

# POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN



State Waste Services (NSW) Pty Ltd  
9 Kenoma Place Arndell Park NSW 2148

## Summary of Dangerous Goods held at the premises

Class	Description	Quantity
2.1	Flammable Gas	7500L
6.2	Infectious Substances	5T
3	Flammable Liquids (Ethanol, Xylene)	<40L
8	Corrosive Substances (Bromide)	<40L

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## EMERGENCY SERVICES INFORMATION PACKAGE

### Site location:

State Waste Services: 9 Kenoma Place Arndell Park

### Hours of Operation:

The normal hours of operation of the Site are between 6am and 4pm, Monday to Friday.

### Brief description of works:

SWS provide a waste collection and disposal service to health and allied health services industries and any other business that requires clinical and sharps waste disposal. The clinical wastes are treated by steam sterilisation process to destroy microbial organisms, rendering the waste harmless.

Cytotoxic and anatomical waste is collected and temporarily stored before being transported to another waste treatment facility to be incinerated.

Areas of the site that are potentially hazardous during a fire emergency have been determined to be the shredder, electrical equipment and the waste storage locations.

The potential for fire is electrical fault or the shredder sparking and igniting undesired solvents in the waste.

Clinical and related waste and cytotoxic waste is classified as **special waste** (Class 6.1 & 6.2) under the NSW EPA Waste Classification Guidelines. The main hazards associated with this waste are sharps injury and the infectious nature of the waste. The risk of these hazards depends on exposure.

There is a wash bay inside the building for cleaning of bins. This area is connected to the Sydney Water Tradewaste System.

An industrial boiler running on LPG (Class 2.1) powers the autoclave. The LPG tank supplied by Supagas is 7500L and situated to the corner of the yard with Hebel walls protecting the boundary fences.

There are minor quantities of dangerous goods stored at the site from time to time including Class 3 flammable liquids (typically ethanol and xylene) and Class 8 corrosive substances (bromide). There is rarely more than a 20L container of either substance at our facility at any one time.

The nearest waterway is Bungarribee Creek that is located 500m to the north of the site. The building is bunded at all doorways to contain all spills and any contaminated firewater. There are two fire hose reels and fire extinguishers are installed throughout the facility.

**The location of nearest fire services is:**  
**Huntingwood Fire Station**  
42 Huntingwood Dr  
Huntingwood NSW 2148

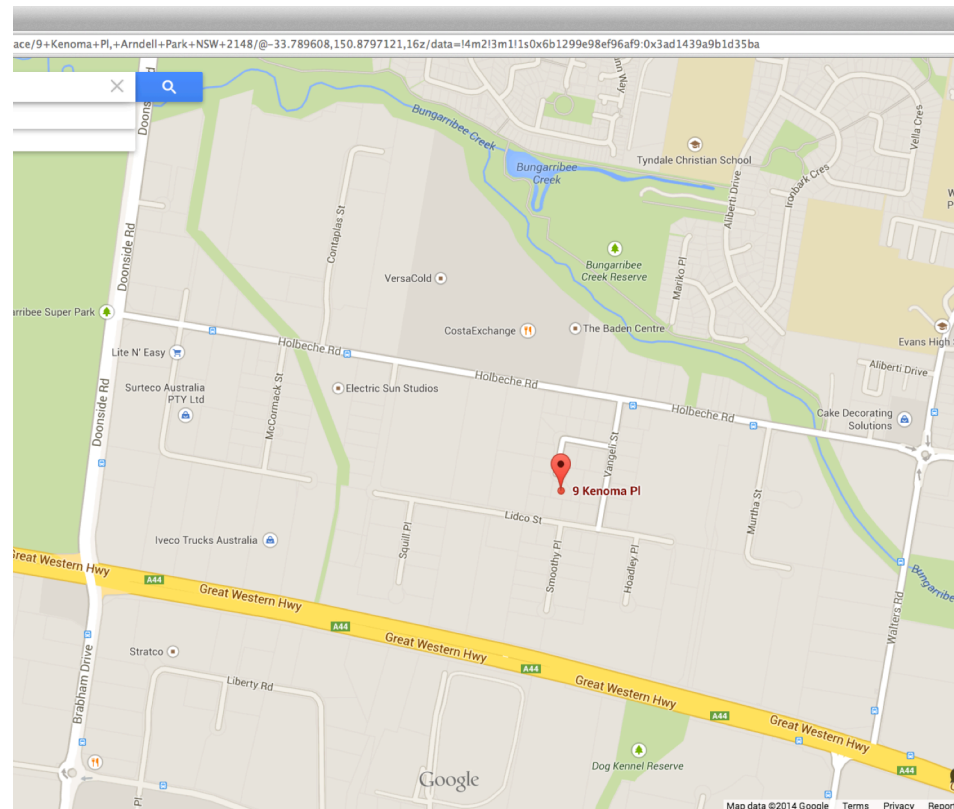


Figure 1 Site Location - 9 Kenoma Place

## 1. INTRODUCTION

This document describes the Pollution Incident Response Management Plan (“plan”) for State Waste Services (NSW) Pty Ltd (“SWS”) waste storage and treatment facility at 9 Kenoma Place Arndell Park. For the purpose of this report, the facility will be known as “the site” from here onwards.

All personnel and contractors working at the site should be made aware of the general contents of this document and accompanying procedures.

It is a requirement that all those employees responsible for emergency response activities, as defined by this document, have a copy of this plan and receive the appropriate level of training needed to ensure the effective implementation of the respective emergency and pollution incident response procedures identified in this plan.

The plan is designed to cover all emergency and pollution incidents conditions that could be reasonably anticipated at the site.

### 1.1 DEFINITION OF AN EMERGENCY

An emergency situation can be defined as any abnormal or dangerous event that may adversely affect the safety or well being of nearby persons, communities or the environment. Under these circumstances, the occupants of the said premises are called to immediately respond to the emergency situation in an effort to control, correct and return the dangerous situation to a safe condition.

If there is any doubt, an event should be treated as an emergency and the procedures stipulated by this plan should be followed. Note that all fires are to be treated as emergencies.

The three levels of emergency are defined as:

- **LOCAL ALERT:** Any emergency situation that threatens human lives, property or the environment at one location of the Site, but is not likely to spread to other areas of the Site or the property;
- **SITE ALERT:** Any emergency situation where effects may spread to other areas on the Site; and

- **EXTERNAL ALERT:** Any emergency situation where effects may spread and impact on people, property or the environment outside the site boundaries, such as a grass fire.

Each of these three levels of emergency may be further classified as follows:

- **MINOR EMERGENCY:** An emergency situation that can be handled entirely by the Site's emergency response personnel without the assistance of the respective public emergency services; and
- **MAJOR EMERGENCY:** An emergency situation that requires the assistance of the public emergency services i.e. ambulance, fire brigade or police services.

An EXTERNAL ALERT is automatically a MAJOR EMERGENCY, as action cannot be taken outside the site boundary independently of the public emergency services.

## 1.2 DEFINITION OF A POLLUTION INCIDENT

The Environmental Guidelines: Preparation of pollution incident response management plans (NSW EPA) defines a pollution incident as:

"...an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise."

Under the Section 148 of the POEO Act, pollution incidents causing or threatening material harm to the environment must be notified immediately to the relevant authorities.

"Material risk of harm to the environment" is defined under Section 147 of the POEO Act as:

*(a) harm to the environment is material if:*

*(iii) It involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or*

- (iv) It results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and*
- (b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.*

### 1.3 POLLUTION INCIDENT RESPONSE MANAGEMENT

There is an obligation on holders of environmental protection licences to prepare and implement a pollution incident response management plan (PIRMP) for each licensed activity.

