



Element 10 - Community Awareness and Emergency Preparedness

Villawood Site Pollution Incident Response Management Plan (PIRMP)

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1 INTRODUCTION

1.1 BACKGROUND

PPG Industries Australia Pty Limited ("the licensee") is the holder of Environment Protection Licence No. 1996 ("the licence") issued under the Protection of the Environment Operations Act 1997 ("the Act"). The licence authorises the carrying out of activities at 9 Birmingham Ave, Villawood, NSW, 2163 ("the premises") for the production of chemicals and their storage.

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), the Protection of the Environment Operations (General) Regulations 2009 (POEO Regulation) and the Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012 ("the amendment").

The requirement for a PIRMP must:

- be kept at all times at the premises to which the environment protection licence relates;
- include information as detailed in the Act and be in the required form as required in the amendment;
- be tested on an annual basis and within one month of any pollution incident occurring with the course of an activity to which the licence relates as per clause 98E (2)(b) of the amendment; and
- be immediately implemented if a pollution incident does occur in the course of an activity so that material harm to the environment is not caused or threatened.

2 FACILITY INFORMATION

PPG Industries at the Villawood site undertakes activities of batch mixing, milling, grinding, dispersing and packaging of water-based paints.

2.1 FACILITY DETAILS

Facility details as listed in the site Environmental Protection Licence 1996 are as follows:

Company	PPG Industries Australia Limited
Postal Address	PO BOX 204, Chester Hill. NSW 2162
Site Address	9 Birmingham Ave, Villawood. NSW 2163
Scheduled Activities	Chemical Production Chemical Storage
Contact Number (general enquiries)	02 9794 1200
Contact Number (Environmental Hotline)	02 9725 7953

Below is a google image of the location of the PPG Industries facility. Detailed site maps are presented in Annex A.



The site location (including surrounding land users) and layout is presented in Figures 1, 2 and 3 in Annex A.

3 POLLUTION INCIDENT RESPONSE MANAGEMENT (PIRM)

3.1 OBJECTIVES

The objectives of the plan are to:

- Ensure timely and comprehensive communication about a pollution incident on site to all staff at the premises, the Environmental Protection Authority (EPA), other authorities and the community who may be affected by the impacts of the incident;
- Minimise and control the risk of a pollution incident at the facility by identifying any environmental risks and development of planned actions to minimise and manage those identified risks; and
- Ensure the plan is implemented by trained employees, identify those employees responsible for the implementation of the plan, and ensure the plan is regularly tested for accuracy, currency and suitability.

The PIRMP will be implemented only if material harm to human health or the environment occurs or threatens to occur.

3.2 HAZARD IDENTIFICATION AND RISK CONTROL

3.2.1. POLLUTANT INVENTORY

Paint manufacturing by nature has a list of pollutants which are used as part of the process and as a result have been considered under the PIRMP. The list below covers the main pollutants, and the related potential incidents, for the Villawood facility.

- Pollution to land from solvents, ammonia or other chemicals stored onsite;
- Surface water pollution from solvents, ammonia or other chemicals stored onsite;
- Groundwater pollution from solvents, ammonia or other chemicals stored onsite;
- Air pollution from paint manufacturing process; and
- Fire in production plant

A list of the potential pollutant sources, maximum quantities that may be stored at the Villawood facility, and the approximate locations of each pollutant source are detailed in the table below:

Pollutant	Maximum Quantity	Location	Map Reference
Ammonia 23 Solution	1 x 4000 litres above ground tank	Ammonia Tank	CG5/DG2
Emulsion (Primal RHS-884)	350,000 litres	Tank Farm 2	Tank Farm #2
Acticide BW2	N/A	Manufacturing Plant and Bulk Store	DG1 and DG3
Teric N9	N/A	Manufacturing Plant and Bulk Store	DG1/CG3 and DG3/CG8
Texanol (NX795) Tank	50,000 litre above ground tank	Tank Farm 1	Tank Farm #1
Propylene Glycol	50,000 litre above ground tank	Tank Farm 1	Tank Farm #1
Non-DG or Class 3 Chemicals	2,000 litres	Various drum storage areas	Manufacturing Plant and Empty Drum Bund
Small amounts of Class 3 solvents and paints.	40 litres	R&D, upstairs in operations building	CG4
Acetylene cylinders and oxygen for welding	6 cylinders (21 cubic meters)	Maintenance Shop	CG6
WD40 and drums of diesel.	500 litres diesel 12 cans WD40	Maintenance Shop	CG6
Diesel	200 Litre AST and 50L Drums	Diesel Store Shed (AST) and Maintenance Shop	CG8
First Flush System	40,000L Sump	Adjacent to Tank Farm 2	First Flush System

