Your ref SSD 6761
Our ref 274648-00 Arndell Park Clinical Waste Management Facility

ARUP

Level 4, 108 Wickham Street
Fortitude Valley
QLD 4006
GPO Box 685 Brisbane QLD 4001
Australia

t +61 7 3023 6000
f +61 7 3023 6023

leah.howell@arup.com
www.arup.com

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

28 April 2021

Dear Jim

RE: Arndell Park Clinical Waste Management Facility (SSD 6761) – Modification application

This letter is being submitted to the NSW Department of Planning, Industry and Environment (DPIE) on behalf of Med-X Pty Ltd, formally requesting a modification to the Development Consent for the Arndell Park Clinical Waste Management Facility (SSD 6761) under section 4.55 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

On 28 September 2020, the Executive Director, Regions, Industry and Key Sites, as a delegate of the Minister for Planning and Public Spaces, approved State Significant Development (SSD) Application 6761. The approved development permits the processing of up to 2,000 tonnes per annum (tpa) of clinical waste and storage of up to 300 tpa of related waste at the Arndell Park Clinical Waste Management Facility (the facility).

Operation of the site under the Development Consent commenced on 22 January 2021 following approval of the Operational Environmental Management Plan (OEMP) on 20 January 2021 and all other pre-operational conditions and requirements having been met.

This application for modification seeks the removal of condition A6(e) and the modification of condition A6(d), both which relate to waste storage. The proposed modification is one that involves 'minimal environmental impact' (refer section 4.55(1A) of the EP&A Act).

Proposed modifications and justification

Condition A6(e) reads:

> *A6(e) store any related waste outside of the approved hours of operation*

The following justification is aligned with the Response to Submissions (RtS) and Amended Project Report (APR) for SSD Application 6761, dated 26 June 2020 and the Waste Management Plan (WMP) for the facility approved on November 2020.

Under normal operating procedures, related waste is collected from the facility daily. However, due to factors outside of Med-X's control, instances may arise where related waste needs to be stored overnight (i.e. due to late deliveries, refer to Section 2.4.2 of the RtS and APR). As per the WMP, related waste is sorted on receival and stored appropriately prior to collection. The same procedures would be followed for any instances where related waste is needed to be stored overnight. As part of the WMP, the daily storage of all waste streams, and the capacity of the freezer to store anatomical waste, is monitored and recorded.

As such, it is proposed that Condition A6(e) be removed from the Development Consent.

Condition A6(d) reads:

> *A6(d) store more than 450 kilograms of clinical waste outside of the approved hours of operation*

As waste received with a late waste delivery comprising clinical waste could also comprise related waste, and the likely maximum volume of waste to be received and stored overnight is 450kg (refer to Section 2.4.2 of the RtS and APR), the following change to Condition A6(d) is proposed:

> *A6(d) store more than 450 kilograms of clinical and related waste outside of the approved hours of operation*

Waste Definitions

As outlined in Schedule 1, clause 50 of the POEO Act, 'clinical waste and related waste' is defined as any waste resulting from medical, nursing, dental, pharmaceutical, skin penetration or other related clinical activity, being waste that has the potential to cause injury, infection or offence. As per the *NSW Health Clinical and Related Waste Management for Health Services* and described in Section 2.4.1 of the RtS, the definitions of clinical and related waste are as follows:

- Clinical waste – has potential to cause injury, infection, or offence. Includes: unrecognisable human tissue; bulk blood or other body fluids; material and equipment stained by blood/body fluids; waste from lab investigations such as specimens; waste from medical or veterinary research; and genetically modified organisms.
- Related waste – streams include:
  - Anatomical waste – identifiable human body parts or large pathological specimens;
  - Clinical sharps – clinical objects capable of inflicting a penetrating injury;
  - Cytotoxic waste - material contaminated with residues or preparations containing materials toxic or otherwise harmful to cells; and
  - Pharmaceutical waste - pharmaceuticals or other chemical substances specified as regulated goods in the *Poisons and Therapeutic Goods Act 2008*.

Related waste storage capacity

As per Section 2.4.9 of the RtS, Table 1 below details the storage areas on site for related waste.

Table 1 Storage of related waste

Waste stream	**Waste expected on site per day – proposed operations**		**Storage capacity provided under proposed operation**
	kg	Litres[1]	
Anatomical waste	90kg	N/A	Stored within a commercial grade freezer with a 90kg capacity. An additional freezer has been purchased to provide storage contingency.
Cytotoxic waste	500kg	2,500L	6 x 660L (total capacity provided 3,960L)
Pharmaceutical waste	80kg	400L	5 x 240L (total capacity provided 1,200L)
Clinical Sharps	N/A	10 x 900L containers collected each day	12 x 900L

[1] It is assumed that related waste has a density of 200kg /m3 or 5L/kg

Related waste management controls

The controls in place for related waste management are summarised below. For additional details refer to the attached Waste Management Plan (WMP) in Attachment A.

- Waste tracking and separation – all related waste bins are weighed, the quantities and source of the waste generated is recorded and the bins are relocated from the bin staging area to a storage area specific to each related waste stream.
- Management of incorrect disposal - Related wastes are contained in coloured bags so can be easily identified by staff. If related wastes are found to have contaminated clinical waste bins upon arrival to the facility, the entire contents of the bin will be treated as anatomical, cytotoxic waste or pharmaceutical waste and are stored accordingly.
- Sealed containers – all related waste is double bagged and stored in sealed containers or bins to minimise odour and minimise risk of spills.
- Daily collection - For the proposed operations, the collection of related wastes by the nominated waste collection contractor for incineration at a licensed facility will occur daily, Monday-Friday.
- Operational contingency - To prevent any backlog accumulating on site beyond safe storage limits and to conform against conditions of licence of Environment Protection Orders, a risk-based decision with consideration of daily and annual limits is undertaken by the Branch Manager to divert the waste flow where required . If backlog of storage has occurred, all waste will be transported to an alternative licensed treatment facility for processing.
- Loss of containment of related waste – all waste is unloaded inside the building within a bunded area to contain any spills during the unlikely event of a spill. Any spills are immediately contained and cleaned with all staff trained in this procedure and are provided with the appropriate personnel protective equipment.
- Staff training - Med-X operates a formal system to ensure that all employees within the organisation are adequately trained and aware, to enable them to perform their assigned duties. Specific training for the transport and handling of clinical and related waste is undertaken by operations staff.

Impact assessment

The potential environmental impacts of the proposed amendments can be considered minimal under the provisions of Section 4.55(1A) on the following basis:

- The requirement to store clinical and related waste overnight from late deliveries was included in the scope of the RtS and APR (refer to Section 2.4.2) and management measures were developed accordingly. These have been captured in the approved OEMP and Waste Management Plan (WMP) for the facility
- Related waste stored overnight would be collected from the facility on the next working day
- Condition B16 requires clinical waste and related waste to always be secured and maintained within the designated waste storage areas
- The WMP requires all related waste to be sorted on receival and stored appropriately prior to collection, including the storage of anatomical waste a commercial grade freezer. This practice would extend to instances where related waste is stored overnight.
- Key risks pertaining to the proposed modification relate to air quality (odour) and hazards and risks. Adherence to all other Conditions in the Development Consent and the procedures and measures outlined in the OEMP and supporting sub-plans, including the WMP, is considered effective management for these risks.

Summary and conclusion

This application for removal of condition A6(e) and modification of condition A6(d) from the SSD 6761 Development Consent demonstrates that:

- The proposed amendments are effectively administrative in nature and environmental impacts would be consistent with the approved development
- The modification would not alter the development for which consent was originally granted.