SWS hold two (2) environmental protection licences (EPL) under the POEO Act:

1. EPL No. 20233 for Waste storage and Non-thermal treatment of hazardous and other waste at 9 Kenoma Place Arndell Park; and,
2. EPL No. 12609 for transport of hazardous, industrial, Group A, Group B or Group C waste.

Requirements for pollution incident response management plans (PIRMP) include:

- Procedures to be followed in notifying a pollution incident and actions to be taken immediately after a pollution incident;
- The PIRMP must be kept at the premises to which the relevant EPL relates and be available on the website; and
- The PIRMP should be tested.

### 1.4 AIMS OF THE PLAN

The aims of this plan are to:

- Provide a clear understanding of how to handle and react to any emergency and pollution incident situation that may occur at the site or during the transport of waste in the form of effective control structures, procedures and directives;
- Prevent or minimise the impact of an emergency on human life, the community and surrounding environment; and
- Facilitate a return to normal or safe operations as soon as possible.

The procedures contained in this plan have been designed to protect life and where possible prevent or minimise damage to the equipment, site and installations at the site. The procedures also aim to facilitate a return to normal operations by providing effective

utilisation of the safety features, systems and equipment installed at the site to protect people from fire, pollution incidents and other emergencies.

### 1.5 SCOPE AND OBJECTIVES

This plan applies to all equipment, personnel and visitors under the control or management of SWS whilst working or visiting the site.

The plan contains information and instructions that provide a basis for handling various types of emergency situations, such as a fire, medical emergency, spills and gas-leaks.

These instructions should not be regarded as rigid procedures to be followed, but rather as continually improving guidelines to be adapted to cope with unanticipated situations.

The objectives of this plan are:

- To protect human life and facilitate the rescue or evacuation of personnel affected by the emergency situation;
- To control or limit any effect that an emergency situation may have on the site, neighbouring areas or on the community in the vicinity of the location of the emergency;
- To facilitate emergency response and to provide such assistance as is appropriate to the occasion;
- To ensure the quick and effective communication of all vital information to respective authorities;
- To facilitate the organisation and reconstruction activities so that normal operations can be resumed as soon as possible;
- To provide for emergency response training so that a high level of preparedness can be maintained at the facility;
- To provide the structure under which emergency procedures are revised and updated;
- To ensure timely and comprehensive communication of a pollution incident to staff, relevant authorities and all other stakeholders affected by the impacts of the pollution incident; and
- To identify risks and develop actions to minimise and manage these risks.



## 2. SUMMARY OF OPERATIONS, HAZARDS, AND SAFETY SYSTEMS

### 2.1 SUMMARY OF FACILITY OPERATIONS

The Site is located within an industrial area in Arndell Park and surrounded by industrial premises. The land area is 1,650 m<sup>2</sup>.

The site has one entrance and exit driveway from Kenoma Place. The site consists of an industrial warehouse, concrete driveways and open areas (refer to Figure 2-1). The adjoining land consists of industrial facilities.

The site provides treatment for clinical waste using an autoclave process. Wastes are transported to the site by SWS vehicles across the Sydney metro and regional areas.

The clinical waste is delivered to the site in reusable yellow clinical waste bins by trucks. The waste includes sharps, infected material and human tissue. Cytotoxic (purple bins) and anatomical (yellow bins, orange lid) waste is also delivered to the site. However this waste is incinerated off-site at another waste treatment facility.

The autoclaving process involves the following steps:

- The clinical and related waste is weighed and emptied into an autoclave cart;
- The yellow bins are hand cleaned using disinfectant;
- The carts (4 at a time) are placed in the autoclave and cycled through a treatment process of pressure and steam;

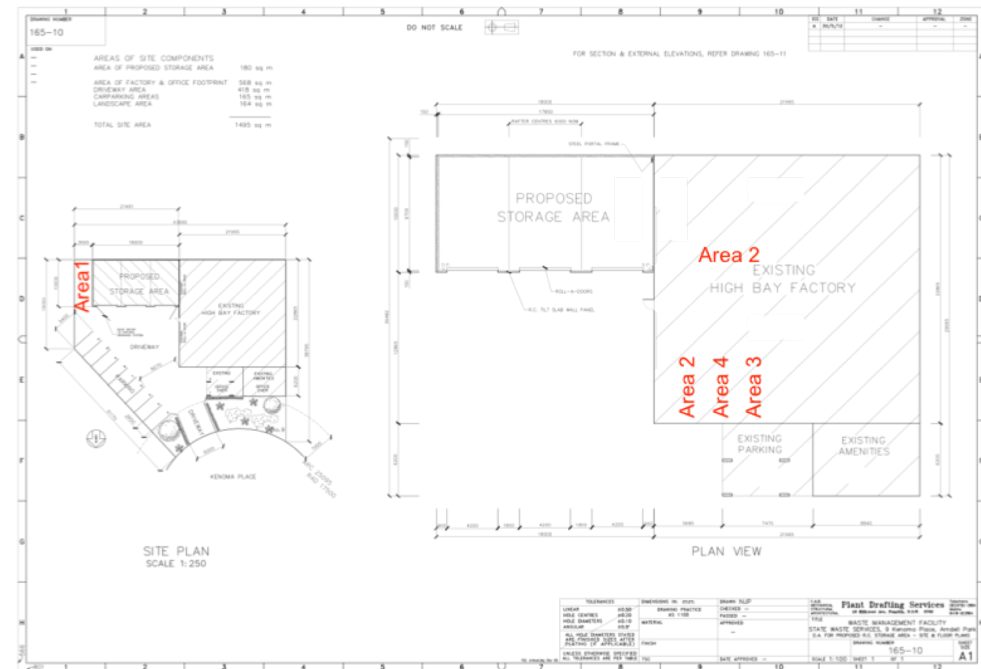


Figure 2-1: Site Layout

- The steam reaches temperatures of 146C.
- The condensate and water used in the autoclave cooling process is collected in a 25,000 litre tank, cooled, filtered and re-used;
- After the steam sterilization process is complete, the autoclave chamber is opened and the carts removed;
- The treated waste is fed into a shredder using a bin-lifter and the shredded waste is transferred to a bulk bin; and
- The bulk bin is transported by truck to landfill.

The locations of dangerous goods storage areas (refer figure 2-1) on site are provided in the following table.

Table 2-1: Dangerous Goods Storage Details				
Area	Chemical Name	UN No	DG Class	Quantity
1	LPG	1075	2.1	7500L
2	Clinical Waste	3291	6.2	5T
3	Cytotoxic	2810	6.1	500kg
4	Flammable & Corrosive	Various	3 & 8	60L

Wastewater discharge to sewer is tested regularly in accordance with the Trade Waste agreement with Sydney Water.

## 2.2 SUMMARY OF TRANSPORT OPERATIONS

In addition to the licensed activities undertaken at the site, SWS is licensed to transport waste of Category 1 and Category 2. Transport includes the following:

- Collection of wastes from clients around the Sydney and NSW regional areas, and then the transport of these wastes to the site;
- Transport of cytotoxic and anatomical waste from the site to Silverwater for incineration; and
- Transport of processed waste (after rendered harmless) from the site to landfill.

## 2.3 SUMMARY OF HAZARDS

The storing and handling of quantities of special waste on-site occurs as part of day-to-day operations. The main hazards are spillage and fire. A spillage may occur during unloading and handling. A fire may occur in the facility with the potential principal causes being:

- The potential for unknown substances within the collected waste to go through the shredding process and a spark causes an explosion or fire;
- Use of non-approved electrical devices; and
- Release of solvent.

Safeguards are in place to reduce the risk of a fire.