Figures 2 and 3 illustrating the locations of the identified pollutants in the table above and the stormwater easement are located in **Annex A**. Chemical storage locations on-site are presented in Figure 2. For chemicals specifically required to be listed in the sites dangerous goods manifest, locations are shown in Figure 3.

This Plan considers air, surface water, groundwater and land pollution incident impacts. Overall well designed and documented environmental management systems are in place to effectively minimise the likelihood and impact of any of these potential pollution incidents.

3.2.2. HAZARD IDENTIFICATION

Potential environmental hazards specific to Villawood facility operations include:

- Chemical storage spills/ leaks (emulsion, ammonia, diesel, other dangerous goods);
- Uncontrolled air emissions release to air (odour, dust, volatile organic compounds);
- Mis-management of potentially hazardous waste materials;
- Fire (electrical and other ignition sources);

A risk assessment has been completed providing a description and likelihood of occurrence for hazards identified at the site and is presented in **Annex B**.

3.2.3. POLLUTION CONTROL MEASURES

The Villawood facility has implemented a number of pre-emptive controls/actions which minimise the risk of harm to the environment, which include:

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- bunded hard stand areas to store chemicals and products, designed to contain spills;
- Interlocks on storage tanks to prevent overfilling as well as high level trips;
- Easement stormwater flood gate to contain spills from going off-site;
- maintenance system to ensure operation of equipment deemed critical (if equipment failed would result in environmental incident) is maintained and in good working order;
- first flush system to collect any spills or overflow of bunded areas prior to migrating off-site;
- provision of spill kits located across the facility for quick response to spills;
- provision of eye wash stations across the facility for quick response to any eye related medical requirements;
- Dust collectors and filter system for dust and associated with paint production;
- provision of material safety data sheets (MSDS) located within storage areas (**Annex D**);
- Sprinkler system as well as fire extinguishers, hose reels and fire blankets; and
- Alarms.

3.2.4. TRAINING

The PPG Training Procedure (EHS-VIL-05-001) describes training program for all PPG staff. Training requirements for persons and their back-ups, relevant to their role and responsibility (this does not include external certifications and licenses for subcontractors) are contained on SharePoint under Element 5 in the training matrix (EHS-VIL-05-002).

The training matrix covers environmental topics such as:

- Air Emission Awareness;
- Spill Prevention, Response and Reporting Requirement;
- Waste Segregation;
- Storm water Management.

Emergency Response training covers off environmental emergencies such as an uncontrolled spill. The training topics for emergency response contained within the training matrix are:

- Emergency Management Team Responsibilities;
- Emergency Evacuation Awareness;
- Emergency Evacuation Drills;
- ERS Team Member Response Training topics.

3.2.5. RISK ASSESSMENT

Potential environmental hazards identified for the site, and the likelihood of any such hazards occurring, are contained in the risk assessment in **Annex B**.

3.3 INCIDENT RESPONSE

The following sections and Section 3.5 provide details on the incident response, including the communication and on-site emergency response actions for responding to an incident that has resulted in a material impact to human health or the environment.

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A pollution incident is required to be immediately notified if there is a risk of 'material harm to the environment', defined under section 147 of the POEO Act as:

- a) harm to the environment is material if:
 - i. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
 - ii. it results in actual or potential loss or property damage or 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.

3.4 INCIDENT RESPONSE PROCESS

Incident response tables have been developed for risks considered most likely to occur both in a general nature for spill management, uncontrolled air emissions and fire management and also more specifically for bulk hazardous chemicals relevant to the facility and include the following:

- Spill Incident Response – General
- Spill Incident Response – Acticide BW20
- Spill Incident Response – Ammonia 23
- Spill Incident Response – Primal RHS-884
- Spill Incident Response – Teric 9
- Spill Incident Response – Texanol
- Spill Incident Response – Propylene Glycol
- Uncontrolled Air Emissions Incident Response (Odour, Dust, VOCs)
- Fire Incident Response

Individual incident response plans are presented in **Annex C**.

