



# **POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN**

**For Seven Hills EPA License 258**

# **Pollution Incident Response Management Plan for Henkel Seven Hills**

---

## Contents

- 1 OVERVIEW ..... 4
  - 1.1 Introduction..... 5
  - 1.2 Purpose..... 5
  - 1.3 Scope ..... 5
  - 1.4 Responsibilities ..... 5
  - 1.5 Documentation ..... 6
  - 1.6 Additional Information..... 6
- 2 EVALUATION ..... 7
- 3 HAZARD, LIKELIHOOD AND PRE-EMPTIVE ACTIONS TO PREVENT POLLUTION INCIDENT RISKS8
  - 3.1 Overview..... 8
  - 3.2 Summary of Pollution Types..... 8
    - 3.2.1 Use and Storage of Chemicals Safety Issues..... 9
  - 3.3 Risk assessment and Control Measures (pre-emptive actions) ..... 10
    - 3.3.1 Identification of Risk Areas..... 10
  - 3.4 Risk Modules..... 12
- 4 MAPS ..... 14
  - 4.1 EPL site map for Seven Hills (Storm Water) ..... 15
  - 4.2 EPL site map for Seven Hills (Emergency Information)..... 16
  - 4.3 EPL map of vicinity..... 17
  - 4.4 Spill Kits Location ..... 18
- 5 EMERGENCY INCIDENT RESPONSE PROCEDURES ..... 19
  - 5.1 Internal communications — key names and contacts..... 19
  - 5.2 Action to be Taken Immediately after a Pollution Incident by License Holder and Occupier of the Premises ..... 19
  - 5.3 Procedures to be followed by the Responsible Person notifying the Pollution..... 19
  - 5.4 Identification of level of Harm ..... 19
  - 5.5 Procedures to be followed for coordinating with the Authorities or Persons..... 20
  - 5.6 Procedure to be followed for Combating the Pollution Caused by a Spill Incident..... 20
  - 5.7 Pollution incidents - Spills ..... 20
  - 5.8 Clean-up Action..... 20
  - 5.9 Spill Kits..... 20
    - 5.9.1 Spill kit management..... 21
  - 5.10 Safety Gear ..... 21
  - 5.11 Location of information ..... 21

5.12 Incident Action Hierarchy for Liquid and Flowable Solid Spills .....21

5.13 Procedure to be followed Following an Air Incident.....23

    5.13.1 Pollution incidents – Air Emissions.....23

    5.13.2 External communications – government agencies and other parties.....23

    5.13.3 Co-coordinating, with the authorities.....23

5.14 Site Control – Incident Response .....24

5.15 Evacuation.....24

5.16 Procedures for Notifying Pollution Incident to EPA, Local Councils or Relevant Authorities  
24

6 EARLY WARNINGS AND COMMUNICATIONS TO NEIGHBORS .....24

    6.1 Community Communication and Consultation .....24

    6.2 Website information .....25

    6.3 Emergency Incident Response Procedures .....26

    6.4 Availability and Location of This Plan.....27

7 TRAINING – SUMMARY AND REFERENCE TO PROJECT PROCEDURE .....27

8 UPDATING OF PLAN.....27

9 TESTING.....28

    9.1 Testing dates.....28

    9.2 Recording of Testing.....28

10 IMPLEMENTATION OF THE PLAN .....28

APPENDIX 1 RISK MODULES.....29

    Aqueous Based Management Risk Module 1 .....30

    Chemical Handling and Storages Risk Module 2.....34

APPENDIX 3 – REGULATORY REQUIREMENTS.....40

# 1 OVERVIEW

This Pollution Incident Response Management Plan (PIRMP or Plan) has been written to comply with the legislative requirements under the *Protection of the Environment Operations Act 1997* (POEO Act) and the *Protection of the Environment Operations (General) Regulation 2009*.

Henkel is certified under the ISO 14001:2015, and the certification is valid until the 30<sup>th</sup> of August 2024. The discharge of Benzene (Air), Fine Particles (Air), Nitrogen Oxides – Summer (Air), Nitrogen Oxides (Air), Volatile organic compounds – Summer (Air) and Volatile organic compounds (Air) had been under the load limit since the license was issued.

Noise levels nor exceed an LA noise emission criterion of 67 dB at any time in compliance with condition L3.1. of the EPA License. At Seven Hill we use the maintenance software MEX to ensure all plant and equipment installed at the premises is maintained in a proper and efficient condition.

Every year the report site emissions is generated based on the stack emissions. The measurements are done by Ektimo Pty Ltd, and the results are used for the calculation of emissions for DECC yearly report.

At Seven Hills we treat all the water including the first four millimeters of rainwater. The water goes to the first flush, then to the holding tanks. After the water is in the holding tanks, we transfer it to the trade waste plant where it is treated before being discharged.

Under the legislation referred to above, the Environment Protection Licence (EPL) also requires a PIRMP to clearly document pollution risks, communication procedures to authorities and the community regarding pollution incidents, along with testing and training for pollution response. If there is a pollution incident involving material harm or threatened material harm to human health or the environment, the PIRMP will be implemented.

The PIRMP contains the following sections as required by the regulation:

1. **Background** –describes main features of the regulation
2. **Hazard, likelihood and pre-emptive actions to prevent pollution incident risks** – describes type of pollution incidents that may be possible and lists procedures that are already in place to minimise and manage pollution. Ranking of risks is included in appendices
3. **Maps** – map of project to show location of potentially affected neighbours and environmentally sensitive areas
4. **Emergency incident response procedures** – what to do in case of material harm
5. **Early warnings and communication to neighbours** –when to contact neighbours in case of pollution incidents and info required for website
6. **Training** –information to be passed on to staff and contractors
7. **Updating of plan** –frequency of updates
8. **Testing** – frequency of drills to test effectiveness of PIRMP
9. **Implementing of plan** – reference to legislation requirement to carry out aspects of the plan during a pollution incident

## 1.1 Introduction

Seven Hills site is licensed to carrying out Chemical Production of Paints/polishes/adhesives production at 7 Stanton Road Seven Hills, NSW 2147, LOT 1 DP 812060.

This site is covered by an Environment Protection Licence (EPL) number 258 for the scheduled activities of Chemical Production of Paints/polishes/adhesives.

The site has an overarching environmental management system supported by and ISO 14001:2015 certification.

## 1.2 Purpose

The purpose of this PIRMP is to improve the way pollution incidents are reported, managed and communicated to the general community.

The purpose of this plan is to:

- Ensure comprehensive and timely communication about a pollution incident to staff at the premises, the Environment Protection Authority (EPA), other relevant authorities specified in the Act (such as local councils, NSW Ministry of Health, SafeWork NSW, and Fire and Rescue NSW) and people outside the facility who may be affected by the impacts of the pollution incident.
- Minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks
- Ensure that the plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

## 1.3 Scope

This PIRMP is for the use of all Seven Hills staff involved in the manufacturing of adhesives and all contractors undertaking works on the site. The PIRMP will be implemented only if material harm to human health or the environment occurs or threatens to occur.

The Seven Hills site is located at 7 Stanton Road, Seven Hills and holds EPL number 258. Environmental Management at the site is subject to improvements in processes and practices from time to time. To accommodate these ongoing changes and also to accommodate increases in site specific environmental assessment and management, the plan will be progressively reviewed.

This Plan is to clearly define the requirements of Henkel staff to report and respond to pollution incidents in accordance with the 2011 and 2012 changes to the POEO Act 1997 and the POEO (General) Regulation 2010.

## 1.4 Responsibilities

*All Henkel staff and contractors must:*

- Report incidents
- Implement PRIMP as required
- Attend any emergency preparedness training
- In the event of an emergency event, report to the Operations Manager
- Follow the instructions given in the event of an emergency.
- Co-operate with emergency personnel in the event of an emergency.
- When safe to do so, take steps to contain or control the hazard.

*Supervisors and managers are responsible for:*

- Ensuring their staff are aware of PIRMP
- Training of staff
- Reporting incidents
- Implementing PRIMP as required
- Attending any emergency preparedness training
- In the event of emergency, report the emergency to the Operations Manager
- Follow the instructions given in the event of an emergency.
- Co-operate with emergency personnel in the event of an emergency.
- When safe to do so take steps to contain or control the hazard.

*Management is responsible for:*

- assisting with advice, reporting and response process.
- ensuring the Plan is made available to staff responsible for implementing the plan and authorised officers under the POEO Act
- giving advice on whether environmental incidents need to be reported to external agencies
- assisting in the notification of pollution incidents to the relevant authorities
- provision of maps associated with the plan
- assistance with the implementation of response actions to pollution incidents
- assistance in communicating with neighbours and the local community about the Plan and when incidents of a certain nature occur
- ensuring that staff responsible for activating the Plan have training about their roles in the Plan
- testing and reviewing this Plan.
- Immediately responding to any emergency situation.
- Ascertaining the nature of the emergency and determining appropriate actions.
- Ensuring the appropriate emergency services have been notified.
- Co-ordinating the deployment of staff and any internal specialist resources.
- Where safe to do so take steps to contain or control the hazard.
- Ensuring that appropriate senior management are kept updated on the situation.
- Co-ordinating post-incident recovery strategies.

## **1.5 Documentation**

The environmental incident register in SHEcom is used to record and monitor all environmental incidents within Henkel. The register will assist with record keeping, reporting and determining improvements to incident response and review of the Plan. The register is kept by the SHEQ Manager.

The SHEQ Manager is responsible for monitoring and measuring the effectiveness of incident management and of this Plan.

## **1.6 Additional Information**

**Contact:** Aamir Qureshi 02 9838 6183

**Effective date:** 22/10/2018

**Review date:** 02/05/2023

## 2 EVALUATION

This Pollution incident Response management Plan (the Plan) complies with the requirements under the:

- [POEO Act 1997 Part 5.7A Duty to Prepare and implement Pollution Incident Response management Plans](#)
- [POEO \(General\) Regulation 2009 Part 3A](#)

The requirements under the legislation are supported by the [Environmental Guidelines: Preparation of pollution incident response management plans](#), which provides additional advice from the EPA on Plan preparation.

Plan preparation is a requirement for holders of Environment Protection License's (EPLs). The Seven Hills site operates under EPL no. 258 and is therefore required to prepare a PIRMP and implement the PIRMP if and when an incident occurs.

Key areas which this Plan covers are described in table 1 PIRMP Requirements.