As such, we trust that the proposed modification is acceptable and approval can be addressed under the provisions of Section 4.55(1A) of the EP&A Act.

Yours sincerely

Leah Howell
Associate

Attachment A – Waste Management Plan

Med-X Pty Ltd

Arndell Park Clinical Waste Management Facility

Waste Management Plan

Final | 8th October 2020

Job number 274648-00

Arup Pty Ltd ABN 18 000 966 165

Arup
Level 4, 108 Wickham Street
Fortitude Valley
QLD 4006
GPO Box 685 Brisbane QLD 4001
Australia
www.arup.com

ARUP

Contents

Glossary

Term	Definition
AQMP	Air Quality Management Plan
Arup	Arup Pty Ltd
CRM	Customer Relations Management System
DPIE	Department of Planning, Industry, and Environment
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979
EPA	Environmental Protection Agency
EPL	Environmental Protection Licence
GMOs	Genetically Modified Organisms
GPS	Global Positioning System
IMS	Integrated Management System
ISO	International Organization for Standardization
L	Litres
Med-X / the Applicant	Med-X Pty Ltd
MRV	Medium Rigid Vehicle
NATA	National Association of Testing Authorities, Australia
NSW	New South Wales
NSW Health Requirements	NSW Clinical and Related Waste Management for Health Services requirements
OEMP	Operational Environmental Management Plan
OH&S	Occupational Health and Safety
PDA	Personnel Digital Assistance
POEO Act	Protection of the Environment Operations Act 1997
RtS	Response to Submissions
SSD	State Significant Development
The Consent Conditions	Conditions of Development Consent
OTMP	Operational Traffic Management Plan
The Facility	Med-X Clinical Waste Management Facility
The Site	Arndell Park Industrial Precinct at 9 Kenoma Place, Arndell Park
tpa	Tonnes per Annum
WMP	Waste Management Plan
AQMP	Air Quality Management Plan

1 Introduction

1.1 Overview

Med-X Pty Ltd (Med-X) operate the Med-X Clinical Waste Management Facility (the Facility) located within the Arndell Park Industrial Precinct at 9 Kenoma Place, Arndell Park (being Lot 14, DP 786328).

The facility has been approved to receive and process up to 2,300 tonnes per annum (tpa) of clinical and related wastes (specifically 2,000 tpa of clinical waste and 300 tpa of related wastes) between the hours of 7.00am and 7.00pm, Monday-Saturday (including any public holiday that falls on a Saturday). The waste will be collected and delivered to the facility by the collection fleet (8 Medium Rigid Vehicle (MRVs) and 8 vans) between the hours of 5am and 5pm.

The Facility includes the following infrastructure:

- The enclosed clinical waste management facility building, with a bunded area with access for one vehicle to unload;
- The on-site car park adjacent to the facility building where a second vehicle waits to be serviced in the bunded area;
- The enclosed office building.

Development Consent for State Significant Development (SSD) 6761, comprising expansion of the facility, was granted by the NSW Department of Planning, Infrastructure and Environment (DPIE) on 28 September 2020 in accordance with Section 4.38 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

An Environmental Protection Licence (EPL) has been issued under the *Protection of the Environment Operations Act 1997* (POEO Act) by the Environment Protection Authority (EPA). This EPL has been updated following the approval of the Development Consent.

This Waste Management Plan (WMP) has been prepared to manage the received clinical waste and related waste at the Facility, in accordance with the requirements of the Conditions of Development Consent (the Consent Conditions) and the EPL issued for the Facility. The WMP details strategies to implement control strategies and mechanisms for the effective management of clinical and related waste, and details strategies for the lawful storage and/or processing of waste during operation.

1.2 Scope and Objectives

This WMP forms part of the Facilities Operational Environmental Management Plan (OEMP). The purpose of this WMP is to provide waste management procedures in accordance with Consent Conditions, EPL and relevant legislation.

- This WMP provides information on the key waste management requirements for the Facility, including the following:
- Details of the classification and quantity of waste that would be accepted, stored and processed;

- Details of the waste management measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;
- Details of the waste monitoring programme;
- A program to investigate and implement ways to improve the environmental performance of the development over time;
- Details of the contingency plan and protocol for managing and reporting any incident, non-compliance, complaint, and failure to comply with statutory requirements; and
- A protocol for periodic review of the WMP.

1.2.1 Legal and other requirements

The following regulatory framework applies to this WMP:

- Environmental Planning and Assessment Act 1979;
- Development Consent issued under the Environmental Planning and Assessment Act 1979;
- Protection of the Environment Operations Act 1997 (POEO Act);
- Environment Protection Licence (EPL 20233) issued under the POEO Act by the EPA;
- Environmental Protection Licence (EPL 12609) issued under the POEO Act by the EPA;
- Certificate of Approval – Clinical Waste Treatment Method issued under the POEO Act by the New South Wales (NSW) Ministry of Health;
- The Protection of the Environment Operations (Waste) Regulation 2014;
- The NSW Health Clinical and Related Waste Management for Health Services 2017; and
- NSW EPA Waste Classification Guidelines Part 1: Classifying Waste 2014

1.2.2 Conditions of Development Consent

Development Consent for SSD 6761 was granted by the DPIE on 29th September 2020 in accordance with Section 4.38 EP&A Act. The conditions of the Development Consent include the provision of a Waste Monitoring Program for the facility as shown in Table 1 below.

Table 1 Waste Monitoring Development Consent Conditions

Condition		Section
B11. Prior to the commencement of operation, the Applicant must prepare a Waste Monitoring Plan for the development to the satisfaction of the Planning Secretary. The Waste Monitoring Plan must:		
(a)	be prepared by a suitably qualified and experienced person(s) prior to the commencement of operation;	Section 1.6

Condition		Section
(b)	include suitable provision to monitor the: (i) quantity, type and source of waste received on site; (ii) quantity, type and quality of the outputs produced on site; (iii) freezer capacity on site for the storage of received anatomical waste; and	Section 4.2, 4.3, 5.1
(c)	ensure that: (i) all waste that is controlled under a tracking system has the appropriate documentation prior to acceptance at the site; (ii) sufficient capacity is available for the storage of all clinical and related wastes; and (iii) staff receive adequate training in order to be able to recognise and handle any hazardous or other prohibited waste including asbestos.	Section 4.1.1, 4.1.2, 4.3, 4.4
B12. The Applicant must:		
(a)	not commence operation until the Waste Monitoring Plan required by condition B11 is approved by the Planning Secretary; and	Noted.
(b)	implement the most recent version of the Waste Monitoring Plan approved by the Planning Secretary for the duration of the development.	Noted.

The additional Consent Conditions relevant to this plan and the corresponding report references are shown in Table 2 below.

Table 2 Additional Development Conditions Development Consent Conditions related to waste management and monitoring

Relevant Condition	Requirement	Section Reference
Processing and Storage Capacity		
A6.	**The applicant must not:**	
(a)	receive or process more than 2,000 tonnes per annum of clinical waste;	Section 4.1 4.2 and 4.3
(b)	receive or store more than 300 tonnes per annum of related waste;	
(c)	process more than 648 kilograms of clinical waste per operating cycle of the autoclave;	
(d)	store more than 450 kilograms of clinical waste outside of the approved hours of operation;	
(e)	store any related waste outside of the approved hours of operation; and	
(f)	store more than 1,200 kilograms DG Class 6.2 PG III at all times	
Operation of Plan and Equipment		
A16.	**All plant and equipment used on site, or to monitor the performance of the development, must be:**	
(a)	maintained in a proper and efficient condition; and	Section 5.1, 5.2
(b)	operated in a proper and efficient manner.	