### 2.3.1 Dangerous Goods

Table 2-2: Classes of dangerous goods stored and handled at the Site		
Class	Class Description	Major Hazards
2.1	Flammable Gas	<ul style="list-style-type: none"> <li>• Flash fire</li> <li>• Unconfined vapour cloud explosion</li> <li>• Toxicity (under extreme concentrations)</li> </ul>
3	Flammable Liquid	<ul style="list-style-type: none"> <li>• Flash fire</li> <li>• Pool fire</li> <li>• Unconfined vapour cloud explosion</li> <li>• Potential toxic fumes (in the event of fire)</li> <li>• Potential water contamination</li> </ul>
6.2	Infectious Substances	<ul style="list-style-type: none"> <li>• Can cause infectious disease in humans or animals</li> <li>• Capable of spreading disease when exposure to them occurs.</li> </ul>
8	Corrosive Substances	<ul style="list-style-type: none"> <li>• Destroy living tissues</li> <li>• Corrode metal and other materials</li> <li>• May ignite flammable/combustibles substances</li> <li>• React dangerously with other corrosive or incompatible substances</li> </ul>

### 2.3.2 Special Waste

Clinical waste has the potential to cause injury, infection or offence. Some examples of clinical waste include:

- Body fluids or Blood;
- Materials or equipment that have been exposed to body fluids and or blood;
- Human tissue (excluding hair, nails, and teeth);
- Laboratory specimens/cultures; and
- Animal tissue/carcasses resulting from medical research.

This waste is put through a steam sterilisation process at the site, which renders the waste harmless.

Cytotoxic waste relates to any substance that may be contaminated with any residue or preparations that contains materials that are toxic to cells especially because of their ability to alter cell production. Some examples of cytotoxic waste may include:

- Drugs that are used to treat cancer, rheumatoid arthritis, multiple sclerosis;
- Equipment utilised in administering or preparation of cytotoxic materials; and
- Body fluids/blood that may still have cytotoxic properties.

Exposure can occur through skin absorption, skin contact, ingestion and sharp injuries, inhalation of aerosols and drug particles.

Cytotoxic, pharmaceutical and anatomical waste is stored at the site then incinerated off-site at another waste treatment facility.

Anatomical wastes are human/animal tissues, organs, body parts and pathological specimens.

Material Safety Data Sheets (MSDS) for each chemical substance stored at the Site are kept at locations that are accessible to where each chemical is stored.

### 2.3.3 Process Related Hazards

Operations include the loading, unloading and storage of infectious and toxic wastes as well as the processing of infectious waste. The major operational related hazards associated with the site activities include:

- Damage to a waste bin during unloading from transport vehicle, causing a spill of a waste product;
- A pallet/bin collapses as a result of an unstable storage arrangement, causing possible injury to an employee and/or damage to bins;
- Injury to employees as a result of contact with a waste product (e.g. sharps injury);
- Spillage of waste bin during processing, transfer or equipment leak or the like;
- Release of vapours (toxic or flammable) during processing or as a result of a spill;
- A waste spill travels down a stormwater drain potentially causing environmental harm and/or human injury (off-site) due to direct or indirect contact with the substance;
- Fire caused by ignition of an unwanted substance such as flammable liquid or flammable gas most likely within the shredder; and
- Fire or explosion due to the storage of incompatible wastes or dangerous goods that are inadvertently brought onto site.

### 2.3.4 Potential Pollutants Stored on Site

Table 2-3: Potential Pollutants		
Pollutant Name	Storage location details	Maximum Quantity
Wash water from bin wash bay.	Treated then released to trade waste under Sydney Water TWA.	3000L
Cytotoxic waste	Stored within purple bins in the facility	0.3T
Clinical waste	Stored within yellow bins in the facility	4.5T
Anatomical waste	Stored within yellow bins (orange lid) in the facility	0.2T
Waste inadvertently brought onto site.	Stored within the facility in a bunded area	Unknown (<0.5T)
Treated autoclave waste	Temporarily stored within bulk bin and removed off site every 2 days	4T

### 2.3.5 Risk Assessment

Risk can be evaluated using the template shown in Figure 2-2 below. Refer Attachment1 for the SWS Site Risk Assessment Analysis

Figure 2-2: Risk Assessment Template

7. RISK ASSESSMENT					
Risk Assessment – What is the worst possible consequences of this hazard / incident? What is the likelihood of this occurring?					
RISK RATING	LIKELIHOOD				
CONSEQUENCE	Rare The event will only occur in exceptional circumstances	Unlikely The event is not likely to occur in a year	Possible The event may occur within a year	Likely The event is likely to occur within a year	Almost Certain The event is almost certain to occur within a year
<b>Catastrophic</b> (Accidental death / serious injury)	Significant Risk	Significant Risk	High Risk	High Risk	High Risk
<b>Major</b> (Serious injury)	Low Risk	Moderate Risk	Significant Risk	High Risk	High Risk
<b>Moderate</b> (Lost time due to workplace injury)	Low Risk	Low Risk	Moderate Risk	Significant Risk	High Risk
<b>Minor</b> (Minor workplace injury – no lost time)	Low Risk	Low Risk	Low Risk	Moderate Risk	Significant Risk
<b>Minimal</b> (No injury)	Low Risk	Low Risk	Low Risk	Low Risk	Moderate Risk

Risk Rating for this hazard / incident – tick one as appropriate:

High Risk	Significant Risk	Moderate Risk	Low Risk
Immediate action required	Action required as soon as possible	Action required within 1-3 months	Monitor the hazard Minimal action
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 2.4 SUMMARY OF SAFETY SYSTEMS

A number of important safety features have been incorporated into the design and operation of the Site to reduce the potential for hazardous events as outlined above to occur, or to minimise their impacts in terms of potential effects on human life and the surrounding environment.

### 2.4.1 On-site Water Containment System

The facility is equipped with bunding, which would limit pollutant release in the event of a spill in which spill kits are not sufficient to limit the extent of the spill.

There is 120mm high bunding at all doorways to contain all spill and contaminated firewater within the building. All spills within the building will be treated and collected before ultimately being released to the sewer with no potential release to the stormwater system.

SWS are investigating the option of stormwater isolation protection as an additional protective barrier.

### 2.4.2 Fire Services

The fire services available at the site are:

- 1 x 9kg Co2 Fire Extinguisher
- 3 x 9kg A:B(E) Powder Fire Extinguisher
- 2 x 36m fire hoses connected to hydrant water mains

Services are inspected semi-annually.

Contaminated firewater would be treated with bleach at 10000ppm and the pH level tested and adjusted (should it be below pH7) before being released to sewer.

Emergency Response Personnel can be quickly contacted via the following communication methods:

- Using internal telephone system; and

- Mobile phones (if the person to be contacted is known to be outside the site).

#### **2.4.3 Spill Control Equipment**

In addition to the water containment measures, SWS maintain the following clinical waste spill kit items on site.

- Broom, a pan and scraper, mop and mop bucket;
- A large (10 litre) reusable plastic container or bucket with fitted lid;
- Clinical waste bags for the disposal of clinical waste;
- Disinfectant containing (1%) 10,000 ppm available chlorine or equivalent;
- Rubber gloves suitable for cleaning;
- Detergent, sponges / disposable cloths;
- Personal protective equipment including eye protection, an apron or long sleeve impervious gown, a face mask, heavy-duty gloves;
- Incident report form;
- Waste spill sign.

Cytotoxic spill kit should contain at least:

- Mop and mop bucket, a pan and scraper;
- A large (10 litre) reusable plastic container or bucket with fitted lid;
- Cytotoxic waste bags for the disposal of cytotoxic waste;
- 2 hooded overalls, shoe covers, long heavy duty gloves, latex gloves, a face mask and eye protection;
- Absorbent toweling / absorbent spill mat;
- Incident report form;
- Waste spill sign.

#### **2.4.4 Other**

**Personal Protective Equipment (PPE)** available to employees includes:

- Safety footwear, headwear, and hi-viz clothing;



- Eye Protection and ear protection;
- Various gloves.

Additional PPE is provided in spill kits in case employees need to clean up clinical or cytotoxic waste.