**TABLE 1**

<b>PIRMP Legislation covered under this Plan</b>		<b>Reference</b>
<b>POEO Act Part 5.7</b>		
153A	Duty of licence holder to prepare pollution incident response management plan	Whole document plus references
153C	Information to be included in plan including procedures on actions to take after an incident and coordinating with authorities	5 + references
153D	Keeping of plan:	6.3
153E	Testing of plan:	9
153F	Implementation of plan:	10
<b>POEO (General) Regulation 2009</b>		
98C(a)	Hazard assessment:	3.4 + appendix 1
98C(b)	Likelihood assessment:	3.4 + appendix 1
98C(c)	Pre-Emptive Action:	3.4 + appendix 1
98C(d)	Pollutant Inventory Types:	3.4 + appendix 1
98C(e)	Pollutant Inventory Quantities:	3.4 + appendix 1
98C(f)	Safety Equipment:	3.4 + appendix 1
98C(g)	Staff Contacts:	5.1.1
98C(h)	Authority Contact:	5.1.4 + 6.2 + references
98C(i)	Early Warnings Neighbours:	3.4 & 6
98C(j)	Staff Safety:	3.4
98C(k)	Maps location of pollutants:	3.4 and 4
98C(l)	Early Warnings General:	3.4 and 6
98C(m)	Training of Staff:	7
98C(n)	Timing of Testing:	9
98C(o)	Updating of Plan:	8
98C(p)	Plan Testing:	9
98D(1)	Availability of plan:	6.3
98D(2)	Publishing Plan Parts:	6.2 + 6.3

98D(3)	Procedures under Act:	5 + references
98D(4)	Privacy Protection:	6.3
98E(1)	Testing of the Plan:	9
98E(2)	Minimum Testing requirements:	9

### 3 HAZARD, LIKELIHOOD AND PRE-EMPTIVE ACTIONS TO PREVENT POLLUTION INCIDENT RISKS

#### 3.1 Overview

This chapter deals with the [POEO \(General\) Regulation 2009's sections 98\(a\) to 98\(f\)](#) and partially covers s98(j). These sections deal with the hazard, likelihood and pre-emptive actions which are similar processes to undertaking a risk assessment and providing appropriate control measures to proven or minimise these risks.

The Seven Hills site undertakes Chemical/Adhesives Manufacturing activities.

This Plan also considers both air and water-based pollution incident impacts. Overall considerable design and written environmental management systems are in place to effectively minimise the likelihood and impact of a pollution incident. However, such incidents despite the best design and management methods can occur. Such accidental events are also covered in the Plan by the use of incident response methods.

This Plan uses a modular approach to this risk assessment process. Each module represents an operation undertaken in the Chemical/Adhesives manufacturing such as use and storage of hazardous chemicals along with use and storage of non-hazardous chemicals, wastewater treatment and storm water storage. These modules are common across Henkel operations, but include site specific issues for each Plan. They are based on Seven Hills.

The risk assessment and control measures process include impact on neighbours and crosses over with safety risk assessment processes and is covered under Henkel's SHE standards.

Each module also includes an inventory of pollutants or expected maximum quantities of pollutants likely to be stored. The pollutant types include hazardous chemicals as defined under the Workplace Health and Safety legislation and non-hazardous chemicals such as aqueous based liquids.

#### 3.2 Summary of Pollution Types

Chemical/Adhesives manufacturing by its nature has a limited list of typical pollution types which are required to be considered under the PIRMP. This list covers the main types found at the Seven Hills site.

**Table 2: List of Typical Main Pollutants in Adhesives Manufacturing**

Description	Comments
<b>Air Based Emissions</b>	
Dust	Not Applicable.
Fire	Fire is not considered an environmental incident, but the smoke from the fire can be and can affect neighbours. Fire Management is covered under the Emergency Management Plan and SHEcom.
Noise	Emitted by plant and equipment. Covered under noise monitoring program. Noise is not considered a pollution incident and not covered further under this Plan.
Odour	Odour is generally not associated with this site. Odour incidents are not considered to be material environmental harm, but are included in the PIRMP for consistency with site EMS
<b>General Leaks and Spills</b>	
EMP	For plant and equipment operations. Covered under: <ul style="list-style-type: none"> <li>Emergency management response plan, ORCAs</li> </ul>
EMP	Use of other dangerous goods varies on site. Covered under: <ul style="list-style-type: none"> <li>Emergency management response plan, ORCAs, Risk Assessments Dangerous Goods</li> </ul>
Pesticides	Control of weeds and pests: Covered under <ul style="list-style-type: none"> <li>Jentel procedure</li> </ul>
Aqueous wastes, wastewaters and aqueous potential pollutants	Management of water and stormwater. Covered under: <ul style="list-style-type: none"> <li>Trade Waste plan risk assessment</li> </ul>
Wastes	Storage of wastes and wastes containing chemicals: Covered under: <ul style="list-style-type: none"> <li>Drum reconditioning risk assessment</li> </ul>

### 3.2.1 Use and Storage of Chemicals Safety Issues

Storage and handling of substances which may cause pollution are divided into two areas:

- Hazardous Chemicals — covered by occupational health and safety requirements
- Non-hazardous and aqueous based substances

Hazardous chemicals are documented and itemized in accordance to the Workplace Health and Safety Regulation 2011. The specific hazardous and non-hazardous chemicals documents are identified in Table 3:

**Table 3 Reference Documents to Inventory of Pollutants**

Document Name	Relation to this Plan
Emergency Management Plan, WI AOH A.2-10 Transport of Hazardous chemicals/Dangerous Goods by company Vehicle & Storage of Hazardous, WI ANZ 4.9-03 Dangerous Goods Documentation Requirements for Sea Transport, PRAIMS AO 2.6-05 Warehouse Inbound Handling, PRAIMS AO 2.6-06 Warehouse Outbound handling, Seven Hills Training matrix	Provides: <ul style="list-style-type: none"> <li>• Key contacts regarding OH&amp;S issues and incidents</li> <li>• Hazardous chemicals register</li> <li>• Storage and handling requirements</li> <li>• Plant maintenance records (MEX Software)</li> <li>• Emergency procedures</li> <li>• Training and record keeping (Training matrix)</li> <li>• Handling of hazardous materials and dangerous goods</li> </ul>
List of dangerous goods and materials classified as Hazardous, Hazardous substances inventory listing, RM Info updated	<ul style="list-style-type: none"> <li>• Emergency management plan appendix G</li> <li>• Emergency management plan appendix J</li> <li>• Raw Materials Information Updated</li> </ul>

**3.3 Risk assessment and Control Measures (pre-emptive actions)**

**3.3.1 Identification of Risk Areas**

Assessment analysis and control measures to minimise or prevent any risk of harm to human health or the environment arising out of the relevant activity are required under the overarching documents:

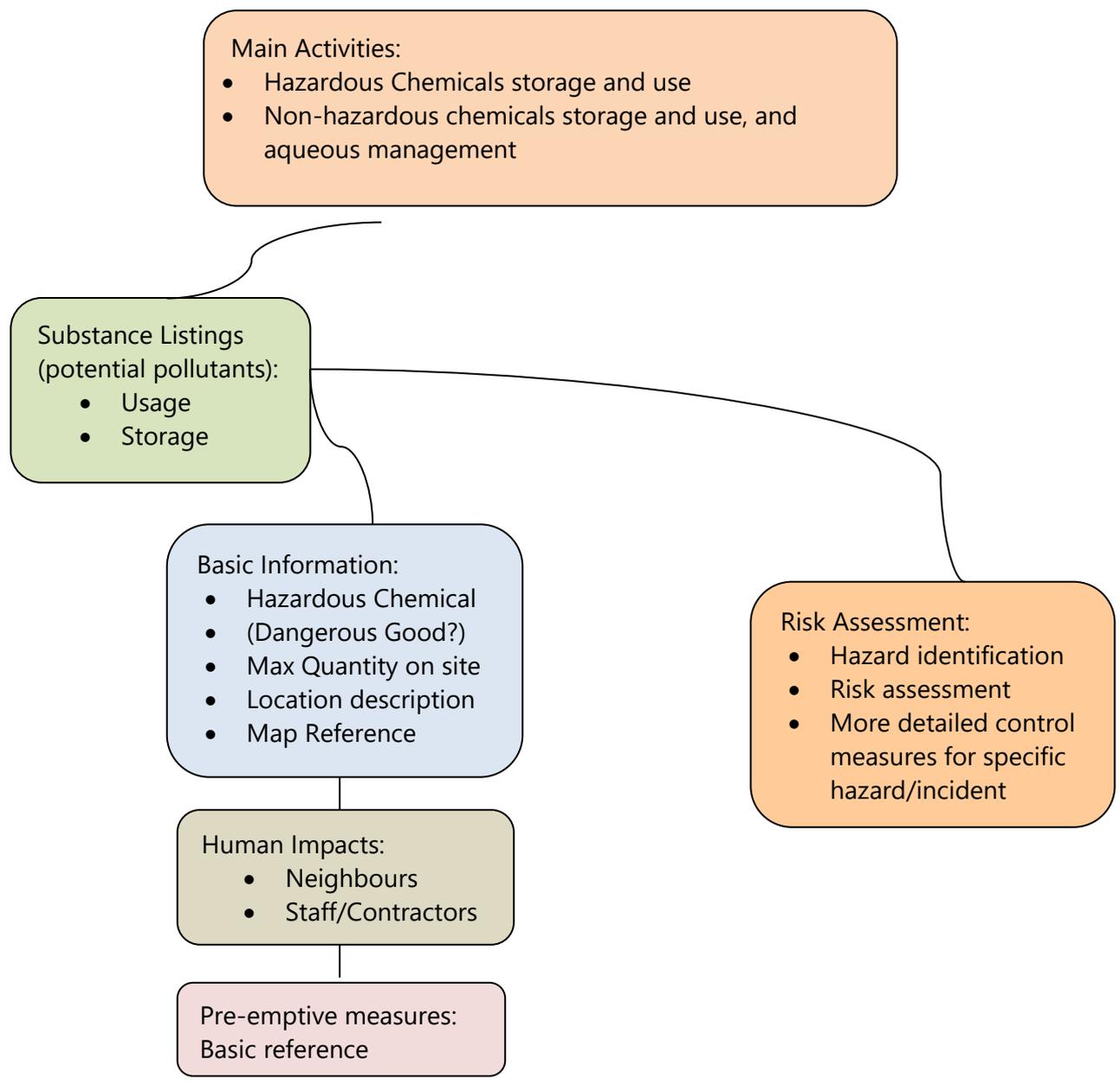
- EMS PRAIMS AOH 3.1-09 and its Annex
- WHS PR ANZ A.2-06 Hazard Identification, Risk Assessment & Risk Control