3.5 COMMUNICATION

3.5.1. INTERNAL COMMUNICATION

All incidents are to be reported immediately to either the onsite EHS Manager either in person or by mobile (0436 812 772) or via the sites internal emergency number (1111) or direct to security (02 97257953 or 0428 609 953), where security can then initiate the correct response, such as contacting:

- Emergency Response Squad (ERS) via radio;
- emergency services via 000; and
- other responders such as EHS via telephone.

The EHS Manager is responsible for notifying the site Operations Manager (0436 813 705), ANZ EHS Manager (0407 247 172). In the absence of the EHS Manager, the site Operations Manager (0436 813 705) is responsible for the Incident Response coordination and should be contacted directly.

3.5.2. EMERGENCY SERVICES

The key external contacts that are required to be notified are listed below. If the incident presents an immediate threat to human health or property call “000”.

EMERGENCY SERVICES	WORK	AFTER HOURS
EMERGENCY (Fire / Ambulance / Police)	000	000
CLEANAWAY EMERGENCY SPILL HOTLINE	1800 774 557	1800 774 557

3.5.3. GOVERNMENT AGENCIES

The key external contacts that are required to be notified are listed below. If a pollution incident occurs where “material harm” to the environment is caused or threatened the notification protocol set out in Section 3.4.1 is followed. If the incident does not require an immediate attention notify the authorities in the order listed in section below.

RELEVANT AUTHORITY NOTIFIABLE ORDER	WORK	AFTER HOURS
NSW EPA	131 555	131 555
CITY OF CANTERBURY BANKSTOWN COUNCIL	9707 9400	9707 9400
MINISTRY OF PUBLIC HEALTH UNIT - CAMPERDOWN	9515 6111	-
SAFework NSW	131 050	131 050

3.5.4. LOCAL COMMUNITY

Community stakeholders that are potentially affected by an incident will be notified immediately by phone call after being instructed by one of the key site contacts. PPG Industries has and would continue to undertake community and stakeholder consultation where necessary.

PPG Industries will continue to update the community where required as outlined in PPG Villawood EHSMS Document, Element 10 – Community Awareness and Emergency Response Procedures.

Immediate Neighboring Sites	Property Address	Work	After hours
Villawood Detention Centre	15 Birmingham Ave	9780 9220	9780 9220
Orica	2 Christina Road	1800 100 327	1800 100 327
Move Dynamics	14 Epic Place	9645 7744	9645 7744
Industrial Unit Complex	7 Birmingham Ave	See tenants below	
Dew Point Engineering	Unit 10/7 Birmingham Ave	0412 533 707	0412 533 707
Tru Blu Beverages	12 Birmingham Ave	02 9912 6700	N/A
Viking Imports	Unit 12/2B Birmingham Ave	02 8004 0399	N/A
Merrylands Floor Coverings Pty Ltd	Unit 1/7 Birmingham Ave	02 9682 3100	
Vacant	Unit 2/7 Birmingham Ave		
Vacant	Unit 3/7 Birmingham Ave		
Hilal meat	Unit 4/7 Birmingham Ave	02 9724 2966	N/A
Australian Digital Copiers	Unit 5/7 Birmingham Ave	1300 792 072	N/A
TT Clothing Pty Ltd	Unit 6/7 Birmingham Ave		
Lamspeed Racing	Unit 7/7 Birmingham Ave	0424 519 217	N/A

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Vacant	Unit 8/7 Birmingham Ave	N/A	N/A
Vacant	Unit 9/7 Birmingham Ave	N/A	N/A
Melli Mechanical Repairs	Unit 11/7 Birmingham Ave	9728 4177	
Minipack Packaging	Unit 12/7 Birmingham Ave	9724 3616	
Nazar Kebabs	Unit 13/7 Birmingham Ave	0424 761 982	0424 761 982
Oceania Kebab Manufacturing	Unit 14/7 Birmingham Ave	0451 626 262	N/A
Vacant	Unit 15/7 Birmingham Ave	N/A	N/A
Eden @ Villawood Brothel Sydney	Unit 16/7 Birmingham Ave	8747 4717	0426 095 166

The communication method may change depending on the nature of the event or as directed by the relevant agency. Regular updates if required will be provided to the affected community throughout the course of event by one of the key site contacts.