Relevant Condition	Requirement	Section Reference
Waste Processing and Storage		
B13.	The Applicant must unload the waste received at the site inside the processing building and at the designated loading dock to avoid spillage.	Section 4.1
B14.	The Applicant must ensure the development does not store clean waste bins in the vehicle manoeuvring area except as shown in Figure 1 in Appendix 1.	Noted.
B15.	All waste processing, and material handling activities must be undertaken in an enclosed processing building and within designated areas.	Section 4.1, 4.2, 4.3
B16.	Clinical waste and related waste received on site must always be secured and maintained within designated waste storage areas shown on Figure 3 and Figure 4 in Appendix 1 and must not leave the site onto neighbouring public or private properties.	Noted.
Statutory Requirements		
B17.	All waste materials removed from the site must only be directed to a waste management facility or premises lawfully permitted to accept the materials.	Section 4.1
B18.	The Applicant must assess and classify all liquid and non-liquid wastes to be taken off site in accordance with the latest version of EPA's *Waste Classification Guidelines Part 1: Classifying Waste* (EPA, 2014) and dispose of all wastes to a facility that may lawfully accept the waste.	Section 4.2.1, 4.3.2
B19.	The Applicant must retain all sampling and waste classification data for the life of the development in accordance with the requirements of EPA.	Section 4.1.1, 5.1

1.2.3 Mitigation measures

In addition, the operational mitigation measures contained in Appendix 2 of the Development Consent for waste management are presented in Table 3.

Table 3 Operational Mitigation Measures

Mitigation requirement		Section
Waste management	A WMP is to be developed and implemented and is to include measures relevant to the management of waste derived at the site.	This WMP

1.2.4 Environmental Protection Licence

Under the EPL No. 20233 the Facility is only licensed to store and process clinical and related wastes (as defined in Schedule 1 of the POEO Act).

Table 4 below details the EPL No. 20233 requirements relevant to this WMP.

Table 4 Environmental Protection Licence No. 20233 Requirements

Relevant Condition	Requirement	Section Reference
L2 Waste		
L2.1	The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below. Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below. Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below. This condition does not limit any other conditions in this licence.	Section 4.2, 4.3.1
L2.2	The maximum quantity of clinical and related waste, treated and/or untreated, at the premises must not exceed 8000 kilograms at any one time.	Section 4.3.1
O1 Activities must be carried out in a competent manner		
O1.1	Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity	Section 4
O4 Processes and management		
O4.1	The licensee must ensure that any liquid and/or non-liquid waste generated and/or stored and/or treated and/or processed and/or reprocessed at the premises is assessed and classified in accordance with the EPA Waste Classification Guidelines as in force from time to time.	Section 4.2.2, 4.3.2
O5 Waste management		
O5.1	Clinical and related wastes that are not allowed to process under this licence received at the premises, including cytotoxic waste, pharmaceutical waste and radiological waste, must be separated from all other waste and transported to a place where it can be lawfully received.	Section 4
O5.2	The licensee must ensure that the handling, labelling, containment, storage and disposal of clinical and related waste are carried out in accordance with the NSW Health's Waste Management Guidelines for Health Care Facilities as in force from time to time.	Section 4
O5.3	Without limiting to O5.2, the licensee must ensure that:	Section 4

Relevant Condition	Requirement	Section Reference
	a) Clinical and related wastes are stored or contained in a weatherproof secure location isolated from any other waste materials, and that the storage area is maintained in a condition which presents no threat to environment or human health b) The storage area for clinical and related wastes contain all necessary equipment required to clean and disinfect the area in case of spillage c) Bagged clinical and related waste are stored and transported in rigid containers which are leak proof, shatter resistant, washable and have security fitted lids to prevent spills at all times d) Bags and containers used for storage and transport of clinical and related waste are colour coded and clearly marked with the wording "Clinical Waste" along with biological hazard symbol in accordance with the requirements of the NSW Health. e) Containers used for clinical and related waste which are to be reused must be thoroughly cleansed and disinfected before being reused f) Where secondhand containers are used all other irrelevant marking shall be obliterated.	
O5.4	The licensee must ensure that waste identified for recycling is stored separately from other waste.	Section 4.3.2
O5.7	The licensee must ensure that all liquid materials including chemicals, fuels, oils, and waste materials are stored in a designated impervious bund that contains 110% of the largest container contained within the bund.	Section 4.3.1
O5.8	The bunded area (floor and walls) must be impervious to the liquid(s) in the containers. The bund wall must not contain drain valves.	Noted.
O5.9	The licensee must ensure that all waste materials covered under this licence, including empty containers are handled, loaded, unloaded and stored only within the building and within bunded area.	Noted.
O5.10	The licensee must ensure that all decanting, consolidating, or bulking of waste materials must be conducted wholly within the building and within bunded area.	Section 3.1, 4
O6 Other operating conditions		
O6.1	The licensee must always comply with the conditions as specified in the approval of the method of treatment of clinical waste issued by NSW Health (NSW Health Approval of a Method of Treatment of Clinical Waste Dated 20 June 2013 issued to State Waste Services Pty Ltd).	Noted.

Relevant Condition	Requirement	Section Reference
O6.2	The licensee must maintain a valid approval of the method of treatment of clinical waste issued by the NSW Health at all times (a) A copy of current NSW Health approval of the method of treatment of clinical waste must be kept on the premises at all times.	Noted.
M1 Monitoring records		
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Section 5
M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	Section 5
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	Section 5

1.3 Supporting documentation

The following documents have been used to inform and support the WMP and are outlined in Table 5 below.

Table 5 Supporting documentation

Document Title	Prepared by
Management Plans	
OEMP	Arup
Operational Traffic Management Plan (OTMP)	Arup
Air Quality Management Plan (AQMP)	Todoroski Air Sciences
Med-X Policies	
SXMXNATPO2020086 Waste Management Policy	Med-X

Document Title	Prepared by
SXMXNATPO2020042 Emergency Management Policy	Med-X
Med-X Integrated Management System (IMS) Procedures	
MXNATQMA110 Med-X IMS Manual	Med-X
MXNATQMA110 17 IMS Procedure Testing & Inspection	Med-X
MXNATQMA110 8 IMS Procedure Calibrated Equipment	Med-X
MXNATQMA110 21 IMS Procedure Data Analysis & Evaluation	Med-X
MXNATQMA110 5 IMS Procedure Legal & Compliance Requirements	Med-X
MXNATQMA110 18 IMS Procedure Non-conforming Outputs	Med-X
MXNATQMA110 24 IMS Procedure Non-conformity & Corrective Action	Med-X
MXNATQMA110 25 IMS Procedure Incident Investigation	Med-X
MXNATQMA110 26 IMS Procedure Continual Improvement	Med-X
MXNATQMA110 9 IMS Procedure Competence & Awareness	Med-X
MXNATQMA110.10 IMS Procedure Communication & Participation	Med-X
Operational Procedures	
MXNATQPR304 Med-X Spill Control Management Procedure	Med-X
MXNATQPR307 Med-X Weighing Waste Procedures	Med-X
MXNATQPR314 Med-X Monitoring Treatment Facility Procedure	Med-X
MXNATQPR315 Med-X Treatment Facility Maintenance	Med-X
MXNATQPR318 Med-X Equipment Validation	Med-X
MXNATQPR319 Med-X Calibration Equipment Treatment	Med-X
MXNATQWMP001 Med-X Operational Waste Management Plan	Med-X
MXNATQMA110.9 Competence and awareness procedure	Med-X
MXNATQPR320 Med-X Backlog Contingency Procedure	Med-X
MXNATQPR305 Med-X Handling Clinical and Quarantine Waste Procedures	Med-X
MXNATQPR306 Med-X Handling Cytotoxic Anatomical and Pharmaceutical Waste Procedures	Med-X
MXNATQPR311 Med-X Forklift Operations	Med-X
MXNATQPR310 Med-X Shredder Operation	Med-X
MXNATQPR308 Med-X Autoclave Operations	Med-X
MXNATQPR309 Med-X Boiler Operations	Med-X
Other	
Med-X Aspects National Register	Med-X

1.4 Qualifications of Author

The WMP has been reviewed and approved by the qualified persons as summarised in Table 6 below.