**Table 4 List of Documents Covering Environmental Risk Assessment and Control Measures**

Document Name	Relation to this Plan
<p>WHS Emergency Management Plan, Training Matrix, MEX Software</p>	<p>Provides:</p> <ul style="list-style-type: none"> <li>• Key contacts regarding OH&amp;S issues and incidents</li> <li>• Hazardous chemicals register</li> <li>• Storage and handling requirements</li> <li>• Plant maintenance records</li> <li>• Emergency procedures</li> <li>• Training and record keeping</li> <li>• Handling of hazardous materials and dangerous goods</li> </ul>
<p>EMS Seven Hills risk-based internal audit program, PRAIMS AOH 3.1-09 and its Annex, Training Matrix</p>	<p>Provides in relation to PIRMP requirements:</p> <ul style="list-style-type: none"> <li>• Internal auditing of sites and</li> </ul> <p>Requires Henkel sites to undertake or implement:</p> <ul style="list-style-type: none"> <li>• Aspects and Impacts assessment</li> <li>• Maintenance activities</li> <li>• Facility management</li> <li>• Emergency response and incident response</li> <li>• Staff training and competencies</li> </ul>
<p>Procedures, factsheets and guides relating to PIRMP requirements</p>	<ul style="list-style-type: none"> <li>• PR ANZ A.2-03 Reporting Safety/Environmental Hazards or Incidents</li> <li>• PR ANZ A.2-05 Safe Handling of flammable liquids</li> <li>• PR ANZ A.2-06 Hazard identification, risk assessment, risk control.</li> <li>• PR ANZ A.3-02 SHEcom: Reporting of Environmental Data</li> <li>• Emergency Management Plan</li> <li>• PR SH 1.1-01 SHE Management System</li> <li>• PR SH 1.4-01 Managing Complains &amp; Concerns raised by the public about operations at Seven Hills site</li> <li>• PR SH A.2-01 Employee security, safety, health, regulatory &amp; environmental auditing program.</li> <li>• PR SHE ET A.6-14 Waste Management</li> <li>• SOP AO ETP 2.5-03 ETP-Sewer Discharge</li> <li>• SOP MFG SH 4.6-22 Operation of the first flush system</li> <li>• WI AOH A.2-10 Transport of Hazardous chemicals/Dangerous Goods by company Vehicle &amp; Storage of Hazardous</li> <li>• WI ANZ 4.9-03 Dangerous Goods Documentation Requirements for Sea Transport</li> <li>• PRAIMS AO 2.6-05 Warehouse Inbound Handling</li> <li>• PRAIMS AO 2.6-06 Warehouse Outbound handling</li> </ul>

### 3.4 Risk Modules

To improve the effectiveness of the Plan the following requirements under the POEO (General) Regulation are covered in this section. This is undertaken by a process described in the following flowchart:



In Appendix 1 Risk Assessment, each of the activities has their polluting substances listed. Each polluting substance is assessed for the requirements described in the flowchart above.

Table 5 provides a breakdown of the coverage of the regulatory requirements in the modules according to the POEO (General) Regulation 2009 by section part.

**Table 5: Risk Module Coverage of the POEO (General) Regulation 2009**

Section	Item heading	Covered by
98C(a)	Hazard assessment:	Hazard and Likelihood Risk assessment and Corrective Control Measures tables
98C(b)	Likelihood assessment:	Hazard and Likelihood Risk assessment and Corrective Control Measures tables
98C(c)	Pre-Emptive Action:	Hazard and Likelihood Risk assessment and Corrective Control Measures – Control measures and corrective action
98C(d)	Pollutant Inventory Types:	List Of Polluting Substance Storages/Uses At Site Initial Assessment – Name/description, Covered under Hazardous Chemicals SAP and Emergency management plan
98C(e)	Pollutant Inventory Quantities:	List Of Polluting Substance Storages/Uses At Site Initial Assessment – Amount Stored (maximum or estimated Maximums stored)
98C(f)	Safety Equipment:	List Of Polluting Substance Storages/Uses At Site Initial Assessment- Ref to Safety Coverage
98C(i)	Early Warnings Neighbours:	List Of Polluting Substance Storages/Uses At Site Initial Assessment – Need for early warnings to neighbours
98C(j)	Staff Safety:	List Of Polluting Substance Storages/Uses At Site Initial Assessment – Ref to Safety Coverage
98C(k)	Maps location of pollutants:	List Of Polluting Substance Storages/Uses At Site Initial Assessment Location of Storage, Map reference (supports section 4 Maps)

## 4 MAPS

This section covers the *POEO (General) Regulation s98E(k)* requirements which are:

A detailed map (or set of maps) showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises.

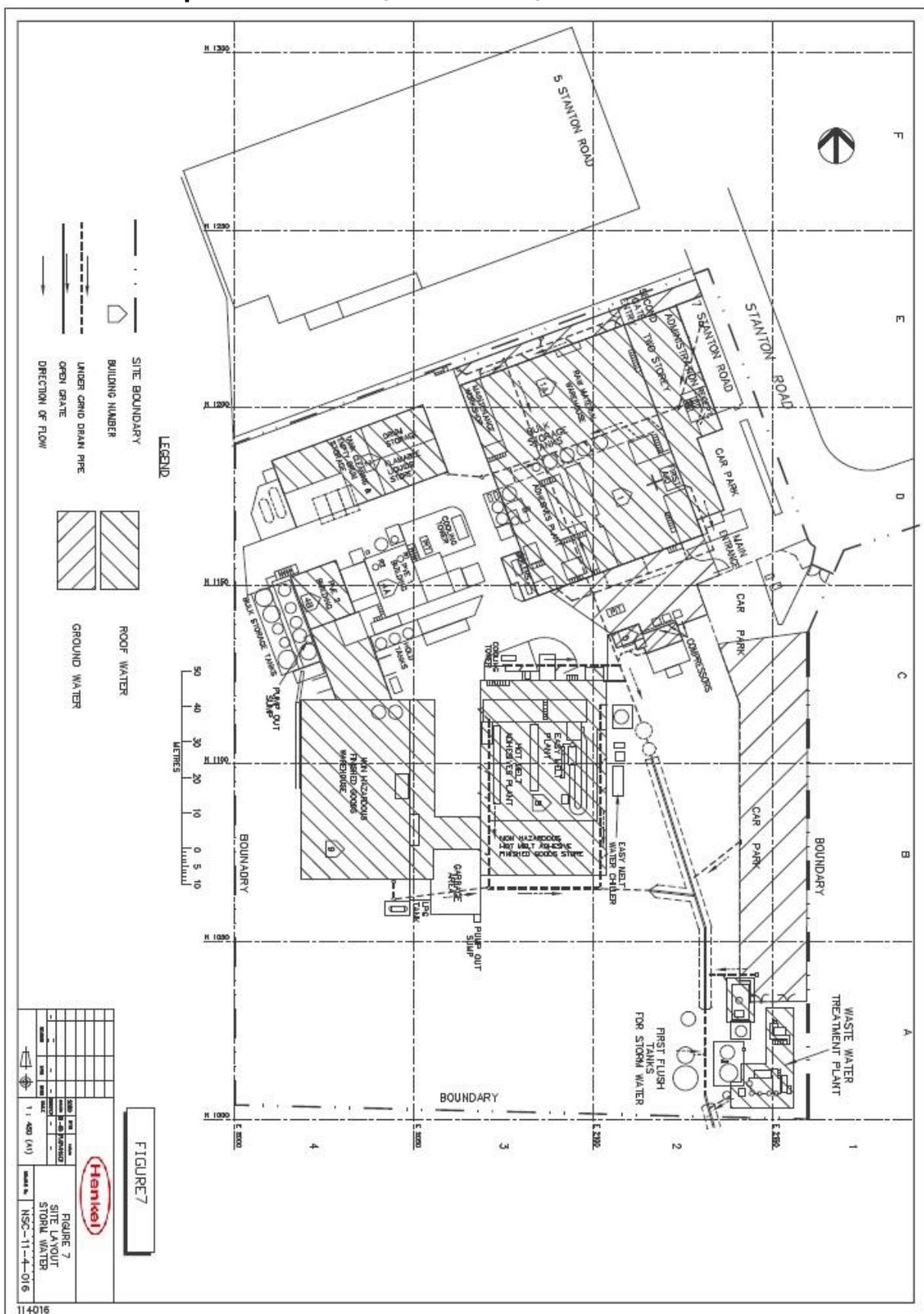
Map 4.1 shows the geographic location of the Seven Hills and includes the requirements above.