A **Material Safety Data Sheet** (MSDS) register is located in the facility at the control desk.

**Waste audits** are periodically conducted of waste collected from hospitals, laboratories and medical research centres with the results reported back to clients. Any incorrectly disposed waste type is highlighted and fed back into the clients waste segregation programs.

### 3. TYPES OF EMERGENCIES

The following types of emergencies covered by this plan are summarised in Table 3-1 below.

Table 3-1: Types of emergencies		
Emergency Event	Emergency Type	Emergency Response Procedure
Fire/Explosion	Fire within property	Fire/Explosion; Gas Release
	Fire within shredder / waste bin	
Spills	Spills during material handling operations or transport	Dangerous Goods Emergency; Spill Control and Containment
	Collision of road vehicles	
	Bin damaged by forklift	
	Overflow causing release of contaminated wastewater	
	Bin containing infectious waste overturns during unloading, spilling contents	
Personal Injury	Work accident, such as heart attack, serious fall, severe injury or contact with chemical	Medical Emergency
Miscellaneous	Site Evacuation	Evacuation.

#### 4. EMERGENCY CONTROL AND RESPONSE

The normal hours of operation of the Site are between 6am and 4pm, Monday to Friday.

##### 4.1 PRINCIPLES OF EMERGENCY CONTROL AND RESPONSE

The principles of emergency response will be based on Prevention, Containment, Rescue and First aid. These have been summarised below:

Table 4-1: Emergency response principles	
Prevention	Inspection of all Site and dangerous goods storage facilities.
	Regular emergency response drills to ensure site readiness.
Containment	Minimise any secondary damage.
	Immediate isolation of all electrical power to the affected area.
	Strict co-operation with any instructions provided by the Chief Warden.
Rescue	Only trained emergency personnel are to use emergency equipment where an emergency situation requires particular precautions (i.e., Spill Kits, Fire Fighting Equipment) or the use of specialised Personal Protection Equipment (PPE).
	Approved safety clothing to be worn.
	All emergency equipment would be located in relative areas of concern.
	Emergency equipment operations must never endanger the safety of personnel.
First Aid	First-aid officer to provide assistance.

## 4.2 EMERGENCY CONTROL ORGANISATION

The Emergency Control Organisation (Table 4-1) consists of a group of Site personnel who have the responsibility of providing first response actions in an emergency.

The Emergency Control Organisation tasks involve organising the necessary resources, communications, evacuation of personnel and implementing corrective actions that may be necessary to return the emergency situation back to normal.

Table 4-1: Emergency Control Organisation Member Summary		
Team Member	Personnel	Internal Contact No
Chief Warden/First Aid	John de Smit	0400 324 005
Warden/Communication	Sean Christie	0415 307 895
Managing Director	Chris Liney	0448 484 848

All Emergency Control Organisation members clearly understand that they provide the first line of attack in an emergency situation, such as a fire.

## 4.3 PRINCIPLE ROLES AND RESPONSIBILITIES

The Chief Warden is in charge of overseeing and controlling all emergency response actions at the Site. In the case that the Chief Warden is unavailable at the time of the emergency, control will be delegated to the responsibility of the Warden.

### 4.3.1 Damage Control

All Emergency Control Organisation personnel shall be trained in the use of fire-fighting equipment, including the use of fire extinguishers and hose reels.

In the event of a Major Emergency, the role of the Emergency Control Organisation is to ensure that the damage or danger caused by the emergency situation is controlled or minimised until external aid arrives at the Site.

#### ***4.3.2 Rescue and First Aid***

First Aid Officer/s will be required to render assistance in removing any injured personnel from the emergency area and to provide effective management of injuries until paramedics arrive on-site.

#### ***4.3.3 Communications***

The Communications Officer will monitor and facilitate the effective exchange of information between the Site and the relevant State Emergency Services.

The Executive will be responsible for relaying information to the media and other public bodies. All staff will be instructed to not discuss such issues with any external bodies.

#### ***4.3.4 Evacuation***

The Chief Warden will determine and control the evacuation of the Site. The Chief Warden will direct staff to evacuate the Site should the emergency grow beyond manageable proportions. To aid in the evacuation an employee checklist will be used by Chief Warden to mark names and ensure all employees working in the affected area have been safely evacuated.

#### ***4.3.5 Traffic Control***

A Traffic Control Officer, nominated by the Chief Warden will be responsible for ensuring the free flow of traffic around the Site. The task may also involve the removal of any vehicle that may obstruct the free flow of emergency vehicles in and out of the Site.

#### ***4.3.6 Emergency control Point***

In the event of an emergency, the Chief Warden will co-ordinate the emergency response activities from the Emergency Control Point, which is located on the grassed area at the front of the site (if appropriate to emergency).

#### ***4.3.7 Movement of Vehicles***

Vehicles shall not be removed from the car park area during an emergency requiring evacuation of the premises, unless authorised by the State Emergency Services Commander. This is to avoid a local traffic jam, and to protect employees in vehicles against possible injury.

### **4.4 FIRE DETECTION**

Site personnel are the primary mechanism by which fires are detected. Site personnel would be able to quickly detect any leaks of flammable materials, which may lead to an increased fire risk, via visual or odour recognition. Once such situations are detected appropriate first response action would be taken. Smoke detectors are fitted throughout the facility.

### **4.5 RAISING ALARM**

When an emergency situation has been identified, the Managing Director shall immediately be informed. If necessary, emergency services shall be contacted by calling 000.

#### ***4.5.1 Evacuation Initiation***

The Chief Warden shall assess the extent and severity of the emergency situation and issue a complete site evacuation order if considered necessary.

If it is considered safe to do so, pre-selected personnel shall remain behind to ensure that the Site is brought to a safe or stable condition before proceeding to the Emergency Assembly Area.

All other personnel shall be evacuated immediately.

Where a clear danger exists, Site personnel may evacuate on their own initiative to safe areas or the emergency assembly area.

#### ***4.5.2 Personnel Accounting System***

After evacuating, personnel shall assemble at their designated Emergency Assembly Area. The Chief Warden shall then conduct an attendance roll call to ensure that all persons are accounted for including any visitors and contractors working on-site.

Any missing persons shall be advised immediately to the State Emergency Service upon arrival. The Chief Warden will assess whether or not the on-site emergency response team has the capability or necessary equipment to safely undertake the search and rescue activity of the missing person or wait until the State Emergency Service personnel arrive on-site.

#### ***4.5.3 Adjacent Premises***

The occupants of adjacent premises should be advised if endangered by the emergency. However, evacuation of those areas is the responsibility of the individual companies and the Emergency Services.

### **4.6 NOTIFICATION OF A POLLUTION INCIDENT**

A pollution incident that occurs in the course of an activity (within the facility or during the transportation of waste) so that material harm to the environment is caused or threatened must be notified.

#### ***4.6.1 Notification of a Pollution Incident at the Facility***

Under Section 148 of the POEO Act, holders of environmental protection licences and anyone carrying on an activity or occupying licensed premises that become aware of a pollution incident are required to report it immediately.

Note that pollution incidents that warrant notification are defined under Section 1.3.

#### 4.6.2 How to Notify?

If the incident presents an immediate threat to human health or property:

**CALL 000**

Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service.

Then immediately contact the Chief Warden/Warden who will take over communication responsibilities.

If the incident does not present an immediate threat, or once the initial 000 call has been made, a decision on who to notify needs to be made. Where notification is required then notify the relevant authorities in the following order:

NSW EPA – Environment Line

**131 555**

Blacktown City Council – (02) 9839 6000, A/H 1300-133-491

NSW Health (Public Health) – 1300 066 055

WorkCover on 13 10 50 (WorkCover will ask for the ABN)

#### 4.6.3 What to Notify?

Section 150 of the POEO Act specifies relevant information about a pollution incident to be given as follows:

- (a) the time, date, nature, duration and location of the incident, (b) the location of the place where pollution is occurring or is likely to occur,*
- (c) the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known,*
- (d) the circumstances in which the incident occurred (including the cause of the incident, if known),*



- (e) the action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known,*
- (f) other information prescribed by the regulations.*

The above information is that known to the informant notifying the incident at the time it is notified. If further information becomes known after notification, this information needs to be notified immediately after it becomes known.