Table 6 Qualification of authors

Name	Role	Relevant Qualifications
Joyanne Manning	Approver	BE MEngSc, FIEAust CPEng EngExec NER APEC Engineer IntPE(Aus)

2 Goals of WMP

The goal of the WMP is to document the following operational components for the Facility:

- Overall Implementation of the WMP, including a waste monitoring programme;
- Operational Contingency Plan;
- Process for identification and procedure for managing non-conforming waste bins and receival of non-conforming waste;
- Process for monitoring daily and annual storage and processing limits; and
- Training and Communication programmes.

2.1 Roles and Responsibilities

Branch management is ultimately responsible to ensure that all staff are aware and trained in the Med-X procedures. Branch management must ensure that Drivers, Production Team Members and Facility Hands understand and implement the procedures in place to manage and monitor the quantity, type and source of waste received on-site as per this waste management plan. Table 7 below details the position responsible for implementing the key actions required to conform to the WMP.

Table 7 Allocation of Roles and Responsibilities

Action	Responsibility	Timing
Performance Reporting and Review	National Leadership Team	Annually
Overall Implementation of the WMP, including the waste monitoring programme	Branch Manager	On-going
Actioning the Operational Contingency Plan	Branch Manager	During operational failures
Identifying non-conforming waste bins	Driver	On collection of waste bins from collection points
Identifying non-conforming waste	Production Team Member	On receipt of waste not conforming with EPL or consent conditions
Monitoring daily and annual storage and processing limits	Branch Manager	On-going
Training and Communication	Health and Safety Representative Compliance and Governance Manager	On-going

3 Operations and Potential Impacts

3.1 Site Features and Operations

The Med-X Clinical Waste Management Facility is located within the Arndell Park Industrial Precinct at 9 Kenoma Place, Arndell Park (being Lot 14, DP786328) (the Site). The Site consists of an office building, staff car parking, external storage of empty bins and the processing building which contains all plant, equipment and full bins.

Med-X operates its own collection vehicle fleet that collects clinical and related wastes. Once the clinical and related wastes is delivered to the Site, operations consist of the following activities:

- Receipt of clinical and related wastes;
- Identification and separation of related waste;
- Non-thermal treatment and shredding of clinical waste;
- Storage of treated clinical waste and untreated related waste;
- Contractor collection and transportation of treated clinical waste to an appropriate disposal facility;
- Contractor collection and transportation of related waste to an appropriate disposal facility;
- Washing and storage of waste bins; and,
- Storage of clean, unused bins.

3.2 Wastes Types Received

The type of wastes received at the facility includes:

- Clinical waste;
- Clinical sharps;
- Anatomical waste;
- Cytotoxic waste and; and,
- Pharmaceutical waste.

The Site is currently permitted to store clinical and related wastes and undertake non-thermal treatment of clinical waste. Related waste[1] is not permitted to be treated on site and must be identified, separated and stored in a defined location, and then transported to an appropriate facility for further processing or disposal.

[1] In the context of this report related waste includes anatomical, cytotoxic, parametrical and clinical sharps waste

3.3 Predicated Waste Impacts

The principle potential waste impacts associated with the Facility operations include:

- Odour emissions from wastes received;
- Receipt of non-confirming wastes to site in contravene with the EPL;
- Receipt of non-confirming bins on site in contravene with the NSW Clinical and Related Waste Management for Health Services requirements (NSW Health Requirements);
- Loss of containment of wastes; and
- Inappropriate disposal of oil/solvent soaked materials (such as rags) as general waste.

The Environmental Impact Statement (EIS) and Response to Submissions (RtS) identified potential waste impacts and risks associated with the operation of the facility. Table 8 below lists these impacts and the corresponding risk assessment which informs the mitigation measures required for these impacts.

Table 8 Waste Impact Risk Rating

Issue	Potential Impact	Source	Risk Ranking	Section Reference
Waste Management	Odour emissions from wastes received	Handling and storage of large quantities of clinical and related wastes has the potential to result in emissions of odour if not properly managed.	Moderate	Refer to AQMP
	Receipt of non-confirming wastes to site	Waste which the EPL does not permit to be handled at the Facility is brought to the site.	Moderate	Section 4.2.2
	Receipt of non-conforming bins on site	Waste bins arrive to the site that are non-conforming with the NSW Health requirements.	Low	Section 4.1.1, 4.2
	Loss of containment of wastes	Loss of containment of wastes during handling inside the processing building.	Low	Section 4.3
	Inappropriate disposal of oil / solvent soaked materials	Materials contaminated with oil or solvents being disposed in general waste or recycling bins.	Low	Section 4.3.2

4 Waste Management Measures

4.1 Waste Management System

The fleet vehicles will collect and deliver waste to the treatment facility. The maximum number of vehicles expected to arrive at the facility at once is two. Only one vehicle will unload into the bunded area inside the Facility building at any one time. If a second vehicle arrives on site while a vehicle is already in the process of unloading it will park adjacent to the on-site car park while waiting to be serviced. For more information refer to the OTMP.

- All clinical and related wastes that are received at the Facility are processed; the process includes:
- Unloading from the collection vehicle inside bunded area within the enclosed processing building;
- Inspection of the waste;
- Manually recording the weight, waste type and source (facility where the waste was generated); and
- Separating clinical and related wastes.

All clinical waste is treated on-site via the autoclave system. The treated clinical waste is shredded and compacted prior to collection by a licensed waste collection contractor. Related waste is not permitted to be treated on-site and is instead separately stored until it is collected for disposal at an appropriate facility.

4.1.1 Waste Tracking of Inputs

Med-X utilises its own collection vehicle fleet to collect the clinical and related wastes from private hospitals and other medical facilities. Med-X vehicles are driven by Med-X Drivers who are trained in the collection and transportation of clinical and related wastes.

The process for monitoring the quantity, type and source of waste received on-site is summarised in Table 9 below. All sampling and waste classification data for the life of the development is retained in accordance with the requirements of EPA.