Complaint Hotline number is 02 9725 7953 and is available for members of the public to raise any concerns in regards to PPG operations.

3.6 ADMINISTRATION

3.6.1. EMPLOYEE AWARENESS & TRAINING

All new employees will be made aware of the requirements of the plan as part of their induction process. All employees are required to complete environmental training on an annual basis as per the training matrix (described above in Section 3.2.4).

In addition to the above induction, details of the plan will be provided to the key contacts and members of the emergency response team as part of the EMP annual training.

3.6.2. EVALUATION/TESTING

This plan is tested on an annual basis for accuracy, currency and suitability and within one month of any pollution incident occurring in the course of an activity to which a licence relates. A scenario is conducted based on the hazards identified. The plan is updated following the testing to make sure that it is current and suitable and reflective of onsite processes.

If the plan does not require any updates following the annual testing, at a minimum the following must be reviewed and updated:

- all phone numbers
- neighbouring properties (name and contact details)
- site emergency numbers

The below table provide details of testing activities.

Date	Person (s) present	Manner of Testing
26 June 2017	Mike Allen (EHS Manager), Robert Byrne (ERS Bulk Store Supervisor), Wes Pearce (ERS Bulk Store Operator), James Gudjonson (Bulk Store Operator).	The site tested the PIRMP during a test scenario as required under EPA License requirements. During the test, all parties carried out the correct actions to stop, isolate, contain, and raise alert to an IBC spill on-site.

9 May 2018	Troy Brimmer (Plant Operator), Bindu Malla (EHS Rep), Edward Clarke (Supervisor), Robert Byrne (ERS Bulk Store Supervisor).	A scenario of an IBC containing Ammonia, that had developed a leak due to valve damage, was tested in the ammonia unloading area.
23 May 2019	Glenn Hughes (EHS Rep), Wesley Pearce (ERS), Robert Byrne (ERS), Sean Lawrence (ERS).	A scenario of a leaking propellant from the spray can ignited by electric motor in close proximity resulting fire on flammable materials and pressurized spray cans.
23 July 2019	Glenn Hughes (EHS Rep), Miroslav Adamovic (ERS)	A scenario of a leaking glycol spill at the roadway due to hose coupling failure while transferring glycol from tanker to the site glycol tank.
09 April 2020	Bindu Malla (EHS Rep), Lauren Harkin(EHS Rep), George Lambropoulos (Production Manager); Merv Bradbury (Operator), ERS (Miroslav)	Minor Ammonia leak from Tank 5 meter (within the factory) review.
16 April 2020	Bindu Malla (EHS Rep), Lauren Harkin(EHS Rep), George Lambropoulos (Production Manager) , Troy Brimmer (Operator),	Teric N9 minor spill in Bulk store (within the factory in bunded area with ventilation) review.
07 Oct 2020	Glenn Hughes (EHS Rep), Bindu Malla (EHS Rep), Sean Lawrence (ERS, Operator).	A scenario of Ammonia leak into occupied confined space – Disperser
08 Oct 2020	Glenn Hughes (EHS Rep), Bindu Malla (EHS Rep), Gavin Jones (Engineering Manager), Wesley Pearce (ERS, Operator), Ted Clarke (Supervisor), Rob Bryne (ERS, Team Leader), George Lambropoulos (Production Manager) , Karkaletsis (Operation Manager),	A scenario of Air dust reaching offsite.
14 Oct 2020	Glenn Hughes (EHS Rep), Bindu Malla (EHS Rep), Miroslav (ERS, Operator).	A scenario of Ammonia leak into Specialty Making area through damaged pipe.
2 Jun 2021	Lauren Harkin (EHS Rep), George Lambropoulos (Production Manager), E Clarke, Donna Karkaletsis (Operation Manager), Rob Byrne (ERS, Team Leader), Wes Pearce (ERS, Operator) , Gavin Jones (Engineering Manager), Bindu Malla (EHS Rep) and Ashley Ogle (Quality Manager)	A scenario of Forklift collision while transporting Ammonia IBC (within the factory in bunded area with ventilation)
3 Sep 2021	Lauren Harkin (EHS Rep), George Lambropoulos (Production Manager), E Clarke, Donna Karkaletsis (Operation Manager), Gavin Jones (Engineering Manager),) and Ashley Ogle (Quality Manager)	9,000L Glycol spill contained within the Glycol/Waste bund
27 Sep 2021	Lauren Harkin (EHS Rep), George Lambropoulos (Production Manager), E Clarke, Donna Karkaletsis (Operation Manager), Rob Byrne (ERS, Team Leader), Gavin Jones (Engineering Manager),) and Ashley Ogle (Quality Manager)	A scenario of 9,000L Glycol spill where 8,800L was captured in the bund but 200L has ended on the roadway.