#### **4.7 TERMINATING AN EMERGENCY**

Once clearance is given by the Emergency Services that the emergency incident has been controlled, the Chief Warden will assume control of the site. In this event the following tasks shall be undertaken:

- The Chief Warden and Warden must undertake a full investigation and assessment of the area prior to allowing workers to return;
- The Chief Warden and Warden must ensure any clean up required is done so to ensure a safe work environment for all staff. In addition, ensure the safe handling, transport and storage of any waste materials is undertaken;
- All clean up material and contaminated items must be disposed of appropriately, according to the waste management procedure; and
- When the area is considered safe, workers can return to work.

#### **4.8 WRITTEN REPORT ON EMERGENCY AND REVIEW OF EMERGENCY PLAN**

After any emergency, the SWS Operations Manager and Chief Warden shall prepare an incident report providing the following information:

- Reason and cause of incident;
- Review of the emergency response performance;
- Recommendations on preventative strategies or additional safety systems that may be considered essential to avoid a recurrence of the incident; and
- Recommendations on methods or ways to improve the emergency response performance so that any future incidents can be dealt with in a more effective manner.

In the case of pollution incident that was required to be notified under Section 148 of the POEO Act, written notification must be provided to all regulatory authorities that were notified within 7 days of the incident. Information required in the written notification is included in the site's Environment Protection Licence.

#### 4.9 TRAINING

All personnel working at the Site shall be trained in the basic emergency response procedures. All personnel must undertake Induction Training at the commencement of their employment at the Site and be aware of standard operating procedures.

Competency would be recorded following the completion of the training program to ensure that the employee has acquired a satisfactory level of knowledge.

#### 4.10 PREEMPTIVE ACTION

Above all it is pre-emptive actions that will mitigate against any risk of harm to human health or the environment include:

- Always follow the SWS standard operating procedures;
- Take personal responsibility for your safety and the safety of others;
- Ensure all containers and each load is secure and correctly labeled;
- Use the tailgate to load and unload vehicles;
- Carry a clinical waste and cytotoxic waste spill kit in all transport vehicles.

### 5. REVIEW AND TESTING OF THE PLAN

This plan needs to be reviewed once per year, or otherwise:

- Within one month of any emergency pollution incident that requires notification;
- Following any significant changes to the layout or operations on site.

Review and testing of the plan needs to ensure:

- Information in the plan is accurate and up to date; and
- The plan is capable of being implemented in a workable and effective manner (through drills).

## Attachment 1: SWS Site Risk Assessment Analysis.

Functional Area	Description of Hazard / Incident leading to hazard	Possible Consequences	Consequence	Likelihood	Risk Level	Control Measures / Corrective Action
1. Truck delivery	<p>Damaged bin delivered to site.</p> <p>Bin dropped or damaged during unloading from truck.</p>	<p>Clinical and related waste products spill in delivery area.</p> <p>Pathogens from the clinical and related waste released into the air.</p> <p>Employees come into contact with clinical and related waste and are exposed to pathogens.</p> <p>Clinical and related waste products enter the storm water system and flow off-site.</p>	Moderate	Possible	Moderate	<p>All bins delivered to site are inspected, locked and secured at the waste generators premises before delivery to the site. The contents of any damaged bins would be repacked in a new bin and the damaged bin returned to the site, cleaned and disposed of.</p> <p>The waste contained within the bins is typically sealed in plastic bags by the waste generator prior to placement in the bin. In the event of a bin being damaged the waste would be contained within the plastic bag.</p> <p>All employees are trained in the handling of clinical and related waste and are provided with appropriate personal protective equipment (PPE).</p> <p>Employees are in attendance during all unloading operations and will implement spill control procedures and/or emergency response procedures in the event of a large spill.</p> <p>All unloading operations are conducted within the building, which is banded to contain all spills. Any spills within the building drain to the site's drainage system, treated and ultimately released to the sewer with no potential release to the storm water system.</p>

Functional Area	Description of Hazard / Incident leading to hazard	Possible Consequences	Consequence	Likelihood	Risk Level	Control Measures / Corrective Action
2. Bin empty area	<p>Bin dropped or damaged during emptying into cart.</p> <p>Cart overfilled during bin emptying.</p> <p>Cytotoxic waste bin emptied into cart.</p>	<p>Clinical and related waste products spill in bin empty area.</p> <p>Pathogens from the clinical and related waste released into the air.</p> <p>Employees come into contact with clinical and related waste and are exposed to pathogens.</p> <p>Clinical and related waste products enter the storm water system and flow off-site.</p> <p>Cytotoxic waste mixed with clinical and related waste.</p>	Moderate	Likely	Significant	<p>All employees are trained in the handling of clinical and related waste and are provided with appropriate PPE.</p> <p>Employees are in attendance during all unloading operations and will implement spill control procedures and/or emergency response procedures in the event of a large spill.</p> <p>Cytotoxic waste bins are a distinctive purple colour as opposed to the yellow clinical waste bins; the purple bins are identified, inspected and removed to a designated staging area before being removed for waste treatment off-site.</p> <p>All unloading operations are conducted within the building, which is banded to contain all spills. Any spills within the building drain to the site's drainage system, treated and ultimately released to the sewer with no potential release to the storm water system.</p>

Functional Area	Description of Hazard / Incident leading to hazard	Possible Consequences	Consequence	Likelihood	Risk Level	Control Measures / Corrective Action
3. Pre-treatment storage area	<p>Cart full of clinical and related waste is damaged or tipped over during transport from bin unloading area.</p> <p>Cart full of clinical and related waste is left outside pre-treatment storage area.</p>	<p>Clinical and related waste products spill in pre-treatment storage area.</p> <p>Pathogens from the clinical and related waste released into the air.</p> <p>Employees come into contact with clinical and related waste and are exposed to pathogens.</p> <p>Clinical and related waste products enter the stormwater system and flow off-site.</p>	Moderate	Likely	Significant	<p>All employees are trained in the handling of clinical and related waste and are provided with appropriate PPE.</p> <p>Employees are in attendance during all transport operations and will implement spill control procedures and/or emergency response procedures in the event of a large spill.</p> <p>All transport operations are conducted within the building, which is banded to contain all spills. Any spills within the building drain to the site's drainage system, treated and ultimately released to the sewer with no potential release to the stormwater system.</p>

Functional Area	Description of Hazard / Incident leading to hazard	Possible Consequences	Consequence	Likelihood	Risk Level	Control Measures / Corrective Action
4. Autoclave	<p>Autoclave chamber door not closed during sterilization.</p> <p>Autoclave chamber door opened before sterilization process finished.</p> <p>Autoclave chamber fails during sterilization.</p> <p>Steam boiler fails during sterilization.</p> <p>Steam control valve fails open or closed.</p>	<p>Autoclave unable to hold chamber pressure causing an explosion.</p> <p>Release of vapours that contain pathogens from unsterilized clinical and related waste.</p> <p>Release of condensate into stormwater system.</p> <p>Sterilization process does not meet the requirements of NMHRC and NSW Health guidelines for treatment of clinical and related waste.</p> <p>Unsterilized clinical and related waste removed from the autoclave chamber and moved to the treated waste storage and shredder and sent to landfill.</p>	Major	Unlikely	Moderate	<p>Door of the autoclave is fitted with an outer locking ring system. The interlock system must be engaged for the autoclave sterilization process to commence.</p> <p>Waste treatment guidelines require the temperature of the waste in the autoclave to be monitored and recorded. In the event that the temperature, pressure or time required fail to satisfy the requirement of the guidelines, the waste will remain sealed in the autoclave chamber until the sterilization cycle can be completed to satisfy the guidelines.</p> <p>Employees are trained in the autoclave operating procedures and are in regular attendance during all sterilization processes.</p> <p>In the event of a failure of the steam boiler or steam control valve before the completion of the sterilization cycle, the waste will remain sealed in the autoclave chamber until the sterilization cycle can be completed to satisfy the guidelines.</p> <p>Condensate from autoclave is treated and released to sewer.</p> <p>Autoclave chamber can withstand pressures up to 250 psi, operating pressures are typically 75 psi.</p> <p>The autoclave is fitted with pressure relief valves, which are regularly inspected.</p>