Table 9 Montioring process for wastes received

Step	Description
1. Bin inspection at collection point	All bins are inspected by Med-X personnel to ensure compliance with NSW Health requirements and Australian Standards. Any bins that are found non-compliant are not collected and the Client is notified. The following information is to be reported on the Med-X Personnel Digital Assistance (PDA)[2]: • Client details • Location and date of non-compliance • Description of non-compliance

[2] Personal Digital Assistance – handheld device that functions as an information manager

Step	Description
2. Information recorded at collection location	The type and quantity of the clinical and related waste bins is documented on a PDA at the collection location. The following is recorded by the Med-X driver using the PDA: • Client details • Date of collection • Location of collection • Each bin has a barcode. The PDA scans this barcode and the bin type, size (L) and quantity is recorded.
3. Client Sign-off	A service docket is generated by the PDA and is signed by the Client to confirm completion of the service.
4. Receival documentation	Upon arrival to the site the following documentation should be provided to the Production Team Member: • Client details • Driver route allocation sheet • Service Docket • Weight sheet
5. On-site Bin Inspection	All receptables are visually inspected. If anatomical, cytotoxic or pharmaceutical bags of waste are found to be incorrectly deposited into the clinical waste bins, the entire contents of the bin will be treated as anatomical, cytotoxic or pharmaceutical waste. Incidents of significant contamination will be recorded by the Production Team Member on the weight sheet.
6. Weighing of bins	Each receptable is weighed. The gross weight, bin size and bin type are recorded on the weight sheet by the Production Team Member.
7. Documentation	The following information is uploaded to the Customer Relations Management System (CRM) and logistics management system daily for each delivery by the Production Team Member: • Client Details • Total net weight of each waste type (recorded on weight sheet) • Number and size of containers weighed (recorded on weight sheet) • Drivers route allocation sheet • Service Docket

4.1.2 Waste Tracking of Outputs

Outputs in the context of this facility include the treated clinical waste and the sorted related waste which is stored in an allocated area within the facility.

The process for tracking treated clinical waste is summarised in Table 10 below.

Table 10 Monitoring process for treated clinical waste

Step	Description
1. Treated clinical waste is tested	Every load processed by the autoclave undergoes biological indicator testing to test the efficacy of the autoclave. This information is recorded and stored within the CRM system.
2. Treated clinical waste is weighed	All four autoclave carts are weighed after each treatment cycle. The results are recorded on a daily clinical waste treatment list, which is recorded by the numbers of cycles, with this data stored on the CRM system.

Step	Description
3. Treated clinical waste is compacted	All treated clinical waste is shredded. The shredded material is classified as "inert waste", which is then loaded into the bulk compactor bin.
4. Bulk compactor bin collected	The compactor is collected by a nominated waste collection contractor for disposal at an EPA licensed landfill facility.
5. Weight data recorded	The weight of each compactor collected is recorded by the nominated waste collection contractor. The net weight of each bulk compactor bin is recorded at the landfill weighbridge. The total material landfilled is provided to Med-X within a monthly invoice provided by the waste collection contractor. The following information is collated to Med-X and uploaded to the CRM system: • Date of collection • Net weight of material disposed to landfill per month • Disposal location

The process for tracking clinical sharps, cytotoxic and pharmaceutical waste is summarised in Table 11 below.

Table 11 Monitoring process for clinical sharps, cytotoxic and pharmaceutical waste

Step	Description
1. Bins are weighed and sorted	All clinical sharps, cytotoxic and pharmaceutical waste bins are weighed and data recorded (refer to Table 9 above).
2. Wastes are centrally stored	Wastes are decantated into bulk bins stored in an allocated area: • Cytotoxic waste is stored in 660L bins • Pharmaceutical waste is stored in 240L bins • Clinical sharps containers are stored in 900L bins
3. Wastes collected	The bulk clinical sharps, cytotoxic and pharmaceutical waste bins are collected daily by the nominated waste collection contractor for incineration at a licensed facility.
4. Weight data recorded	The weight of each bin type collected is checked against the total weight incinerated at the licensed facility. The following information is collated by Med-X and uploaded to the CRM system: • Date of collection • Weight of each bin collected • Size (L) and number of each of bin collected • Total weight of each stream incinerated • Disposal location (for each stream)

All anatomical waste is stored in a commercial grade freezer with a 90kg capacity. The process for tracking anatomical waste and the available freezer capacity is summarised in Table 12 below.

Table 12 Monitoring process for anatomical waste

Step	Description
1. Bins are weighed and sorted	All anatomical waste bins are weighed, and data recorded (refer to Table 9 above). A cumulative total of the anatomical waste being stored at the facility at any one time is recorded and monitored throughout the day.

Step	Description
2. Anatomical waste is decantated into freezer	Anatomical waste is transferred into the allocated storage freezer. The freezer is visually inspected throughout the day to determine if the freezer is nearing capacity. If the freezer is nearing capacity the anatomical waste is collected by the nominated waste contractor.
3. Anatomical wastes collected	The anatomical waste is collected daily by a suitable waste collection contractor for incineration at an EPA licensed facility.
4. Weight data recorded	The following data is collated by Med-X and uploaded to the CRM system: • Date of transfer to incineration facility • Weight of anatomical waste bins collected • Total number of bins collected • Disposal location

4.1.3 Information Systems and Equipment

Med-X utilises a series of equipment and systems to collect, store and monitor waste collection and storage. The interactions between these systems is shown in Figure 1 and descriptions of the equipment and systems are detailed in Table 13.