Map 4.2 shows the location of potentially affected neighbours

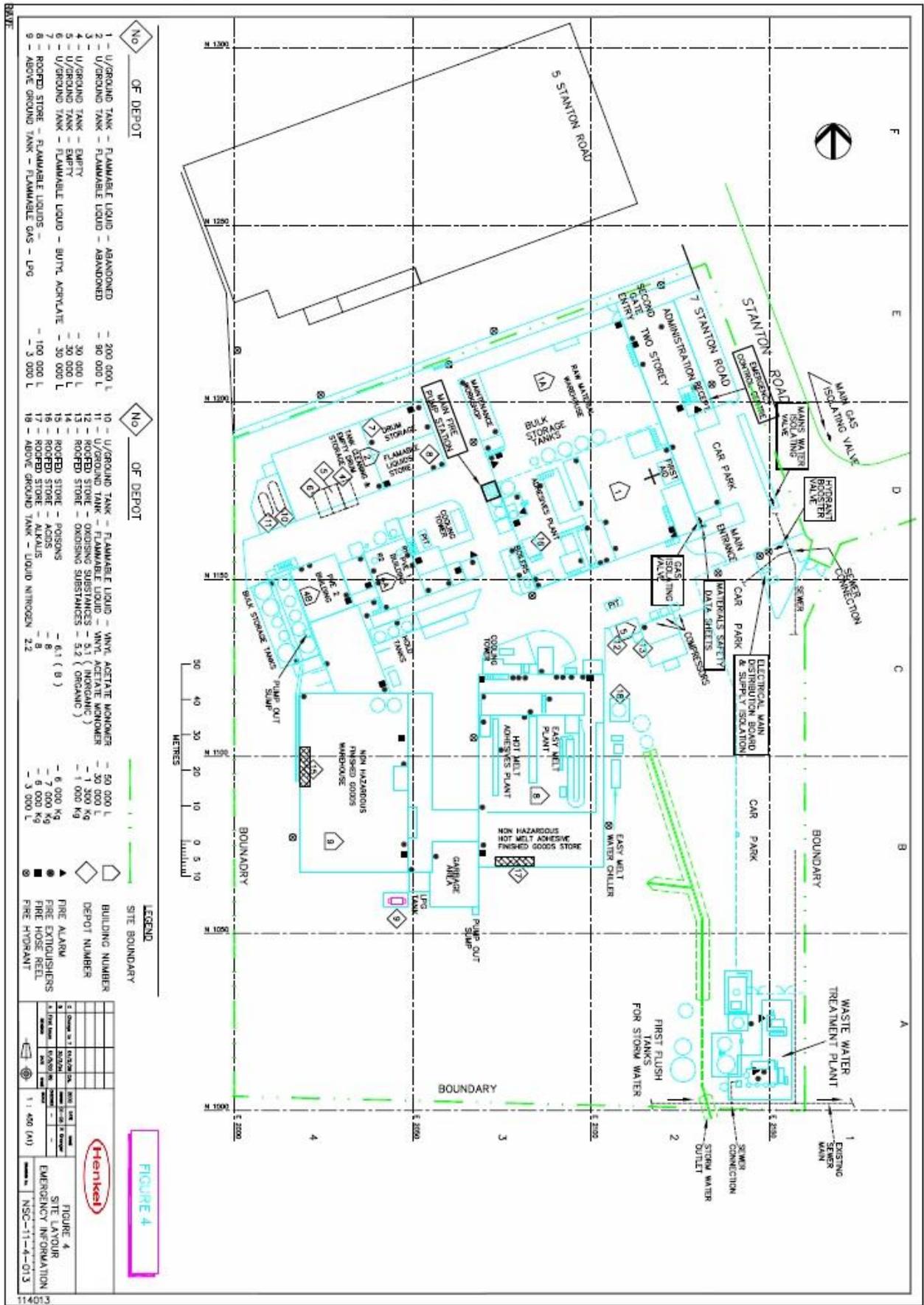
Map 4.3 shows EPL map of vicinity

Map 4.4 shows Spill Kits Location

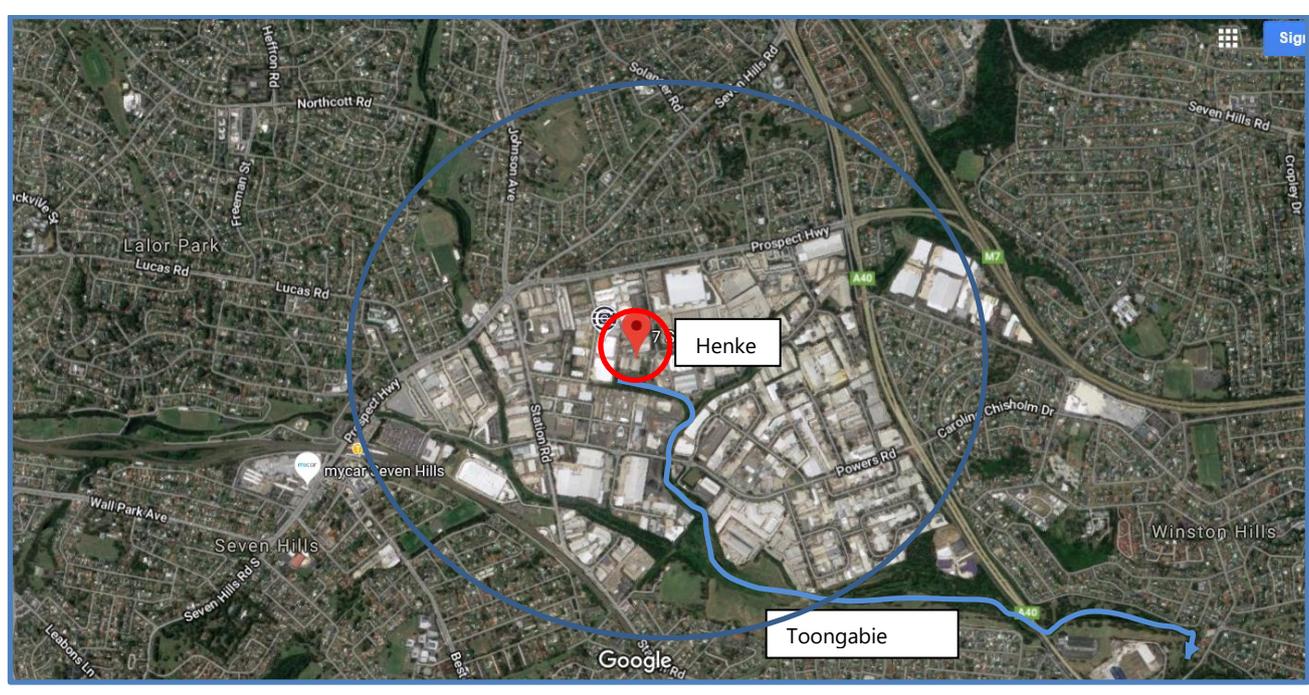
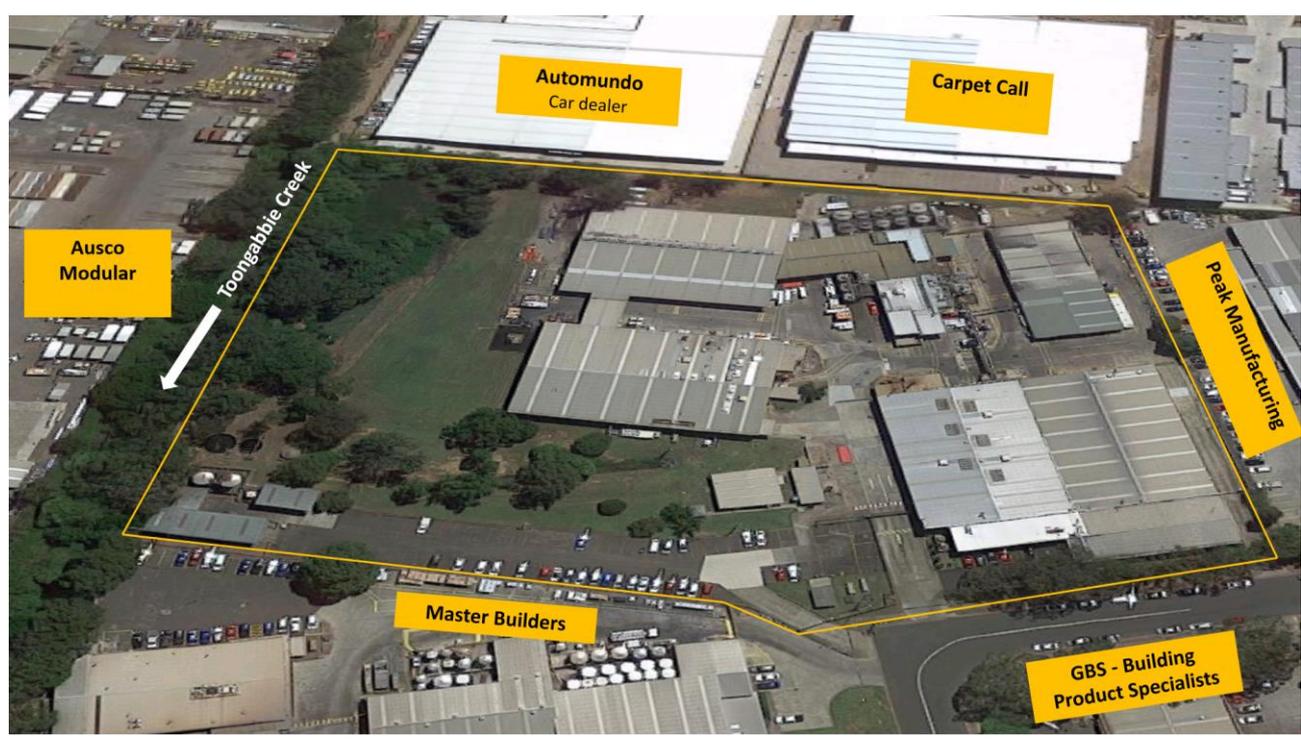
### 4.1 EPL site map for Seven Hills (Storm Water)



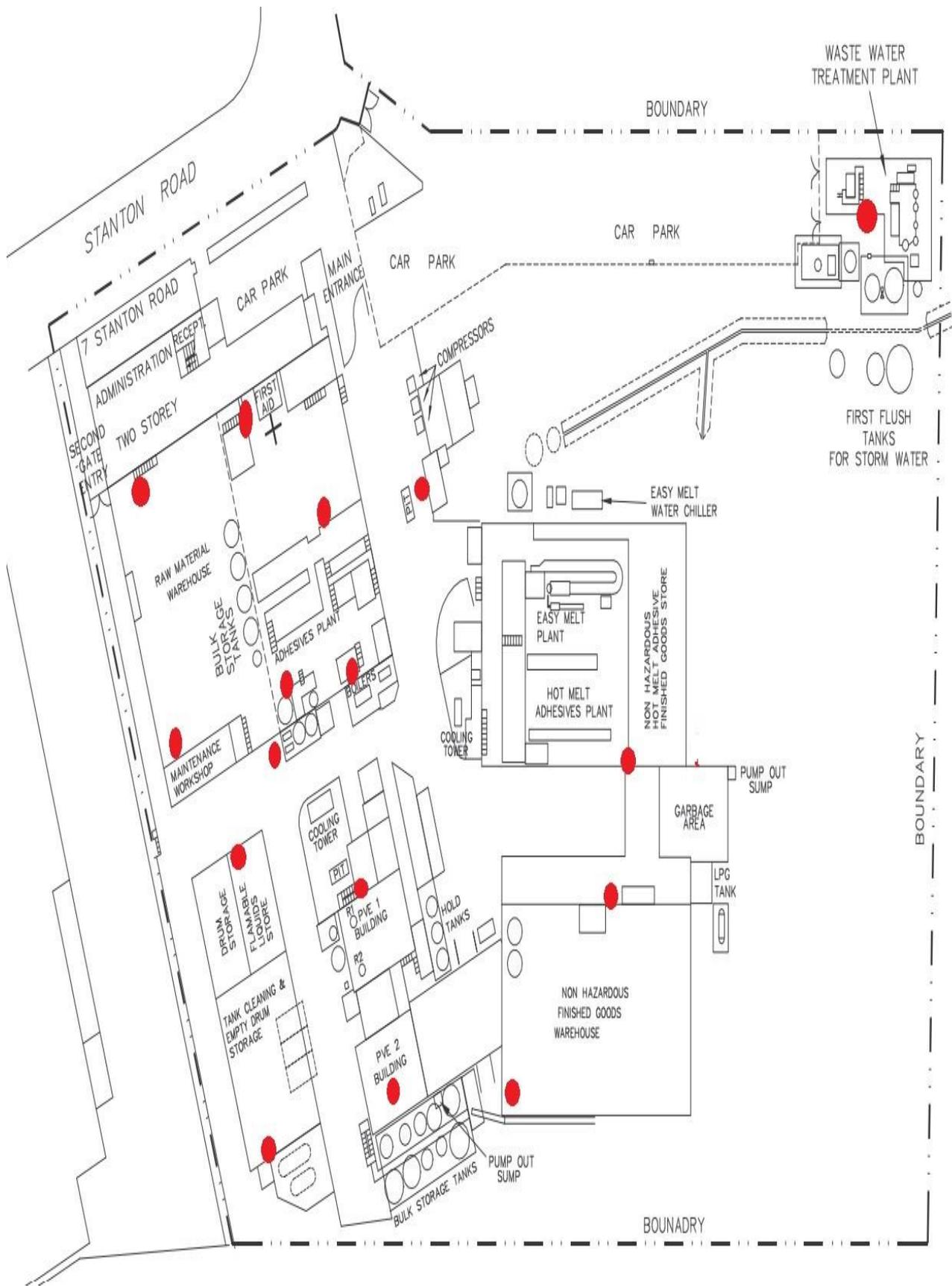
### 4.2 EPL site map for Seven Hills (Emergency Information)



### 4.3 EPL map of vicinity



### 4.4 Spill Kits Location



## 5 EMERGENCY INCIDENT RESPONSE PROCEDURES

### 5.1 Internal communications — key names and contacts

Internal Communications are outlined in the following documents:

- Emergency Response Plan
- SHEcom
- Work, Health and Safety Committee minutes

**Table: List of Key Jobs and 24 hour Contact Details**

Job title	Contact Number
SHEQ Manager	02 9838 6014 - 0409 841 953
Operations Manager	02 9838 6183 - 0420 307 051
Production Manager	02 9838 6072 - 0409 395 530
Maintenance Supervisor	02 9838 6173 - 0427 893 051

### 5.2 Action to be Taken Immediately after a Pollution Incident by License Holder and Occupier of the Premises

This Pollution Incident Response Management Plan must be followed immediately after a pollution incident occurs.