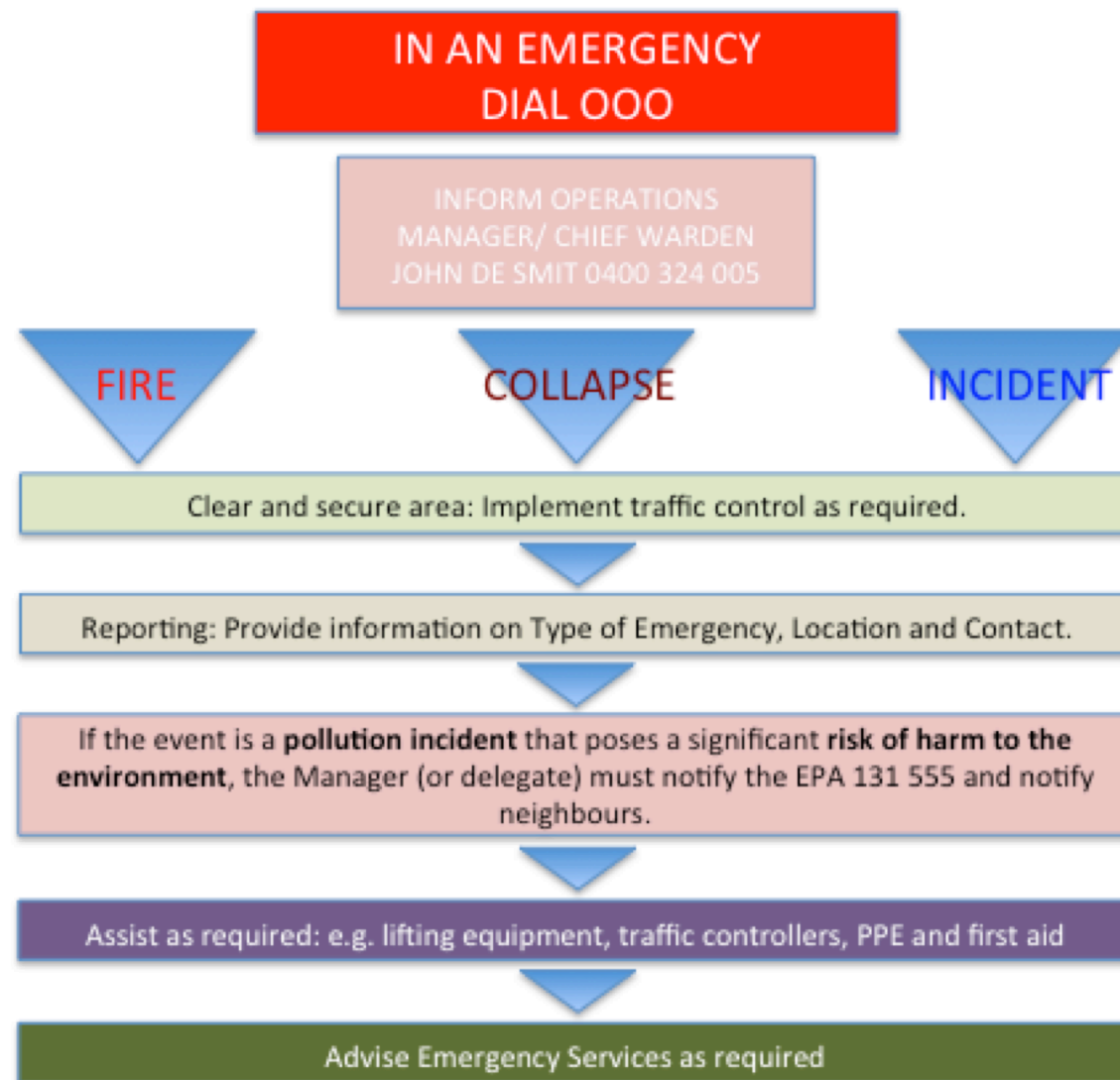
5. Treated waste storage area and Shredder	Cart full of treated waste is damaged or tipped over during transport from bin unloading area.	<p>Treated waste products spill in pre-treatment storage area.</p> <p>Treated waste products enter the stormwater system and flow off-site.</p> <p>Release of vapours that contain pathogens from treated waste.</p>	Moderate	Likely	Significant	<p>The autoclave process destroys all pathogens and the treated waste is considered harmless.</p> <p>All employees are trained in the handling of clinical and related waste and are provided with appropriate PPE1.</p> <p>Employees are in attendance during all transport operations and will implement spill control procedures and/or emergency response procedures in the event of a large spill or fire.</p> <p>All transport operations are conducted within the building, which is banded to contain all spills. Any spills within the building drain to the site's sewerage system, treated and ultimately released to the sewer with no potential release to the stormwater system.</p>
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6. Bin wash area	Clinical and related waste left in bin moved to bin wash area.	<p>Clinical and related waste products spill in wash area.</p> <p>Pathogens from the clinical and related waste released into the air.</p> <p>Employees come into contact with clinical and related waste and are exposed to pathogens.</p> <p>Clinical and related waste and/or cleaning solution products enter the stormwater system and flow off-site.</p>	Minimal	Almost Certain	Moderate	<p>The waste contained within the bins is typically sealed in plastic bags by the waste generator prior to placement in the bin. All clinical and related waste products are removed from the bins in the bin empty area.</p> <p>All employees are trained in the handling of clinical and related waste and are provided with appropriate PPE.</p> <p>Employees are in attendance during all washing operations and will implement spill control procedures and/or emergency response procedures in the event of a large spill.</p> <p>All bin-washing operations are conducted within the building, which is banded to contain all spills. Any spills within the building drain to the site's drainage system, treated and ultimately released to the sewer with no potential release to the stormwater system.</p>
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7. Transport of Medical Waste	<p>Transport container fractures due to traffic accident.</p> <p>Transport container falls from truck spilling contents on driveway.</p> <p>Transport truck unloads at wrong location spilling contents outside designated area.</p>	<p>Spill is contained by truck operator or site personnel without any effect.</p> <p>Spill is not contained and finds its way into the stormwater system.</p> <p>Potential contamination of stormwater system with quarantine waste.</p>	Major	Possible	Significant	<p>Transport containers are of sturdy construction able to withstand significant impacts without fracturing.</p> <p>Transport containers are fully sealed so potential for spillage is negligible.</p> <p>There are no stormwater drains within the vicinity of the unloading area.</p> <p>Truck unloading procedure is always supervised by Site personnel who can provide guidance and assistance if required to do so.</p> <p>Procedures and facilities for spillage control are maintained at the Site for effective response. Spill kits are available on each truck and within the facility.</p> <p>All medical waste transport operations undertaken within the requirements of the ADG Code and NSW Health guidelines.</p> <p>All medical waste transport operations are undertaken by SWS trucks.</p> <p>Truck driver and Site personnel have been trained in the correct spill clean-up procedure.</p>
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## Attachment 2: Emergency Flowchart.