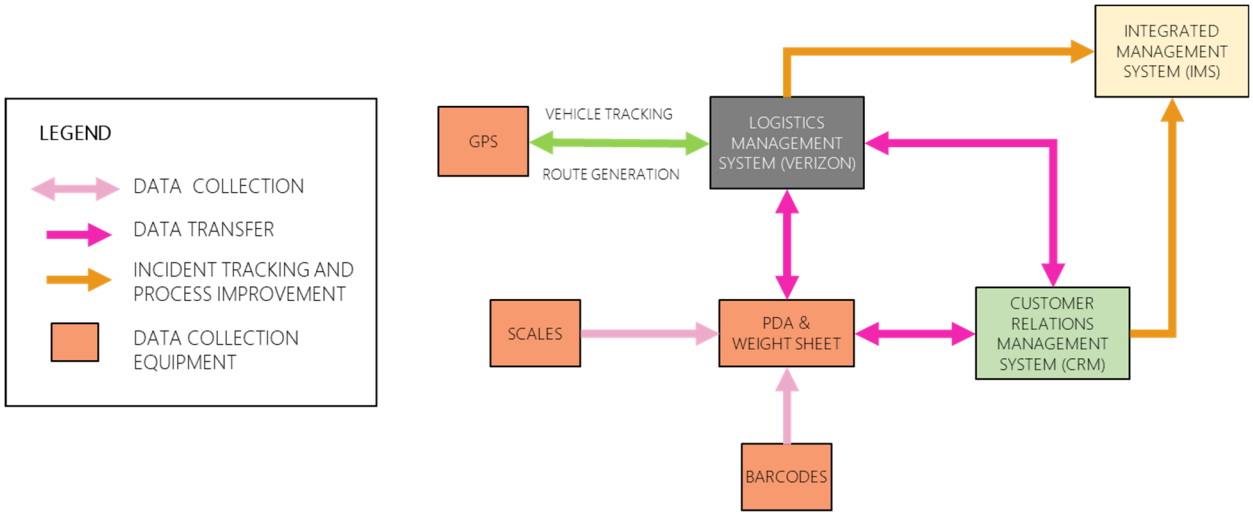

Figure 1 Interactions between Med-X systems

Table 13 Description of equipment and systems

Diagram Reference	Description	Interfaces
DATA COLLECTION EQUIPMENT		
GPS - Global Positioning System	All Med-X collection vehicles are equipped with a GPS. The GPS provides the routes for collection to the Med-X Drivers. The GPS tracks the location of vehicles undertaking collections in real time.	The Logistics Management System generates the collection routes and sends this information to the GPS. The driver's location is transferred to the logistics management system. The GPS is used to communicate to drivers that they need to slow down if the Facility is congested.
PDA – Personnel Digital Assistance	The PDA is a handheld device the Med-X Driver uses to: • Scan bin barcodes to record time and location of collection • Calculate the number, type and size of bins collected at each location • Retrieve client details • Store Driver route allocation sheet information	The PDA directly transfers the information to the CRM System.
BARCODES	All waste storage containers / bins provided to Clients must be labelled with a barcode.	The PDA scans the barcodes, this information is directly transferred to the CRM system.
SCALES	Electric scales are used to record the weight of each bin.	This information is directly transferred from the PDA to the CRM system.
INFORMATION SYSTEMS		
LOGISTICS MANAGEMENT SYSTEM (VERISON)	The Logistics Management System is used for: • Producing the Driver route allocation sheet • Vehicle Tracking • Maintenance Programs / Vehicle Diagnostics • Route Management and Improvement. • Route Analysis and Reporting • Driver Time Management	The Logistics Management System connects to the CRM system to generate collection routes and the weekly run sheets that provide: • Collection location and collection frequency • Services to be provided at each location The Logistics Management System connects to the GPS to provide Drivers the collection route in real time. Data collected in the Logistics Management System is used to inform the IMS and improve procedures and processes as required.
CUSTOMR RELATIONS MANAGEMENT SYSTEM - CRM	The CRM system is used for: • Collating and storing all client data (existing and potential)	The CRM system connects directly with the PDA to collect client information. The CRM system connects directly to the Logistics Management System.

Diagram Reference	Description	Interfaces
	• Checking Pricing, Weights, Container Size, Service Details, Rent jobs • Invoicing • Incidents of non-compliance	Data collected in the CRM system is used to inform the IMS and improve procedures and processes as required.
INTEGRATED MANAGEMENT SYSTEM - IMS	The IMS exists as part of a larger strategy that establish, document and implement processes, integrate policies and objectives, whilst satisfying the requirements of ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018. The key process groups addressed in the IMS include: • Management and review processes • Operation and service processes • Support & assurance processes	Data collected in the Logistics Management and CRM systems is used to inform the IMS and improve procedures and processes as required.

4.2 Waste Classification and Sorting

4.2.1 Waste Classification

The type of wastes received at the facility include clinical waste, clinical sharps, anatomical waste, cytotoxic waste and pharmaceutical waste. These are described in Table 14 below as per the NSW Health Clinical and Related Waste Management for Health Services[3] and the NSW EPA Waste Classification Guidelines Part 1: Classifying waste[4].

Table 14 Waste streams received at the facility

Waste Stream	Definition
Clinical Waste	Clinical waste with the potential to cause injury, infection or offence: Unrecognisable human tissue (excluding hair, teeth, nails and anatomical waste) Bulk blood or other body fluids (or body substances) Material and equipment visibly stained by blood or body fluids (includes incontinence pads and disposable nappies that come from an infectious patient) Lab specimens, cultures or other waste from lab investigations Waste from medical or veterinary research Genetically Modified Organisms (GMOs)
Clinical sharps	Any clinical object capable of inflicting a penetrating injury which may or may not be contaminated with blood and or body substance. This includes needles, ampoules and any other sharp objects or instruments designed to perform penetrating procedures. May contain clinical material or GMO waste.
Anatomical waste	Identifiable human body parts such as limbs, organs, placenta and recognisable or large pathological specimens resulting from investigation or treatment of a patient. It does not include deceased bodies.
Cytotoxic Waste	Material contaminated with residues or preparations containing materials toxic or otherwise harmful to cells. This includes any residual cytotoxic drug or laboratory chemical and any discarded material or clinical waste associated with the preparation or administration or excretion of cytotoxic drugs. May include GMOs or tissues containing GMOs.
Pharmaceutical Waste	Pharmaceuticals or other chemical substances specified as regulated goods in the Poisons and Therapeutic Goods Act 2008. Includes any substance specified in a Schedule of the Poisons List under the Act, as well as any therapeutic good which is unscheduled. Includes expired or discarded pharmaceuticals, filters or other material contaminated by pharmaceutical products.

4.2.2 Screening and Recording

There are two main screening points for the identification of the type of waste received at the Facility:

[3] NSW Health (2017), *Clinical and Related Waste Management for Health Services*, https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2017_026.pdf
[4] NSW EPA (2014), *NSW EPA Waste Classification Guidelines Part 1: Classifying waste,* https://www.epa.nsw.gov.au/~/media/EPA/Corporate%20Site/resources/wasteregulation/140796-classify-waste.ashx

- **Driver bin inspection:** The Drivers inspect the waste bins at each collection point to ensure only bins with approved waste types are collected; and
- **Driver and/or Production Team Member in-bin visual inspection:** All bins are to be visually inspected to determine if non-confirming wastes are stored in the bin and to confirm the waste is stored in the correct bin.

Drivers will not collect any waste bin that is not compliant with NSW Health requirements and Australian Standards. Only clinical, clinical sharps, anatomical, pharmaceutical and cytotoxic waste receptables will be collected.

During the visual inspection, if anatomical, cytotoxic or pharmaceutical bags of waste are found to be incorrectly deposited into the clinical waste bins, the entire contents of the bin will be treated as anatomical, cytotoxic or pharmaceutical waste. If non-conforming waste is identified, the bin containing the waste is isolated and collection via an appropriate contractor is arranged.

Any incidences are recorded in a non-conformance Report and non-conformance Log by Med-X Staff as per the Med-X IMS Procedure – Non-conforming Outputs.

4.2.3 Waste Sorting

During the visual inspection process, the waste bins are sorted into clinical waste, clinical sharps, anatomical, pharmaceutical and cytotoxic waste. The clinical waste is transferred to the autoclave carts ready for treatment and the related wastes are stored in their allocated area as per Figure 2[5].

4.3 Waste Processing and Storage

The waste receival process consists of the following activities:

- A waste delivery vehicle arrives and reverses into the building through the door located at the back of the building;
- Full bins are unloaded directly into the full bin staging area inside the building and inspected;
- Bins are weighed;
- Clinical waste bins will be sorted into groups with a combined weight of approximately 162kg;
- Clinical waste is transferred via the bin lift or manually into autoclave carts;
- Each cart is to be weighed upon entry into the autoclave to ensure no more than 162kg is processed during any one cycle;
- Cytotoxic, pharmaceutical and clinical sharps waste bins are transferred to their allocated storage areas; and,
- Anatomical waste is transferred to the allocated freezer for storage.

Clinical waste is treated in the autoclave, followed by shredding, this process is an approved treatment method by NSW Department of Health.

[5] As per Appendix 1 Development Layout Plans Figure 3 in the Conditions of Consent.

If there is a loss of containment of wastes during the handling process inside the processing building, the spill will be contained according to the Med-X Spill Control Management Procedure (MXNATQPR304).

The waste receival and waste treatment process is summarised in Figure 2 below.