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19 Dec 2021	Lauren Harkin (EHS Rep), George Lambropoulos (Production Manager), E Clarke, Donna Karkaletsis (Operation Manager), Gavin Jones (Engineering Manager),) and Ashley Ogle (Quality Manager)	14.T Ropaque Ultra spill contained within the Bund
17 Jan 2023	Lauren Harkin (EHS Rep), E Clarke (Production Manager), Rob Byrne (ERS, Team Leader), Wes Pearce (ERS) and Jeff Ho (Maintenance Lead)	A scenario of the tank farm bund failing following a spill from the Primal Bulk tank

Any amendment details to the plan are documented in document history, **Section 4** below.

3.6.3. PLAN AVAILABILITY

In accordance with Section 153D of the POEO Act, the plan is available to all site employees via the intranet (SharePoint) located within the sites Environmental Health & Safety Management System under Element 10 (procedure number EHS-VIL-10-012). This plan has also been placed on the internet on the Taubmans website (<http://www.taubmans.com.au/about/environment-health-and-safety>). A hard copy of the plan will also be available at the site, 9 Birmingham Ave, Villawood in reception and security office.

3.6.4. ACCOUNTABILITY

The following table outlines the key personnel who are accountable for the PIRMP at the site and the relevant contact details. Should the EHS Manager be absent the Operations Manager is responsible for Incident Response coordination and should be contacted directly.

Villawood EHS Manager	PRIMARY INCIDENT RESONSE COORDINATION Implementation, Testing. and updating of this plan	0436 812 772
Villawood Operations Manager	BACK UP INCIDENT RESONSE COORDINATION Notification to adjacent neighbours/properties and testing	0436 613 705
ANZ Operations Director	Liaise with media	0438 835 255
ANZ EHS Manager	Notification to relevant authorities	0407 247 172

4 DOCUMENT HISTORY

All changes made to this procedure EHS-VIL-10-012 should be documented in the document history table below and must be loaded onto the Taubmans website.

Revision	Date	Changes made	Completed By
01	03/06/2014	Publication of procedure.	EHS Manager
02	23/10/2014	Change of document number	EHS Manager
03	28/01/2016	Removed 'effective dates' not required as this is a live document.	ANZ EHS Manager
04	20/09/2016	No changes made.	ANZ EHS Manager & EHS Manager