Also Follow:

- 2-0 EMERGENCY PROCEDURE
- 2-1 FIRE EMERGENCY PROCEDURE - (Adhesives Plant/Raw Materials Store/Maintenance Workshop (Buildings 1 & 1A))
- 2-2 FIRE EMERGENCY PROCEDURE – (For a Fire in the PVE Buildings (PVE1/PVE2))
- 2-3 FIRE EMERGENCY PROCEDURE – (For a Fire in Hot Melt Building)
- 2-4 FIRE EMERGENCY PROCEDURE – (For a Fire in the Main Warehouse)
- 2-5 FIRE EMERGENCY PROCEDURE – (For a Fire During Tanker Unloading)
- 2-6 FIRE EMERGENCY PROCEDURE – (For a Fire in the Flammable Liquids Store)
- 2-7 FIRE EMERGENCY PROCEDURE – (For a Fire in the Organic Peroxide Store)
- 2-8 FIRE EMERGENCY PROCEDURE – (For a Fire in the Drum Reconditioning Area)
- 2-9 FIRE EMERGENCY PROCEDURE – (For a Fire in the Laboratories)
- 2-10 FIRE EMERGENCY PROCEDURE – (For a Fire in the Office Areas)
- 3-1 LEAKS AND SPILLS PROCEDURE
- 3-2 LEAKS AND SPILLS - GAS LEAK - NATURAL GAS
- 3-3 LEAKS AND SPILLS - GAS LEAK – NITROGEN
- 3-4 LEAKS AND SPILLS - GAS LEAK - CYLINDER GASES
- 4-1 SITE EXPLOSION RISK MINIMISATION PROCEDURES

### 5.3 Procedures to be followed by the Responsible Person notifying the Pollution

This is covered under:

- Covered under the appendix A of the Emergency Management Plan

### 5.4 Identification of level of Harm

The following levels of pollution incidents are used at Henkel:

1. **Trivial** → Can be cleaned up by person who made the spill without any further harm
2. **Internally Notifiable internal** → where a person requires help to clean up the spill

3. **Possible licence report** → sub-material harm, but may wish to report it to EPA only as a licence condition. Includes minor breaches of licence conditions. Less than 4 complaints from neighbours which are not health related.
4. **Material Harm level 2** → Reportable as material harm, but does not require a fire unit on site (ring 1300 729 579 not 000)  
 Generally able to manage incident with staff on site  
 Exceeds \$10,000 clean up and make good costs  
 More than 5 complaints which are annoyance or not health related incidents  
 One or more complaints which are health based with medical certificate or lost time off work
5. **Material Harm Level 1** → Requires fire unit, 000  
 May require evacuation from site

## 5.5 Procedures to be followed for coordinating with the Authorities or Persons

This is covered under

- See section 5.4
- Emergency management plan. Section 3.

## 5.6 Procedure to be followed for Combating the Pollution Caused by a Spill Incident

For incidents involving material harm, the fire brigade or Hazmat would combat the pollution caused by a spill incident and become the emergency controller.

## 5.7 Pollution incidents - Spills

A spill can be the release of any chemical or substance (i.e. – production, waste waters, oil, and fuel) that may potentially enter stormwater, creeks, rivers, ground water or contaminate soil.)

### The POEO Act definition of a **pollution incident** is:

*Pollution incident* means 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.

## 5.8 Clean-up Action

All pollution incidents are required to be acted upon immediately. This is a separate action to that of notification. Where possible both should be undertaken concurrently.

### POEO Act definition of "**clean-up action**", in relation to a pollution incident, includes:

- (a) action to prevent, minimise, remove, disperse, destroy or mitigate any pollution resulting or likely to result from the incident, and
  - (b) ascertaining the nature and extent of the pollution incident and of the actual or likely resulting pollution, and
  - (c) preparing and carrying out a remedial plan of action.
- It also includes (without limitation) action to remove or store waste that has been disposed of on land unlawfully.

## 5.9 Spill Kits

Spill kits include a range of products and materials used to contain and absorb liquids. Some kits are designed for use on impervious surfaces (eg. bitumen, asphalt or concrete) whilst others are designed to contain and absorb liquids (mostly fuels and oils) in waterways. Spills onto bare or loose soil surfaces can usually be managed without having to use a spill kit.

Spill kits used by staff would commonly be “General Purpose” and would be capable of containing a spill of 80–90 litres. Special-purpose spill kits are also available for paints, solvents, acids and caustic or corrosive substances.

**5.9.1 Spill kit management**

Spill kits should be available in areas where hazardous substances are used/stored and should be easily accessible. Refer to the map with the spill kits location on section 4.4

Also

- Spill kits should be available on site and restocked/replaced if used.
- Spill kits should be available at:
  - Entrance to QC Lab
  - Glue bench under stairs Tank 2
  - Glue Bench Weigh up area
  - Receiving Office
  - Receiving Workshop
  - GB raw material warehouse under stairs
  - Tanker unloading dock
  - Flammable store
  - VAM unloading area
  - PVE 2 RX!
  - PVE weigh up area
  - Warehouse entrance
  - Warehouse corner PVE
  - HM end granule line
  - DG store / training room
  - R&D lab
  - Trade waste plant

**5.10 Safety Gear**

Use appropriate PPE before getting in close proximity to a chemical spill. PPE types to be used are identified on the SDS.

For aqueous based spills, such as dam waters and materials from sediment basins or floods, general safety gear for site will be suitable.

Further details of safety issues regarding incidents is under the PRAIMS AOH 3.1-02 SHE Incident Investigation and Reporting – A Requirements

**5.11 Location of information**

The Pollution Incident Response Management Plan will be located with the Emergency Response Plan. emergency documentation.

**5.12 Incident Action Hierarchy for Liquid and Flowable Solid Spills**

When a spill occurs, it is the duty of the employee/contractor who notices or creates the spill to:

- Raise the alarm that an incident has occurred
- If you are the Emergency Controller take over command of the clean-up unless replaced (see section 4.7)
- If not the Emergency Controller then follow their instructions
- Invoke the following actions in the following table.

<b>Incidents from liquids and flowable solids – generic procedure – use when site specific procedure does not exist</b>		
Main Action	Detailed Actions	Comments / information
Safety Check	Ensure personal safety – WHS rules apply at all times. Refer to the SDS for correct PPE or use standard PPE for the site for non-hazardous materials e.g. waters and muddy waters	Do not put yourself or any other person in danger when containing or cleaning up a spill. This is to prevent harm to humans. If anyone is injured or requires rescue they must be attended to first

	If the material leaking is a flammable liquid ensure that ignitions sources are isolated or removed from the area.	Typical examples are paints and thinners used for maintenance or other purposes.
	If the material is on fire or undergoing a dangerous reaction, invoke firefighting procedures.	Refer to Emergency Response Plan, fire procedures.
	Reporting requirements: Major incidents must be immediately reported	This is also covered in the Emergency Response Plan.
Stop the leak	Do not allow any material down Stormwater drains	This to prevent and minimise harm to the environment
	Where safe to do so minimise further leakage by turning off valves, pumps, or the machine, plugging leaks with bungs etc.	Stopping the leak or source of the pollution will minimise its impacts
	Do not flush stormwater drains with water unless authorised by the controlling agency e.g. Fire Brigade or EPA	Further runoff from the site will cause additional pollution. Only the EPA and Fire Brigades can make this decision.
	If the leak or spilt material is likely to go off-site and the incident is of such a scale consider notifying neighbours which may be affected.	This is covered in the section 6.1.
Contain the leak	Contain material to small area	Limiting the spread of the material will minimise harm to the environment
	Depending on the size of the spill: Quick construction of barriers or earth mounds, bunds and dams, sandbags and spill kits socks/pillows or absorbent materials to minimise spread of liquids and flowable solids	For large spills consider use of earthmoving equipment to quickly construct bunds and dams downstream to contain the spill. Smaller spills use spill kits. Note use socks/pillows to absorb oils on water surfaces.
	Take into account the topography of the site to plan location of barriers and dams to prevent spreading of the spill.	Refer to the plan of stormwater drains/drainage topography to locate water courses
	Prevent it from spreading any further by using the sausages (from the spill kit) to form a bund on the ground. Tie as many sausages together as needed to create a continuous barrier	On non-impervious surfaces use spill kit socks (or sandbags or similar) to form a bund downhill from the spill to stop it spreading; place spill kit pillows under leaks; broadcast absorbent material over the spill and work towards the centre of the spilled material with a stiff bristle broom.
Clean up	Clean up the spill Follow the method in the SDS If possible, transfer to another container/tank	This may involve organising the pump out of liquids by a waste contractor or transfer of liquids into drums or elsewhere.
	Mop up the spill with the Pads (from the spill kit) or spread liquid absorbent material over the spill.	Spill kits should be used in combination. Place contaminated spill kit materials in a suitable bin or drum (e.g. 200l)
	Shovel up or excavate contaminated soil	Place in a suitable drum/s or if large volume a special banded stockpile
	Spills on water: Deploy boom on downstream side of spill. Consider wind direction and current or tidal flows. Slowly pull the boom around the spill and then draw it back into a small area.	Position hydrophobic absorbent pads or hydrophobic granular material over the surface of the spill contained by the floating boom.
Waste management	For small spills: Place contaminated booms and pads in a 200 L drum or similar container and remove from site to an authorized waste disposal facility.	Waste storage should be referred to the SHEQ Manager. Aim for waste materials to be transported off site.
	Containers and drums which contain spilt materials to be stored temporarily until collected for waste disposal	Storage of waste drums may require bunds or other spill capture systems

Report	Complete an Environmental Incident Report in SHEcom	
	The report is automatically distributed globally within Henkel	
	If material harm is triggered, then a report to the EPA must be completed as per section 101, POEO General Regulation	Refer to EPA's incident reporting template.