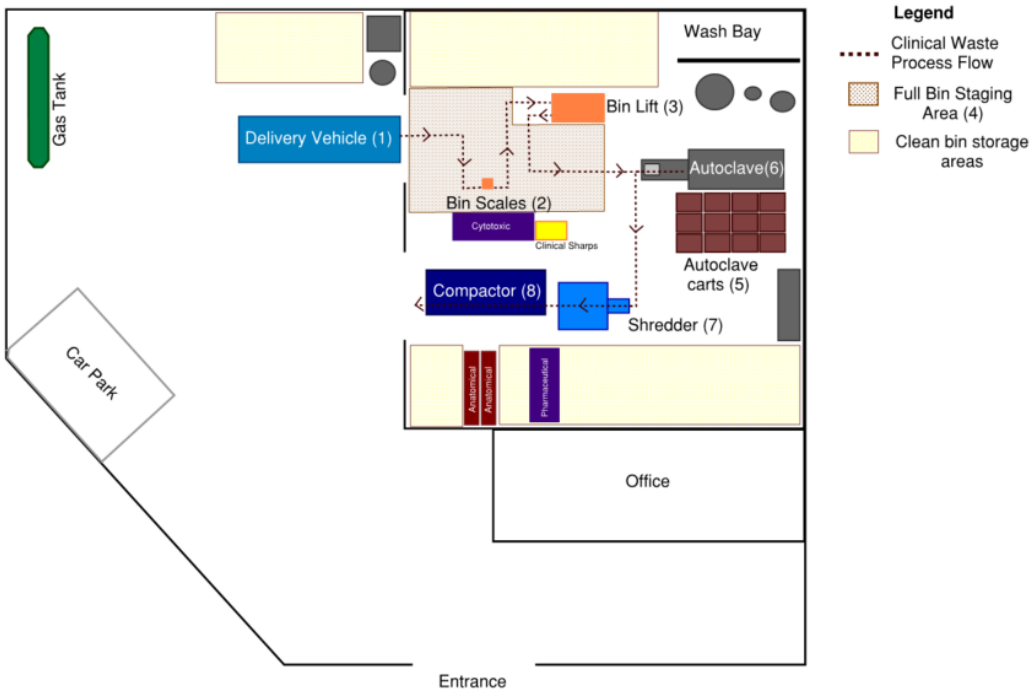

Figure 2 Waste receival and treatment process

The site plans for the internal and external areas of the Facility are provided in Figure 3 below.

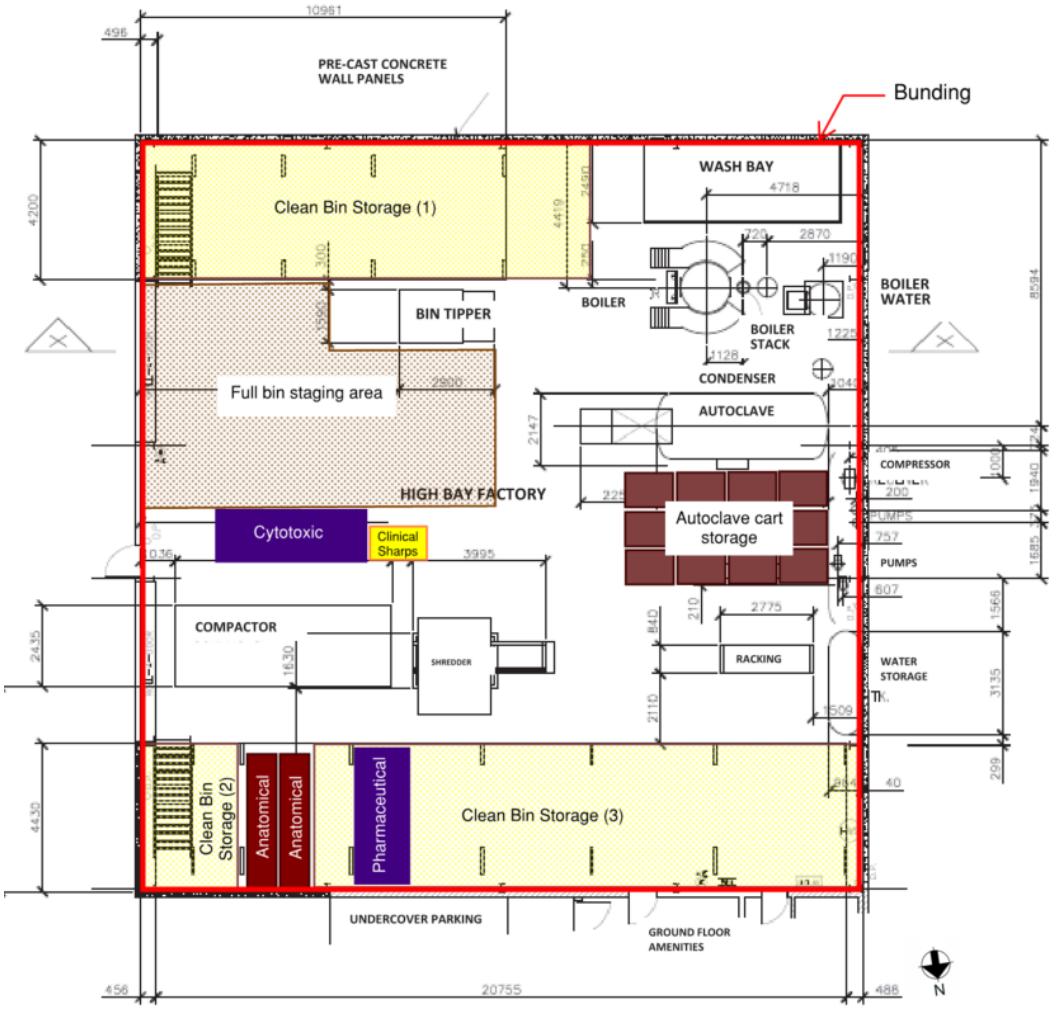

Figure 3 Internal site layout – ground floor storage areas

4.3.1 Facility Storage and Processing Limits

The facility is licensed to receive a maximum of 2,300 tonnes of clinical and related wastes per year. The limits apply to waste processing and storage and as such the Facility will not:

- Receive or process more than 2,000 tonnes per annum of clinical waste;
- Receive or store more than 300 tonnes per annum of related waste;
- Process more than 648 kilograms of clinical waste per operating cycle of the autoclave;
- Store more than 450 kilograms of clinical waste outside of the approved hours of operation;
- Store any related waste outside of the approved hours of operation;
- Store more than 1,200 kilograms DG class 6.2 pg iii at all times; and

- Store more than 8,000kg of clinical and related waste, treated and/or untreated, at the premises at any one time as per the EPL.

4.3.2 On-site Waste Generation and Management

Waste is generated on-site within the office building and during other site activities[6]. Appropriate waste bins are provided throughout the office building to enable the segregation of recyclables and general waste at the Facility. Waste bins are decanted into 240L bins and the small waste skip as appropriate.

The waste generated, the waste storage and collection frequency is summarised in Table 15 below.

Table 15 On-site Waste Management

Stream	Storage	Collection Frequency	Collection
General waste[7]	Small waste skip bin	Minimum of once per week	Collected by nominated waste collection contractor.
Comingled recyclables	1 x 240L located within office building	Three days per week	
Organics	2 x 240L located within office building	Three days per week	
Wooden Pallets	On-site storage Located adjacent to office building	As required	Pallets returned to supplier

4.4 Waste Training Programmes

Med-X operates a formal system to ensure that all employees within the organisation are adequately trained and aware, to enable them to perform their assigned duties. Each Manager and Supervisor is responsible for monitoring the abilities of all their workers and their responsibilities.

All employees receive training as identified by an initial training needs assessment. The training requirements of employees are assessed against wider organisational policies and objectives. Gaps in training, knowledge or competence are identified and filled. Appropriate training requirements are further identified through this process using the Competency Review Form. For more details please refer to the Med-X MXNATQMA110 9 IMS Procedure Competence & Awareness document.

Table 16 summarises the training provided to staff.

[6] Please also refer to MXNATQWMP001 Med-X Operational Waste Management Plan
[7] General waste is generated within the office building and from the other by-products from the use of certain products such as potentially oil contaminated cardboard boxes, dirty rags, plastics, empty containers etc.