# Attachment 3: Emergency Procedures.

## FIRE/EXPLOSION

A fire or explosion at the site can have severe repercussions in terms of loss of life and property damage. The site has been furnished with an array of manual fire fighting systems in the form of fire hose reels and fire extinguishers.

As part of the Employee Induction, it is recommended all employees go through a minimum level of emergency response training that includes basic fire-fighting skills using fire extinguishers and hose reels.

### FIRST-RESPONSE ACTION ON DISCOVERY OF FIRE OR SMOKE (GENERAL)

1. Assist and remove any person from the danger area, only if safe to do so;
2. Raise the alarm;
3. Activate the nearest emergency stops or shutdown systems relevant to the affected area;
4. If safe to do so, isolate all electrical equipment in affected area;
5. Immediately notify the Chief Warden;
6. If safe to do so, use the nearest fire extinguisher to smother the fire;
7. Move to the designated Emergency Assembly Area, if instructed to do so by the Chief Warden.

### CHIEF WARDEN/ WARDEN

When informed of the emergency:

1. Proceed to the emergency and establish the nature and location of the emergency;
2. Mobilise and co-ordinate Emergency Control Organisation personnel to take emergency response action;
3. Ensure that the correct Personal Protection Equipment is available to personnel;
4. Determine and carry out the most appropriate fire-fighting response action;

5. If required, telephone the Fire Brigade and/or Police or Ambulance Services confirming the state of the emergency at the site and requesting for additional assistance;
6. Ensure that personnel are safe.
7. Ensure First Aiders are notified.
8. Notify the Managing Director of status of emergency. In the event that the emergency poses a material risk of harm to the environment, the Managing Director shall initiate the notification of a pollution incident procedure.
9. Brief the State Emergency Services upon their arrival.
10. Ensure that no vehicles other than emergency services vehicles enter the site.

#### EMERGENCY CONTROL ORGANISATION

When informed of emergency:

1. Proceed to the Emergency Assembly Point for immediate preparation and activation of the fire-fighting equipment;
2. Proceed to the location of the emergency;
3. Report to the Chief Warden or personnel on location for further instructions;
4. Under the instruction of the Chief Warden, carry out the most appropriate fire-fighting response action;
5. Ensure that personnel are safe;
6. If instructed to do so by the Chief Warden, leave emergency location and proceed to Emergency Assembly Area.

## GAS RELEASE

This section applies to a major release of gaseous substances into the ambient environment. The gases that can potentially be released at the site are the following:

1. LPG, which is a flammable gas.

### FIRST-RESPONSE ACTION ON DISCOVERY OF MAJOR GAS RELEASE (GENERAL)

1. Assist and remove any person from the danger area, only if safe to do so;
2. Raise the alarm;
3. If safe to do so, isolate all electrical equipment in affected area;
4. Immediately notify the Chief Warden and specify details of gas leak such as odour, location of leak and size of leak;
5. Move to the designated Emergency Assembly Area, if instructed to do so by the Chief Warden responsible for the affected area.

### CHIEF WARDEN/ WARDEN

When informed of the emergency:

1. Proceed to the emergency and establish/confirm its nature and location;
2. Determine appropriate action to take;
3. Take into account the Material Safety Data Sheet information;
4. Ensure that all personnel are safe;
5. Mobilise and co-ordinate Emergency Control Organisation personnel to take emergency response action;
6. Initiate a partial or full evacuation, depending upon the location and severity of the gas leak;
7. If required, telephone the Fire Brigade and/or Police or Ambulance Services confirming the state of the emergency at the site and requesting for additional assistance;
8. Notify the Managing Director of status of emergency. In the event that the emergency poses a material risk of harm to the environment, the Managing Director shall initiate the notification of a pollution incident procedure;
9. Brief the State Emergency Services upon their arrival;

10. Ensure that no vehicles other than emergency services vehicles enter the site;
11. Consideration must be given to the notification of neighbouring buildings, particularly down-wind of the incident.

#### EMERGENCY CONTROL ORGANISATION

##### When informed of emergency

1. Proceed to the Emergency Control Point for immediate preparation and activation of emergency response equipment;
2. Proceed to the location of the emergency;
3. Report to the Chief Warden or personnel on location for further instructions;
4. Ensure that personnel are safe;
5. If instructed to do so by the Chief Warden, leave the emergency location and proceed to Emergency Assembly Area.

## DANGEROUS GOODS EMERGENCY

This section applies to a major release or spill of a dangerous good substance in an uncontrolled or unconfined. The types of dangerous goods that can potentially be released or spilt at the site are the following:

- Class 2.1 Flammable Gas;
- Class 3 – Flammable Liquid; and
- Class 8 – Corrosive substances.

### ACTION ON DANGEROUS GOODS EMERGENCY (GENERAL)

1. Assist and remove any person from the danger area, only if safe to do so;
2. Raise the alarm;
3. If safe to do so, isolate all electrical equipment in affected area;
4. Immediately notify the Chief Warden;
5. If safe to do so, use the nearest spill control equipment to clean up the spill; and
6. Move to the designated Emergency Assembly Area, if instructed to do so by the Chief Warden.

### CHIEF WARDEN/ WARDEN

When informed of the emergency:

1. Proceed to the emergency and establish its nature and location;
2. Secure the area and barricade the area in the most suitable way;
3. Determine to appropriate action to take;
4. Take into account Material Safety Data Sheets;
5. Ensure that personnel are safe and clear of vapours, gases and fumes;
6. Maintain contact with the Chief Warden and First Aid personnel;
7. Mobilise and co-ordinate Emergency Control Organisation personnel to take emergency response action;



8. If required, telephone the Fire Brigade and/or Police or Ambulance Services confirming the state of the emergency at the site and requesting for additional assistance;
9. Notify the Managing Director of status of emergency. In the event that the emergency poses a material risk of harm to the environment, the Managing Director shall initiate the notification of a pollution incident procedure;
10. Brief the State Emergency Services upon their arrival;
11. If necessary, activate a partial or total evacuation procedure in consultation with the Chief Warden.<sup>41</sup>
12. When assessing the situation the following must be considered:
  - Is there a fire?
  - Is there a spill or leak, how large is it?
  - Is containment of the Dangerous Good necessary?
  - What are the weather conditions?
  - What is the area like?
  - What is the risk to: people, property or environment?
  - How significant is the risk, based on the situation?
  - The hazards of the product, Class and Sub Risk?
  - The degree of danger, based on the Packing Group?
  - Is public protection necessary: stay in place or evacuate?
  - What resources: human and equipment are required and how readily available are they?
13. Ensure that no vehicles other than emergency services vehicles enter the site;
14. Consideration must be given to the notification of neighbouring buildings, particularly down-wind of the incident.

## EMERGENCY CONTROL ORGANISATION

When informed of emergency:

1. Proceed to the Emergency Control Centre for immediate preparation and activation of emergency response equipment and fire truck;
2. Proceed to the location of the emergency;

3. Report to the Chief Warden or personnel on location and implement emergency response strategy as instructed by the Chief Warden or provide assistance to State Emergency Service personnel as required;
4. Ensure that personnel are safe;
5. If instructed to do so by the Chief Warden, leave emergency location and proceed to Emergency Assembly Area; and
6. Ensure any spillage is cleaned up and disposal of resulting waste is in accordance with regulations.

## SPILL CONTROL AND CONTAINMENT PLAN

The purpose of this procedure is to ensure the containment of all spills on the site and to prevent the entry of spilled materials/debris into stormwater systems and public waterways, reducing the risk of environmental pollution and exposure to breaches and penalties under environmental pollution legislation.

### SPILL CONTROL INFORMATION

There is potential for a spillage of clinical or cytotoxic waste from the storage bins to occur and to a lesser extent, a dangerous goods spill. As there is only minor storage of dangerous goods, it is more likely a spill of waste would occur.