## 5.13 Procedure to be followed Following an Air Incident

### 5.13.1 Pollution incidents – Air Emissions

An air emission can include, smoke, dust, odour or emission of a chemical or air impurity.

Incidents from Air Based Emissions - generic procedure – use when site specific procedure does not exist		
Emission	Action	Comments / Information
<b>Dust</b>	If dust is of such a scale it will impact on neighbours or represents a risk to neighbours, consider informing potentially affected neighbours to close their doors and windows and stay indoors until further notice	Generally observable or complaints based.
<b>Fire</b>	Depends on size and type of fire. Follow emergency plan for fires If smoke represents a risk to neighbours, consider informing potentially affected neighbours to close their doors and windows and stay indoors until further notice. Co-ordinate with combat agencies to inform neighbours.	Smoke is the main air emission of concern. Large fires threatening property may trigger evacuation procedures with neighbours. See Emergency Response Procedure
<b>Odour</b>	Neighbours who identify themselves when lodging a complaint will be followed up by the responsible site manager or nominee.	Expired stock can cause odour if not disposed in a short time frame. Problems with the extraction system can become in odour from raw materials and can affect neighbours.
<b>Noise</b>	Neighbours who identify themselves when lodging a complaint will be followed up by the responsible site manager or nominee	Note: noise is not a pollution Incident under the POEO Act.

### 5.13.2 External communications – government agencies and other parties

This is covered under:

- Emergency Response management Plan

### 5.13.3 Co-coordinating, with the authorities

POEO Act s153C States in relation to the contents of a PIRMP:

*(c) the procedures to be followed for co-ordinating, with the authorities or persons that have been notified, any action taken in combating the pollution caused by the incident and, in particular, the persons through whom all communications are to be made.*

This action should only be followed if there is no procedure or other requirement to follow in dealing with a spill type incident. For example, the emergency management plan SOP Leaks and Spills procedure.

The below actions in 5.4.2 and 5.4.3, or its alternatives, are to be implemented in conjunction with the emergency management plan.

### 5.14 Site Control – Incident Response

Emergency contact details are listed in the Appendix 1 of the emergency management plan.

To cover the requirements of this plan a generic procedure for site control and communications internally and with the appropriate government agencies, neighbours and other stakeholders appears in the Emergency Management Plan.

**Table 6 – Process for Site Controller for co-ordinating with the authorities**

Major incident Reporting Response		Henkel Management Actions
1.	For major <b>POLLUTION INCIDENTS</b> <b>immediately</b> appoint an interim site controller. SHEQ Manager will act as site controller. All Site Controllers are to consider advice provided and use this in decision making.	Site Management to appoint interim/temporary site controller.
2.	Arrival of more senior Henkel’s SHEQ Manager - Site Controller	Interim Site controller to hand over to Henkel SHEQ Manager and provide advice.
3.	Arrival of a combat agency – Fire and Rescue, EPA or SafeWork. Combat agencies to make clear who their Site Controller is. (A reported pollution incident will generally result in a combat agency arriving)	Site Controller to hand over to Combat agency Site Controller, assist provide advice and follow instructions.
4.	Advice to combat agency	Advice can include maps and equipment which is at hand which may assist in combating the incident.

### 5.15 Evacuation

For large dangerous incidents such as large bush fires or major flooding, the Site Controller may consider evacuation of staff to appropriate distances away from the incident. If an Emergency Plan has been developed, this plan will provide appropriate distances and or locations of evacuation areas.

### 5.16 Procedures for Notifying Pollution Incident to EPA, Local Councils or Relevant Authorities

This is covered under:

- Emergency Management Plan
- S6.2 Website Information

## 6 EARLY WARNINGS AND COMMUNICATIONS TO NEIGHBORS

### 6.1 Community Communication and Consultation

Henkel will update the immediate neighbours as required by phone.

An assessment of the typical pollution incident types has been undertaken, in Chapter 4 and in other Henkel reports to consider the potential impacts on neighbours. This resulted in the early warning actions located in Table 7 below.

**Table 7: List of Typical Main Pollutants and Potential Neighbour Impacts and Early Warnings**

<b>Air Based Emissions</b>		
<b>Description</b>	<b>Potential Risks</b>	<b>Early Warning actions</b>
Dust	Air quality issues Loss of amenity Community complaints	In extreme cases contact neighbours via doorknock process and ask them to close windows and doors and stay inside until further notice
Fire - smoke	Air quality issues	In extreme cases contact neighbours via doorknock process and ask them to close windows and doors and stay inside until further notice. For larger fires, coordinate with combat agencies.
Noise	Loss of amenity	Not required under PIRMP. Communicate with neighbours on as needs basis.
Odour	Air quality issues Loss of amenity Community Complaints	In extreme cases contact neighbours via doorknock process and ask them to close windows and doors and stay inside until further notice
<b>Spill type emissions</b>		
Fuel including diesel and petrol based fuels	Water quality issues if spill enters waterway Community complaints	In extreme cases contact neighbours via doorknock process and ask them to avoid use of the water until further notice. For larger spills coordinate with combat agency.
Lubricants and hydraulic oils	Water quality issues if spill enters waterway Community complaints	In extreme cases contact neighbours via doorknock process and ask them to avoid use of the water until further notice
Other chemicals	Water quality issues if spill enters waterway Community complaints	In extreme cases contact neighbours via doorknock process and ask them to avoid use of the water until further notice
Soils and erosion	Water quality issues if spill enters waterway Community complaints	In extreme cases contact neighbours via doorknock process and ask them to avoid use of the water until further notice
Contaminated materials uncovered	Water quality issues if spill enters waterway Community complaints	In extreme cases contact neighbours via doorknock process and ask them to avoid use of the water until further notice
Wastes	Water quality issues if spill enters waterway Community complaints	In extreme cases contact neighbours via doorknock process and ask them to avoid use of the water until further notice

**6.2 Website information**

This Pollution Incident Response Management Plan (PIRMP or Plan) Website Information has been written to comply with the legislative requirements under the *Protection of the Environment Operations Act 1997* (POEO Act) and the *Protection of the Environment Operations (General) Regulation 2009 s98D*:

*(2) A plan is also to be made publicly available in the following manner within 14 days after it is prepared:*

- (a) in a prominent position on a publicly accessible website of the person who is required to prepare the plan,
  - (b) if the person does not have such a website--by providing a copy of the plan, without charge, to any person who makes a written request for a copy.
- (3) Subclause (2) applies only in relation to that part of a plan that includes the information required under:
- (a) section 153C(a) of the Act, and
  - (b) clause 98C (1) (h) and (i) or (2) (b) and (c) (as the case requires).

Below is a recommended layout of what should be published on the Henkel website with a link to it in a prominent position.

### 6.3 Emergency Incident Response Procedures

Under *Part 5.7 of the POEO Act*, there is a duty to notify each relevant authority (identified below) of a pollution incident, where material harm to the environment is caused or threatened. Material harm includes actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial or that results in actual or potential loss (refer definitions) or property damage of an amount over \$10,000.

For the above pollution incidents, the Operations Manager of Henkel will be responsible for reporting to the authorities below without delay.

For further details refer to the PRAIMS AOH 3.1-02 SHE Incident Investigation and Reporting – A Requirements

**Relevant authorities' notification order**

**If there is an immediate threat to human health or the environment:**

<b>call Fire and Rescue first</b>	000
EPA	131 555
SW Paramatta PHU (Sydney West AHS)	02 9840 3603
SafeWork NSW	131 050
Blacktown City Council	02 9839 6000

**If there is not an immediate threat to human health or the environment:**

<b>call EPA first</b>	131 555
Blacktown City Council	02 9839 6000
SW Paramatta PHU (Sydney West AHS)	02 9840 3603
SafeWork NSW	131 050
Fire and Rescue	1300 729 579

*Company Environmental Complaints/Incident Reporting number 1300 361 371*

Early warnings for affected or potentially affected community members for any pollution incident are to be communicated to those members via a phone call. The Operations Manager or nominee will be responsible for coordinating the calls.

For air pollution incidents that may affect neighbours, those neighbours will be asked to close their doors and windows and stay indoors until further notice.

For water pollution incidents that may affect neighbours who could access the said water, those neighbours will be asked to avoid use of the water until further notice.

## 6.4 Availability and Location of This Plan

The POEO (General) Regulation 2009 s98D(1) states:

(1) A plan is to be made readily available:

- (a) to an authorised officer on request, and
- (b) at the premises to which the relevant licence relates, or where the relevant activity takes place, to any person who is responsible for implementing the plan.

The availability of this Plan will be made available by locating printed copies in the same locations as the Environment Protection Licence (EPL) is located – namely in the Operations Manager’s office, the SHEQ manager’s office and the first aid room.

Unlike the EPL this Plan is to only be available to those who are to implement the Plan. This is made clear by The POEO (General) Regulation 2009 s98D(3) which States

- 4) Any personal information within the meaning of the Privacy and Personal Information Protection Act 1998 is not required to be included in a plan that is made available to any person other than a person referred to in subclause (1).

If components of the Plan are considered to contain sensitive private information, then only those cleared should be permitted access to the full Plan. Alternative Plans with such sensitive information removed (e.g. contact phone numbers and names) can be more widely distributed. Full plans will be made available to the relevant government agencies, on request or during an incident response activity.

## 7 TRAINING – SUMMARY AND REFERENCE TO PROJECT PROCEDURE

Necessary environmental management competencies have been determined for each of the broad positions in Seven Hills including:

- Operations Manager
- SHEQ Manager
- Maintenance Manager
- Site Operations Leaders

Training of Henkel staff falls into several categories:

- Formal Internal Training
- Project / Site Training Information provided on site such as inductions and
- toolbox talks

To also satisfy the requirements under this PIRMP the training is to also include:

- Awareness of the PIRMP
- Where this Plan can be accessed
- Pollution incident classification and reporting under this plan
- Spill response actions under this plan
- Other incident response actions under this plan
- Early warnings internally and to neighbours where appropriate
- Specific procedures in dealing with potential pollution incidents SOP Leaks and Spills procedure.

## 8 UPDATING OF PLAN

**Effective date:** 20/10/2018

**Review date** This Plan will be updated according to the following:

- 12 months from the last update; or
- Within one month of a Category 1 Incident; or
- As identified after testing of the Plan (see section 8).

## 9 TESTING

The POEO (General) Regulation 2009 98E states for testing of the Plan:

- 1) *The testing of a plan is to be carried out in such a manner as to ensure that the information included in the plan is accurate and up to date and the plan is capable of being implemented in a workable and effective manner.*
- 2) *Any such test is to be carried out:*
  - (a) *routinely at least once every 12 months, and*
  - (b) *within 1 month of any pollution incident occurring in the course of an activity to which the licence relates so as to assess, in the light of that incident, whether the information included in the plan is accurate and up to date and the plan is still capable of being implemented in a workable and effective manner*

Testing of the Plan will be integrated into other emergency and incident testing and training programs where possible.

