considerations**

### **State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)**

The SRD SEPP identifies certain classes of development as SSD. Operation of a resource recovery or recycling facility that meets the criteria in Clause 23(5) of Schedule 1 of the SRD SEPP is classified as State Significant Development. The development meets the criteria in Clause 23(5) of Schedule 1 as it involves a clinical waste management facility that handles more than 1,000 tonnes per year of waste.

### **State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)**

The ISEPP aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to certain types of infrastructure development, defining certain types of development as Traffic Generating Development and providing for consultation during the development assessment.

The development constitutes traffic-generating development under Schedule 3 of the ISEPP as it is development for the purpose of a resource recovery facility in accordance with Schedule 3 to the ISEPP. Consequently, it requires referral to TfNSW for comment and consideration of accessibility and traffic impacts.

The Department referred the development to TfNSW during the public exhibition. After reviewing the development and the EIS, TfNSW provided no comments on the development and did not recommend conditions of consent.

### **State Environmental Planning Policy No 33 – Hazardous and Offensive Development (SEPP 33)**

SEPP 33 provides definitions of hazardous and offensive industries, aims to facilitate development defined as such and ensure that in determining developments of this nature, appropriate measures are employed to reduce impacts of the development. SEPP 33 requires an assessment of hazardous materials, including a screening method based on the quantities of dangerous goods on a site, to assist in determining if a development is likely to be a potentially hazardous industry.

The development would store and process dangerous goods, including liquified petroleum gas (LPG), propane, cytotoxic waste and clinical waste. As such, the development would be potentially hazardous according to the SEPP 33 screening and a Preliminary Hazard Analysis (PHA) was submitted to support the development. The PHA concluded the development could adequately manage potential hazard risks with the current risk management system in place and recommended installing an automatic fire detection system in the warehouse building.

The PHA has been reviewed by the Department's hazard specialist who concludes there would be no significant off-site consequences from the development provided the Applicant implements the proposed safeguards and recommended conditions.

### **State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55)**

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application. The development would not include any earthworks and construction works. As such, the EIS stated the development would have no impacts on any potential contamination and a remedial action plan would not be required.

## Sydney Regional Environmental Plan No 20 – Hawkesbury-Nepean River (No 2) 1997

SREP 20 aims to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context. The Department's assessment has concluded the development would not compromise the aims and objectives of SREP 20.

## Blacktown Local Environmental Plan 2013 (BLEP)

BLEP aims to encourage development opportunities for business and industry so as to deliver local and regional employment growth and to provide for infrastructure to maintain and meet demands arising from housing and employment growth. The Department has reviewed the relevant provisions of the BLEP. The Department's assessment of the development against the relevant provisions of BLEP are provided in **Table 5**.

**Table 5 | Assessment of the Development Against BLEP**

Provision	Consideration
<b>IN1 General Industrial Zone</b>	The site is zoned IN1 General Industrial. Use and development of the site for a resource recovery facility is permissible with consent.
<b>Clause 7.5 Essential Services</b>	The site is located within an established industrial precinct. The existing supply of water and electricity, disposal and management of sewage, stormwater drainage and vehicular access would continue to serve the development.

The Department has consulted with Blacktown City Council throughout the assessment process and has considered all relevant provisions of the BLEP and those matters raised by Council in its assessment of the development (see Section 6 of this report). The Department concludes that the development is consistent with the relevant provisions of BLEP.

## Blacktown Development Control Plan 2015

In accordance with Clause 11 of the SRD SEPP, development control plans do not apply to State significant development. Despite this provision, the Department has considered the Blacktown Development Control Plan (BDCP) 2015 in its assessment of the development. The relevant provisions include Sections 4.5, 4.6, 6, 7 and 8.3 of Part A and Sections 7.1 and 7.2 of Part E.

With compliance of consent conditions and implementation of mitigation measures in place, the development could adequately manage impacts of air quality and odour, noise and vibration as well as waste management. Adequate parking spaces would be provided at both the clinical waste management facility and depot. The development involves expansion of an established waste management facility. Essential services, including water supply, sewerage, electricity, gas and postal services are immediately available and would continue to serve the expanded operation. The Department's assessment has concluded the development could comply with the BDCP 2015.

## Appendix D – Key Issues – Community Views

The Department publicly exhibited the original DA and EIS for the development from **Thursday 24 January 2019** until **22 February 2019** (30 days). Details of the exhibition process and notifications are provided in **Section 5.1** of this report. During the exhibition period, the Department received a total of nine submissions on the development, including five objections. Of the submissions received, four were from Council and government agencies, four objections were from special interest groups and one objection was from a member of the community.

The issues raised by public submissions and how each issue has been addressed is summarised in **Table 6**.

**Table 6** | Department's response to issues raised in public submissions

Issue	Consideration
<b>Traffic</b>	
Traffic impacts of the development on the safety and capacity of the Holbeche Road and Vangeli Street intersection, including cumulative impacts of other development and congestion resulting from the existing kerbside parking spaces opposite the intersection.	The Department notes SIDRA modelling was undertaken for the Holbeche Road and Vangeli Street intersection and found the development would not impact on the surrounding road network and the key intersections would continue operating satisfactorily without significant delays. The Department has recommended a condition requiring the Applicant to prepare and implement an Operational Traffic Management Plan (OTMP) as part of the Operational Environmental Management Plan (OEMP). The OTMP would detail the measures to ensure road safety and network efficiency during operation, the electronic fleet tracking system, heavy vehicle routes, access and parking, as well as the monitoring program.
<b>Odour Impacts</b>	
The odour emission would have detrimental impacts on amenities of surrounding premises.	The Department considers the development would cause low odour concentration levels at or below the appropriate criteria at all sensitive receivers, with the exception of one receiver which currently exceeds the criteria but would remain unchanged. The Department considers the mitigation measures proposed by the Applicant would be adequate to minimise odour emissions. To formalise these mitigation measures, the Department has recommended preparation and implementation of an Air Quality Management

Issue	Consideration
	<p>Plan (AQMP) as part of the Operational Environmental Management Plan (OEMP). The Department has also recommended an odour audit is completed within six months of operation to validate the odour impact predictions within the amended Air Quality Impact Assessment.</p>

## **Appendix E – Recommended Instrument of Consent**

The recommended development consent for SSD-6761 can be viewed on the Department's website at:

<https://www.planningportal.nsw.gov.au/major-projects/project/10896>