Table 16 Training Programmes

Employee	Training Type	Descriptions	Frequency
All Staff	Induction	Includes health, safety and environmental briefing.	Within the first month of employment
All Staff	Awareness Training	Appropriate to respective responsibilities. Is provided to ensure employees are aware of any significant impacts, actual or potential, of their work activities: Responsibilities in achieving conformance with policies and procedures; Relevant incidents and the outcomes of investigations; Relevant hazards, Occupational Health and Safety (OH&S) risks and actions; Ability to remove themselves from work situations they consider dangerous; Contribution to the effectiveness of the management system; and, Potential consequences of departure from specified operation procedures.	On-going
Drivers	On-the-Job Training	Additional training to understand logistics management system, waste tracking procedures, identification of non-conforming receptables and loading & unloading procedures.	On-going during first six months of employment
Production Team Member	On-the-Job Training	Additional training to understand waste tracking procedures, identification of non-conforming receptables, identification of non-conforming waste, unloading procedures and equipment operation.	On-going during first six months of employment

Where required, awareness training is conducted in-house to allow the transfer of organisational knowledge but for more specialist skills, external seminars, trainers or courses are utilized. The effectiveness of awareness training is evaluated and recorded. The company induction includes an introduction to the organisation's policy statements and objectives. Future training needs are identified as part of the management review process.

4.5 Operational Contingency Measures

Operations at the facility have the potential to be disrupted by various external and internal factors. Potential sources of disruption to the operation of the Facility and the corresponding remedial measures are summarised in Table 17 below.

Table 17 Operational Contingency Plan

Factor	Potential Impact	Remedial Measure
Unexpectedly high volume of waste collected in a day	Potential daily or annual storage / processing exceedances	To prevent backlog accumulating on site beyond safe storage limits and to conform against conditions of licence of Environment Protection Orders, a risk-based decision with consideration of daily and annual limits is undertaken by the Branch Manager to divert the waste flow where required[8]. If backlog of storage has occurred, all waste will be transported to an alternative licensed treatment facility for processing. Clients will be notified as appropriate.
Major plant[9] planned or unplanned shutdown	Inability to process clinical waste at the Facility and resulting accumulation of waste within the Facility.	

[8] Please refer to MXNATQPR320 Med-X Backlog Contingency Procedure for additional information.
[9] Major plant refers to the Autoclave, Boiler and Shredder.

5 Waste Monitoring and Reporting

5.1 Monitoring Program

The key monitoring activities at the site include:

- Calibration of Equipment[10];
- Validation of Equipment[11];
- Monitoring of Processing Efficacy[12]; and,
- Monitoring of Waste Volumes and Compliance[13].

All data, processes, procedures and checklists for monitoring and reporting are stored on the Med-X IMS, including the legal and compliance requirements procedure[14]. All sampling and waste classification data for the life of the development is retained in accordance with the requirements of EPA.

The Branch Manager is responsible for monitoring the effectiveness of all waste management measures and equipment on site and ensuring the implementation of the monitoring programmes. Table 18 below summarises the key monitoring activities and frequency of monitoring at the Facility.

Table 18 Details of Monitoring Activities

Item	Type of monitoring	Description	Frequency
Weighbridge	Calibration	As part of start-up arrangements each day, the weighbridge must be zeroed and initialized.	Daily
Autoclave	Calibration	Autoclave operations (including chamber loading and heating), time and temperature recording equipment are to be calibrated by an accredited testing organization.	Minimum every six months
Weighbridge	Validation	Weighing of a 20kg standard weight will be undertaken to check the ongoing accuracy of the weighbridge.	Weekly
Shredder	Validation	The shredder is monitored daily to assess efficacy of the equipment. Periodical maintenance is performed on a quarterly basis with the shredder cutters typically replaced every 6 weeks.	Daily
Autoclave	Processing efficacy	Biological Indicator tests are undertaken by the National Association of Testing Authorities (NATA) approved Laboratory, to validate the autoclave sterilisation process.	Yearly
Autoclave	Processing efficacy	Every load processed by the autoclave must include biological indicator testing.	Daily

[10] Refer to MXNATQPR319 Med-X Calibration Equipment Treatment Facility for more information
[11] Refer to MXNATQPR318 Med-X Equipment Validation for more information
[12] Refer to MXNATQPR314 Med-X Monitoring Treatment Facility Procedures and MXNATQMA110 18 IMS Procedure Non-conforming Outputs for more information
[13] Refer to MXNATQPR307 Med-X Weighing Waste Procedures for more information
[14] Refer to MXNATQMA110 5 IMS Procedure Legal & Compliance Requirements.

Item	Type of monitoring	Description	Frequency
Autoclave Cart Limit	Waste Volumes	Autoclave carts are weighed before processing to ensure no more than 600kg is processed during any one cycle.	Per treatment cycle
Daily Storage on Site	Waste Volumes	The daily storage of all waste streams, including the freezer capacity to store anatomical waste, is monitored throughout operational hours.	Daily
Daily Receival / Processing Limit	Waste Volumes	The daily waste volumes processed and stored at the Facility must be recorded and collated on the Med-X CRM system and monitored daily.	Daily
Annual Receival/ Processing Limit	Waste Volumes	Weekly waste volumes must be recorded and stored on the Med-X CRM system and provided to the EPA as per legal and compliance requirements.	Weekly

5.2 Maintenance and Repairs

The basic equipment maintenance schedule for current and proposed operations is summarised in Table 19[15]. In addition to the proposed facility maintenance schedule below, the autoclave manufacturers from the U.S. inspect the autoclave and boiler every two years to confirm its integrity.

Table 19 Proposed facility maintenance schedule

Item	Daily	Weekly	Monthly	As Required
Autoclave		✓		
Filter check	✓			
Filter change				✓
Autoclave Seals				✓
Blow down tank – Autoclave			✓	
Autoclave Loading Bridge			✓	
Boiler		✓		
Blow down tank – Boiler			✓	
Shredder		✓		
Compressor Tank			✓	
Bin lifter	✓			
Inspect electrical connections			✓	
WP-N Platform	✓			

[15] Please refer to MXNATQPR315 Med-X Treatment Facility Maintenance and MXNATQPR308 – Med-X Autoclave Operations for more information

5.3 Performance Reporting and Review

To access the effectiveness, suitability and adequacy of the Facilities environmental management measures, environmental performance management reviews will occur annually. This review will include a performance assessment against the WMP goals. The review will consider reasonable measures that may improve the management of waste at the site, the outcome of the review will be a prioritisation of the implementations recommended.

The State Management Team and the National Leadership Team are ultimately responsible for performance reporting and review, with support from the Branch Manager.

All data is analysed and evaluated to ensure legal and compliance requirements as per the IMS procedure Data Analysis & Evaluation (MXNATQMA110 21) and Legal and Compliance Requirements (MXNATQMA110 5). The Facility will utilise monitoring data to review and identify any exceedances against the adapted goals with the appropriate corrective actions applied as per the IMS Procedure Continual Improvement (MXNATQMA110 26).

Further details of the reporting requirements are provided in the Conditions of Consent and the EPL No 20233 and Section 4.12 of the OEMP.

5.4 Exceedances and Corrective Actions

Handling of any waste related complaints will be managed in accordance with the process outlined in Section 4.3.3 of the OEMP. The Branch Manager, will record and manage all complaints in accordance with the EPL No. 20233, the Consent Conditions and the Facilities reporting procedures.

Incidence procedures will be undertaken in accordance Section 4.3.2 of the OEMP and the IMS Non-conformity & Corrective Action (MXNATQMA110 24). Details on the procedure for the investigation an incident can be found in IMS Procedure Incident Investigation (MXNATQMA110 25).

Notification, emergency response and reporting requirements relating to incidents are detailed in Section 4.3 and 4.4 of the OEMP.