Initial testing of the plan will be undertaken within 12 months of the acceptance of the PIRMP. Design of the testing will be undertaken 1 month before the testing is conducted.

Records of the testing will be kept by SHEQ Manager and forwarded to the Operations Manager

### 9.1 Testing dates

This Plan will be tested according to the following:

- 12 months from the last test, or
- Or before one month after a reportable incident.

### 9.2 Recording of Testing

A detailed record of the testing of the Plan will be prepared after each testing of the plan is undertaken. If the test identifies any shortcomings in the Plan, especially the implementation of the spill response procedures, the Plan will be corrected, or appropriate non-conformance actions will be undertaken.

## 10 IMPLEMENTATION OF THE PLAN

The POEO Act 1997 s 153F requires the Plan be implemented if a pollution incident occurs. \$2 million maximum fines apply for failing to implement the Plan.

Hence if a pollution incident occurs:

- It must be responded to according to this Plan and its reference documents.
- An incident response report/audit must be completed
- Within 7 days provide a written report to the EPA as per the section 101 POEO (general) regulation.

## APPENDIX 1 RISK MODULES

This Plan uses a risk assessment process to demonstrate the existing risk control methods are effective in preventing and minimising environmental harm from pollution incidents. If unacceptable risks are identified new control measures will be introduced. The modular format permits the use of common activities associated with adhesives manufacturing to be used in future PIRMP documents. The modules used for this Plan for the Seven Hills site include:

- Hazardous chemicals
- Non-Hazardous materials
- Aqueous management

Each module uses a standard risk matrix used by Seven Hills PRAIMS AOH 3.1-22.

Each module lists the type of use or storage for the pollutant/s being considered. Each of the above is considered for a range of hazards and their control method considered. Also considered in the above process is:

- Impact on neighbours
- Safety
- Location
- If the pollutant is a hazardous chemical

### Risk Matrix

Environmental risks associated with Seven Hills and its contractor's activities use the following table A.

**Table A: Henkel risk matrix**

Frequency	Very Frequent	5					
	Frequent	4					
	Possible	3					
	Seldom	2					
	Very Seldom	1					
				1	2	3	4
			Negligible	Moderate	Serious	Critical	Very critical
			<b>Severity level</b>				
			Intolerable level of risk; action must be taken as a priority. For new projects, mandatory before startup.				
			Risk reduction to be considered, action to be taken in a timely manner. For new projects, can be completed after startup.				
			Risk is tolerable.				

## Severity level

<b>1 Negligible</b>	- no adverse worker health effects - no environmental impact - economic loss due to property damage <0.1 Mio €
<b>2 Moderate</b>	- minor worker injury - spills/releases of hazardous materials on-site or minor environmental on-site damage or remediation costs < 0.1 Mio € - economic loss due to property damage 0.1 - 0.5 Mio €
<b>3 Serious</b>	- Worker lost-time injury or minor injuries to multiple workers - spills/releases of hazardous materials off-site in an industrial area or moderate environmental damage or remediation costs 0.1 - 0.5 Mio € - economic loss due to property damage 0.5 - 2 Mio €
<b>4 Critical</b>	- worker fatality or major injury of multiple workers or public person - spills/releases of hazardous materials off-site in a mixed area or extensive environmental damage or remediation costs 0.5 - 2 Mio € - economic loss due to property damage 2 - 10 Mio €
<b>5 Very critical</b>	- multiple worker fatalities or public human fatality - spills/releases of hazardous materials off-site in a residential area or extensive environmental damage or remediation costs >2 Mio € - economic loss due to property damage >10 Mio €

## Probability level

<b>1 Very seldom</b> very low probability for hazard	- is not known to have happened, - occurs within 100 – 1,000 years, - imaginable within the period of several generations
<b>2 Seldom</b> low probability for hazard	- occurs within 10 – 100 years, - on average once during operational lifetime of the plant
<b>3 Possible</b> possibility for hazard	- is known to have happened - occurs within 1 – 10 years, - possible several times during operational lifetime
<b>4 Frequent</b> high probability for hazard	- occurs within the period of 1 year - will probably reoccur within 3 – 5 years - possible frequently during lifetime
<b>5 Very frequent</b> very high probability for hazard	- occurs for more than once per year - will probably reoccur within 1 year

The hazards, likelihood and pre-emptive measures assessments which follow use table A in assessing the environmental risks associated with the hazards identified.

### Aqueous Based Management Risk Module 1 – example only- [change where applicable]

#### Purpose

This risk module forms part of the Seven Hills. The activities associated with this module are related only to aqueous based materials, generally water and wastewater management.

#### Activities

Aqueous management involves:

- Wastewater discharge from tanks washing, surface washing, cooling towers, washing plant, and any other activities which add pollutants to water.

This risk module describes the main hazards to human health, or the environment associated with aqueous management. The first table in the risk module lists the potential pollutants. The second

table describes the potential pollution incidents with pre-emptive actions to be taken to minimise or prevent any risk of harm to human health or the environment. In the case of actual or threatened material harm to the environment or human health procedures must be followed for contacting authorities as [insert name of site Environmental Incident Classification and Reporting Procedure]. For incidents where pollution has the potential to impact on the community, early warning systems as described in section 6 of this document are to be initiated.

Further details on the risk assessment and appropriate control methods can be found in the following document:

- Seven Hills WRA

The module has been written to cover general environmental hazards and their controls. As the site environmental management system is fluid, new documentation may better reflect the risks and controls.



<b>List of Polluting Substance Storages/Uses At Site Initial Assessment – Aqueous Management</b>								
Site Name: Seven Hills					Responsible person: SHEQ Manager			
<b>Name / description</b>	<b>Hazardous Chemicals</b>	<b>Amount stored</b>	<b>Location of storage</b>	<b>Map ref</b>	<b>Need for early warning<sup>1</sup></b>	<b>Pre-emptive action ref</b>	<b>Ref to safety coverage</b>	<b>Ref to Hazard and likelihood assessment</b>
<b>AQUEOUS (eg dams, wastewater tanks, other water storage area)</b>								
waste water discharge off site	Only if it contains a hazardous chemical spill	variable	variable	variable	Only in extreme cases where spills threaten to impact on health of waterway	Site cleaning procedure Spill response procedure First Flush	Emergency Management Plan Cleaning Procedure	See items 1. 2. and 3.
Wastewater/fire water	Only if it contains a hazardous chemical spill	variable	variable	variable	Only in extreme cases where spills threaten to impact on health of waterway	Site cleaning procedure Spill response procedure First Flush	Emergency Management Plan Cleaning Procedure	See item 4
<b>SUBSTANCES IN PROCESSES (substances which could be emitted)</b>								
rubbish and litter	Only for asbestos waste	variable	variable	variable	If asbestos is found and fibres enter waterway or become airborne and threaten to impact community	Waste management procedure Asbestos handling procedure	List relevant safety procedures if different from environment	See item 2

<sup>1</sup> Early warnings relate to informing neighbours who may be affected by the emission of this substance. If this substance is of a type and quantity which may reach neighbours, then early warning assessment of actions is required to be undertaken.



<b>Hazard and Likelihood Risk assessment and Corrective Control Measures – Soil and Water Management</b>						
Site Name: Seven Hills					Responsible person SHEQ Manager	
<b>Name / ref of pollutant/ chemicals</b>	<b>Description of Hazard / Incident leading to hazard</b>	<b>Level of impact</b>	<b>Likely hood</b>	<b>Priority</b>	<b>Impact on neighbours</b>	<b>Control Measures Corrective Action</b>
<b>1.Wastewater discharge off site from sediment basins</b>	Insufficient treatment time leading to Breach of Sydney Water licence limit for suspended solids	2	1	Y	Unlikely but possible	1. Staff induction and training 2. Environment Incident procedure
	Incorrect chemical addition leading to low pH discharge and breach of Sydney Water licence	2	1	Y	Unlikely but possible	1. Staff induction and training 2. Environment Incident procedure
	Insufficient oil/grease removal leading to breach of Sydney Water Licence	2	1	Y	Unlikely but possible	1. Spills procedure 2. Staff induction and training 3. Environment Incident procedure
<b>2. Rubbish and other</b>	Improper disposal of waste material found in soil, causing contamination of land or water	3	1	Y	Unlikely but possible	1. Contractor to remove and dispose in accordance with council regulations 2. Staff induction and training 3. Contractor waste management 4. Environment Incident procedure
<b>3.Plant and equipment leaks and spills</b>	Spills into waterways from plant and equipment (e.g. hydraulic hose leaks, leaks from tanks, leaks from vehicles)	3	1	Y	May impact on surface water quality if it goes off site	1. Site EMS requires the following: to ensure that chemical storage areas must be suitably located and banded in a secure protected area with an impermeable floor. First flush systems act as capture / additional containment 2. Spill response measures implemented as per spill procedure or s5.5 of this Plan 3. Auditing of site EMS
<b>4. Wastewater/Fire water</b>	Water use to tackle fire	3	1	Y	May impact on surface water quality if it goes off site	1. Training 2. Drills 3. EMP



## Chemical Handling and Storages Risk Module 2

### Purpose

This risk module forms part of Seven Hills. The activities associated with this module generally relates to chemical handling and storages as classified as hazardous chemicals under the WHS Regulation 2011 but can include other non-aqueous liquid chemicals used at the site.

### Activities

Use of chemicals on site is limited to:

- Petroleum products - fuels, lubricants, hydraulic oils, and chemicals, etc. Largely class 3 flammable or combustible liquid classification
- Aerosol cans.
- Waste chemicals – including waste contaminated with chemicals such as containers, spill clean-up materials etc.
- Other chemicals stored in smaller quantities in groups

This risk module describes the main hazards to the environment associated with chemical use and storage. The first table in the risk module lists the potential pollutants. The second table describes the potential pollution incidents with pre-emptive actions to be taken to minimise or prevent any risk of harm to human health or the environment. In the case of actual or threatened material harm to the environment or human health procedures must be followed for contacting authorities as in *RMS Environmental Incident Classification and Reporting Procedure*. For incidents where pollution has the potential to impact on the community, early warning systems as described in section 6 of this document are to be initiated.

Further details on the risk assessment and appropriate control methods can be found in the following documents:

- Seven Hills WRA
- WHS Management System
- Hazardous Chemical Register for the site

The module has been written to cover general environmental hazards and their controls.