Where a spillage occurs, it is important to know what is spilt and access to the following information will be critical if control is to be effective:

- Name of material;
- Type of material (solid, liquid, granulated);
- Dangerous Goods Class of material (if applicable). This information can usually be obtained from the packaging label e.g. Class 3 (Flammable), Class 8 (Corrosive);
- Type of waste (if applicable). This can be identified by the colour of the storage bin. ie: purple for cytotoxic waste, yellow for clinical and related waste and yellow with an orange lid for anatomical waste; and
- Material Safety Data Sheet (MSDS) kept on site and available from the Safety and Environmental Managers or in the Fire Manifest.

The MSDS will provide information on:

- Ingredients of the spilt substance;
- Harmful properties of the substance and its ingredients e.g. evolution of toxic fumes, miscibility with water, effects on the skin and internal bodily systems etc;
- Requirements of personal protective equipment for safe handling of the spill e.g. impervious gloves, respiratory protection etc;

- Recommended method for containing the spill and preventing environmental damage. NB Emphasis is required on the necessity of containment of the spill rather than dispersal of it;
- The safest means of disposing of the spilled materials, e.g. use of approved/authorised waste disposal authorities; and
- Locations of the spill hardware (shovels, brooms, Hazspill Containers etc) and absorbent materials around the site.

The facility is fully bunded.

Spill kits for clinical and cytotoxic waste are located at the site and within all transport vehicles. These provide means of controlling minor spills and are located at appropriate locations at the facility. Contents of spill kits should include:

#### Clinical waste spill kit

- Broom, a pan and scraper, mop and mop bucket;
- A large (10 litre) reusable plastic container or bucket with fitted lid;
- 2 clinical waste bags for the disposal of clinical waste;
- Disinfectant containing (1%) 10,000 ppm available chlorine or equivalent;
- Rubber gloves suitable for cleaning;
- Detergent, sponges / disposable cloths;
- Personal protective equipment including eye protection, an apron or long sleeve impervious gown, a face mask, heavy duty gloves;
- Incident report form; and
- Wastes spill sign.

#### Cytotoxic spill kit

- Mop and mop bucket, a pan and scraper;
- A large (10 litre) reusable plastic container or bucket with fitted lid;
- 2 cytotoxic waste bags for the disposal of cytotoxic waste;
- 2 hooded overalls, shoe covers, long heavy duty gloves, latex gloves, a face mask and eye protection;
- Absorbent toweling / absorbent spill mat;

- Incident report form; and
- Waste spill sign

Any spill incidents are considered incidents warranting completion of the incident response procedure.

#### SPILL CONTROL PROCEDURE

- Take action to stop or reduce the source of the spill, or divert the flow to safe containment, to the extent that personal safety will permit;
- Contain the spillage to minimise spread of material using the contents of the spill kits available on site;
- Notify the shift supervisor;
- Report the spill incident, location, time of occurrence, type of spill, chemical involved and quantity to the Managing Director;
- Consult MSDS (if available) for recommended clean-up procedure; and
- Dispose of material and all contaminated absorbents etc. as per Disposal Procedure outlined in MSDS or in accordance with regulations.

#### SPILL CONTROL EQUIPMENT MAINTENANCE

- If emergency equipment is used or borrowed for any purpose it must be replenished or replaced immediately; and
- Spill kits are to be checked and maintained on a routine basis.

## EVACUATION

### GENERAL

The most likely reasons for a total or partial evacuation of staff are:

1. Fire, explosion; or
2. Major spill of special (clinical / cytotoxic) waste; or
3. Failure of an internal service or other internal emergency e.g. gas leak etc; or
4. External emergency.

Total evacuation is not the appropriate response for all of the emergencies likely to be encountered. Such an action should only be undertaken in extreme emergencies.

### STAGES OF EVACUATION

There are three stages of evacuation for the site:

- Stage 1 - The affected area.
- Stage 2 - Certain other areas.
- Stage 3 - Total evacuation of the site.

#### **Stage 1:** Partial Evacuation

The most likely response to an emergency is the partial evacuation of an area in response to a fire. The evacuation may be short term until: the emergency has been rectified, medium term, overnight, or long term if damage has been extensive, and reconstruction is required.

#### **Stage 2:** Certain other areas

In addition to the affected building, adjacent buildings may need to be evacuated.

#### **Stage 3:** Total site Evacuation

In the event of the whole site being untenable, even temporarily, total evacuation must be considered.<sup>47</sup>

#### EMERGENCY ASSEMBLY AREA

The Emergency Assembly Area is located at the front of the site. This may change at the discretion of the Chief Warden.

#### ACTION BY STAFF

##### Evacuation

1. When the signal to evacuate is given, collect personal belongings from the immediate area, make plant and machinery safe and store valuables, if safe to do so.
2. The Chief Warden shall supervise evacuation to the nearest safe exit route and then to the Emergency Assembly Area and account for personnel.

#### CHIEF WARDEN/WARDEN

The Chief Warden is responsible for authorising the immediate evacuation of employees/contractors to each Emergency Assembly Area. The decision to evacuate can only be made by the Chief Warden or delegate.

The Chief Warden shall liaise with the Police, Ambulance and Fire Brigade officers present on the scene.

## EVACUATION CHECKLIST

This is to be complete as a last check, to ensure that all documentation has been completed.

(Please circle)

YES NO N/A Have police / fire / ambulance been notified?

(Please circle the appropriate department)

YES NO N/A Has the visitor book been checked and person/s been accounted for?

YES NO N/A Has the Chief Warden – employee checklist been completed and all person/s accounted for?

YES NO N/A If person/s were found missing, has the search warden been notified and the Chief Warden checklist been completed?

YES NO N/A Once the emergency is over pass this document and all relating documents to the management systems co-ordinator.

CHECKLIST COMPLETED BY: \_\_\_\_\_

(Print and signature)

DATE: \_\_\_\_\_



## EMERGENCY DRILL PROCEDURE AND LOG

The purpose of this procedure is to give clear instructions regarding how to undertake emergency and pollution response drills

### METHOD

A drill should include/assess the following:

1. Regular checks to ensure alarms - such as smoke alarms - are working;
2. Identifying where employees/contractors should gather after evacuation;
3. Regular checks to ensure escape routes are clear of obstruction;
4. Appointing a warden to take a role call or register to ensure all employees/contractors are safe;
5. Ensuring safety equipment is in a sensible and easily accessible location and is in working order; and
6. Making sure the correct containment equipment is available.

Drill coordinator: John de Smit

Examples: Fire in the bulk bin; spillage in delivery area; spillage in building.

### PROCEDURE

1. (Drill Coordinator) Raise alarm;
2. (Safety Wardens/Drill Coordinator) Assess situation, judgement call on whether evacuation is necessary as well as whether or not to contact emergency services;
3. (Safety Wardens/Drill Coordinator) Instruct all employees/contractors to evacuate via emergency exits and assemble at the assembly point;
4. (Safety Wardens) Final sweep and isolate premises only if safe to do so;
5. (Safety Wardens) Role call at assembly point to make sure all employees/contractors are accounted;
6. (Safety Wardens/Drill Coordinator) Judgement call on whether or not it is safe to recommence normal site operations;
7. (Safety Wardens/Drill Coordinator) facilitate a "Toolbox Meeting" to discuss the positive and negative aspects of the drill as well as possible improvements;

8. (Safety Wardens/Drill Coordinator) Record all drill information in the “Drill Log”.

#### DOCUMENTATION

It is important to document everything regarding your safety drills as it will aid WHS program training, help identify areas that might need further practice and to help identify maintenance issues, particularly with safety equipment.

Discuss what went well during the drill and why?

Discuss what could have been done better and why?

Look at records of previous drills to see if you’re doing things better, are there any repeat mistakes?