List of Polluting Substance Storages/Uses at Site Initial Assessment - Chemical Use and Storage at Seven Hills								
Operational Area: Across the site					Responsible person: SHEQ Manager			
Name / description	Hazardous Chemicals	Amount stored/. used	Location of storage	Map reference	Need for early warning <sup>2</sup>	Pre-emptive action ref	Ref to safety coverage	Ref for Hazard and likelihood assessment
<b>CHEMICALS (raw materials and products which can cause pollution)</b>								
Flammable raw materials	Yes, and some no, most are class 3	10000 L max	Flammable Store area, PVE	Map 4.2	Only in significant off-site odour and water emissions	See EMP,	See OH&S System manual e.g. s 2 training	1P
Corrosive raw Materials	Yes, possibly class 8,	10000 L max	PVE, glue bench	Map 4.2	Only in significant off-site water emissions	See EMP,	See OH&S System manual e.g. s 2 training	2P
Oxidizing RM	Yes, possibly class 5	2500 kg max	Oxidizers Store Area, PVE	Map 4.2	Only in significant off-site emissions	See EMP,	See OH&S System manual e.g. s 2 training	1F

<sup>2</sup> Early warnings relate to informing neighbours who may be affected by the emission of this substance. If this substance is of a type and quantity which may reach neighbours then early warning assessment of actions is required to be undertaken.



**List of Polluting Substance Storages/Uses at Site Initial Assessment - Chemical Use and Storage at Seven Hills site**

<b>Name / description</b>	<b>Hazardous Chemicals</b>	<b>Amount stored/. used</b>	<b>Location of storage</b>	<b>Map reference</b>	<b>Need for early warning</b>	<b>Pre-emptive action ref</b>	<b>Ref to safety coverage</b>	<b>Ref for Hazard and likelihood assessment</b>
Diesel fuel storage	Yes – C1	2000 L in tank max	Boiler	Map 4.2	Only in significant off-site emissions	See EMP,	SDS and DG training, EMP	1D
Oil and grease for lubrication of plant and equipment	No C2	1000 L max	Glue Bench store	Map 4.2	Only in significant off-site water emissions	See EMP,	SDS and DG training, EMP	1O
Hydraulic oil for plant and equipment storage and use	No C2	1000L max	Glue Bench	Map 4.2	Only in significant off-site water emissions	See EMP	SDS and DG training, EMP	1O
Compressed gases – air, oxy acetylene sets and LPG	Yes – 2.1 flammable or non-toxic non-flammable	1 tonne	Maintenance, LPG tank area	Map 4.2	Only in significant off-site emissions	See EMP,	SDS and DG training, EMP	1G
Wastes – liquid wastes cleaning tanks	Largely no,	Variable	Bunded tanks	Map 4.2	Only in significant off-site emissions	See EMP,	SDS and Spills training	1W



Hazard and Likely hood Risk Assessment and Corrective Control Measures Chemical Handling and Storages							
Name / ref of pollutant/ chemicals	Description of Hazard / Incident leading to hazard	Severity	Likely hood	Risk Factor	Impact on neighbours	Control Measures Corrective Action	Responsible Person
1P, 2P, 1D, 2D, 1F, 2F (diesel usage, flammable liquids and storages in dedicated storage areas)	Catastrophic leak from storage container – enters stormwater drain – overflows and some enters river waters	5	1	M	May impact on surface water quality if it goes off site	<ol style="list-style-type: none"> <li>1. Staff training</li> <li>2. Spills procedure</li> <li>3. EMP section dangerous goods</li> <li>4. EMP section incident management</li> <li>5. First flush system</li> </ol>	See EMP
	Spills and leaks around the site pavement area overflows and some enters river waters	3	2	L	Small volumes make for unlikely impact	<ol style="list-style-type: none"> <li>1. Staff training</li> <li>2. Spills procedure</li> <li>3. EMP section dangerous goods</li> <li>4. EMP section incident management</li> <li>5. First flush system</li> </ol>	See EMP



Hazard and Likely hood Risk Assessment and Corrective Control Measures Chemical Handling and Storages							
Name / ref of pollutant/ chemicals	Description of Hazard / Incident leading to hazard	Severity	Likely hood	Risk Factor	Impact on neighbours	Control Measures Corrective Action	Responsible Person
1P, 2P, 1D, 2D, 1F, 2F, 1O (Diesel usage, flammable liquids and storages in dedicated storage areas)	Odour and other air emissions	3	3	M	May impact on neighbours down wind	<ol style="list-style-type: none"> <li>1. Staff training</li> <li>2. Spills procedure</li> <li>3. EMP section dangerous goods</li> <li>4. EMP section incident management</li> </ol>	See EMP
	Fire in storage area – smoke air emissions	5	1	M	May impact on neighbours down wind	<ol style="list-style-type: none"> <li>1. Staff training</li> <li>2. Spills procedure</li> <li>3. EMP section dangerous goods</li> <li>4. EMP section incident management</li> <li>5. Working in fire season procedure</li> </ol>	See EMP



<b>Hazard and Likely hood Risk Assessment and Corrective Control Measures            Chemical Handling and Storages</b>							
<b>Name / ref of            pollutant/            chemicals</b>	<b>Description of Hazard            / Incident leading to            hazard</b>	<b>Severity</b>	<b>Likely hood</b>	<b>Risk Factor</b>	<b>Impact on            neighbours</b>	<b>Control Measures            Corrective Action</b>	<b>Responsible            Person</b>
1W Waste storage	Leaks and spills from waste storage entering stormwater systems etc.	3	2	L	Small volumes make for unlikely impact	1. Staff training 2. Spills procedure 3. EMP section dangerous goods 4. EMP section incident management 5. First flush system	See EMP
1O Plant and equipment leaks and spills	Spills into waterways from plant and equipment (e.g. hydraulic hose leaks, tanks leaks, leaks from vehicles and road plant.)	3	3	M	May impact on surface water quality if it goes off site	1. Staff training 2. Spills procedure 3. EMP section dangerous goods 4. EMP section incident management 5. First flush system	See EMP



## APPENDIX 3 – REGULATORY REQUIREMENTS

### PIRMP Legislation

#### POEO Act Part 5.7

##### **153A** Duty of licence holder to prepare pollution incident response management plan

The holder of an environment protection licence must prepare a pollution incident response management plan that complies with this Part in relation to the activity to which the licence relates.

##### **Information to be included in plan**

A pollution incident response management plan must be in the form required by the regulations and must include the following:

(a) the procedures to be followed by the holder of the relevant environment protection licence, or the occupier of the relevant premises, in notifying a pollution incident to:

(i) the owners or occupiers of premises in the vicinity of the premises to which the environment protection licence or the direction under section 153B relates, and

**153C**

(ii) the local authority for the area in which the premises to which the environment protection licence or the direction under section 153B relates are located and any area affected, or potentially affected, by the pollution, and

(iii) any persons or authorities required to be notified by Part 5.7,

(b) a detailed description of the action to be taken, immediately after a pollution incident, by the holder of the relevant environment protection licence, or the occupier of the relevant premises, to reduce or control any pollution,

(c) the procedures to be followed for co-ordinating, with the authorities or persons that have been notified, any action taken in combating the pollution caused by the incident and, in particular, the persons through whom all communications are to be made,

(d) any other matter required by the regulations.

##### **Keeping of plan**

**153D**

A person who is required to prepare a pollution incident response management plan under this Part must ensure that it is kept at the premises to which the relevant environment protection licence relates, or where the relevant activity takes place, and is made available in accordance with the regulations.

##### **Testing of plan**

**153E**

A person who is required to prepare a pollution incident response management plan under this Part must ensure that it is tested in accordance with the regulations.

##### **Implementation of plan**

**153F**

If a pollution incident occurs in the course of an activity so that material harm to the environment (within the meaning of section 147) is caused or threatened, the person carrying on the activity must immediately implement any pollution incident response management plan in relation to the activity required by this Part.

#### POEO (General) Regulation 2009

##### **Hazards:**

98C(a) A description of the hazards to human health or the environment associated with the activity to which the licence relates

##### **Likelihood:**

98C(b) the likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood,

##### **Pre-Emptive Action:**

98C(c) details of the pre-emptive action to be taken to minimise or prevent any risk of harm to human health or the environment arising out of the relevant activity,

98C(d) **Pollutant Inventory Types:**



- an inventory of potential pollutants on the premises or used in carrying out the relevant activity,
- Pollutant Inventory Quantities:**
- 98C(e) the maximum quantity of any pollutant that is likely to be stored or held at particular locations (including underground tanks) at or on the premises to which the licence relates,
- Safety Equipment:**
- 98C(f) a description of the safety equipment or other devices that are used to minimise the risks to human health or the environment and to contain or control a pollution incident,
- Staff Contacts:**
- the names, positions and 24-hour contact details of those key individuals who:
- 98C(g) are responsible for activating the plan, and  
are authorised to notify relevant authorities under section 148 of the Act, and  
are responsible for managing the response to a pollution incident,
- Authority Contact:**
- 98C(h) the contact details of each relevant authority referred to in section 148 of the Act,
- Early Warnings Neighbours:**
- 98C(i) details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity of the premises to which the licence relates or where the scheduled activity is carried on,
- Staff Safety:**
- 98C(j) the arrangements for minimising the risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried on,
- Maps:**
- 98C(k) a detailed map (or set of maps) showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises,
- Early Warnings General:**
- 98C(l) a detailed description of how any identified risk of harm to human health will be reduced, including (as a minimum) by means of early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk,
- Training of Staff:**
- 98C(m) the nature and objectives of any staff training program in relation to the plan,
- Timing of Testing:**
- 98C(n) The dates on which the plan has been tested and the name of the person who carried out the test,
- Updating of Plan:**
- 98C(o) the dates on which the plan is updated,
- Plan Testing**
- 98C(p) the manner in which the plan is to be tested and maintained.
- Availability of plan:**
- (1) A plan is to be made readily available:
- 98D(1) (a) to an authorised officer on request, and  
(b) at the premises to which the relevant licence relates, or where the relevant activity takes place, to any person who is responsible for implementing the plan.
- Publishing Plan Parts:**
- (2) A plan is also to be made publicly available in the following manner within 14 days after it is prepared:
- 98D(2) (a) in a prominent position on a publicly accessible website of the person who is required to prepare the plan,  
(b) if the person does not have such a website--by providing a copy of the plan, without charge, to any person who makes a written request for a copy.
- 98D(3) **Procedures under Act:**



3) Subclause (2) applies only in relation to that part of a plan that includes the information required under:

- (a) section 153C(a) of the Act, and
- (b) clause 98C (1) (h) and (i) or (2) (b) and (c) (as the case requires).

**Privacy Protection:**

98D(4) (4) Any personal information within the meaning of the *Privacy and Personal Information Protection Act 1998* is not required to be included in a plan that is made available to any person other than a person referred to in subclause (1).

**Testing of the Plan** - 1) The testing of a plan is to be carried out in such a manner as to ensure that the information included in the plan is accurate and up to date and the plan is capable of being implemented in a workable and effective manner.

98E(1)

**Minimum Testing:**

2) Any such test is to be carried out:

- (a) routinely at least once every 12 months, and
- (b) within 1 month of any pollution incident occurring in the course of an activity to which the licence relates so as to assess, in the light of that incident, whether the information included in the plan is accurate and up to date and the plan is still capable of being implemented in a workable and effective manner