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05	28/06/2017	Update of entire procedure to include risk assessment, updated emergency contact details, surrounding neighbours, identification of environmental hazards, inclusion of training requirements, facility dangerous goods information, requirements of annual review and alignment of emergency response process with the sites emergency response plan (EHS-VIL-10-001)	Environmental Specialist
06	20/09/2017	'Complaint' added to hotline number – word complaint was removed in last review when updating the entire document.	EHS Manager
07	22/06/2018	External consultant review and document update.	Environmental Specialist
08	01/08/2018	External consultant review and document update. Update of Site Plans	Environmental Specialist
09	02/08/2018	NSW EPA Review and External consultant update of figures and risk assessment.	Environmental Specialist
10	21/08/2018	Update figures and associated references for accuracy based on up to date chemical storage locations.	Environmental Specialist
11	13/05/2019	EHS Manager, Operation Manager and Security mobile number and direct contact number updated.	EHS Coordinator
12	31/05/2019	Test activities table updated under section 3.6.2 Evacuation/Testing. ERS to wear SCBA removed from the ANNEX C – INCIDENT RESPONSE PLANS	EHS Coordinator
13	30/07/2019	Test activities table updated under section 3.6.2 Evacuation/Testing.	EHS Coordinator
14	10/03/2020	EHS Manager, ANZ EHS Manager and EHS Coordinators contact numbers updated under sections 3.5.1 and 3.6.4. Training Material title updated under section 3.2.4. Removed CG5 Aerosol Paints cans from the table 3.2.1 and update Chemical Storage and Drainage drawing.	EHS Coordinator
15	09/04/2020	Test activities table updated under section 3.6.2 Evacuation/Testing, no other changes to the document required.	EHS Coordinator
16	16/04/2020	Test activities table updated under section 3.6.2 Evacuation/Testing, no other changes to the document required.	EHS Coordinator
17	07/10/2020	Test activities table updated under section 3.6.2 Evacuation/Testing, no other changes to the document required.	EHS Coordinator
18	08/10/2020	Test activities table updated under section 3.6.2 Evacuation/Testing, no other changes to the document required.	EHS Coordinator
19	14/10/2020	Test activities table updated under section 3.6.2 Evacuation/Testing, no other changes to the document required.	EHS Coordinator
20	10/02/2021	Spill clean-up vendor updated on Annex c tables.	EHS Coordinator
21	02/06/2021	Test activities table updated section 3.6.2 Evacuation/Testing,	EHS Coordinator
22	9/9/2021	Test activities table updated section 3.6.2 Evacuation/Testing,	EHS Manager
23	27/9/2021	Test activities table updated section 3.6.2 Evacuation/Testing,	EHS Manager

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24	19/12/2021	Test activities table updated section 3.6.2 Evacuation/Testing,	EHS Manager
25	17/01/2023	Test activities table updated section 3.6.2 Evacuation/Testing,	EHS Manager
26	10/07/2023	Section 3.5.1 updated Section 3.5.4 updated Section 3.6.4 updated Test activities table updated section 3.6.2 Evacuation/Testing,	EHS Manager

ANNEX A – FIGURES

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ANNEX B – RISK ASSESSMENT

Area:	Bulk Store x	Can Store x	Factory – General x	Specialty Making x	Specialty Filling x	MBM x
	Bulk Filling x	Maintenance x	Planning x	QC Lab x	R&D x	Warehouse x
Date:	01/08/18					
Risk Assessment Team Member:	Mike Allen – EHS Manager Natalie Maloney – ANZ Environmental Specialist ARC Environmental					
Background Information:	The Protection of the Environment Operations Act 1997 (POEO Act) and the Protection of the Environment Operations (General) Regulations 2009 require a risk assessment to be completed as part of the sites pollution incident response management plan.					
Describe who may be affected:	All site employees					

Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
Bulk dangerous goods stored on-site – Ammonia 23	Leak or spill of Ammonia 23 potentially contaminating land, surface water, groundwater and air and causing harm to human health or environment. Likelihood of incident increased by: Bunding failure; Tank failure; Poor maintenance of piping and hoses.	3	5	4	Location in CG6/DG2 – Southern end of the facility – Stormwater Pit to the west. Potential for end pathway to be the easement however stormwater flood gate can be closed to prevent off-site migration.	Piping and hoses are regularly inspected as part of the preventative maintenance program. Tank contained in a bunded area on hard stand. A spill kit station is located in the immediate area.	3	3	2

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
				4		Captured in the first flush system and subject to stormwater discharge procedure. Stormwater drainage network able to be closed with flood gate prior to migration off-site			2
Bulk dangerous goods stored on-site – Primal RHS - 884	Leak or spill of Primal RHS - 884 potentially contaminating land, surface water, groundwater and air and causing harm to human health or environment. Likelihood of incident increased by: Bunding failure; Tank failure; Poor maintenance of piping and hoses.	3	5	4	Located in Tank Farm #2 – Stormwater Pits to the south west – Potential for end pathway to be the easement however stormwater gated at main driveway.	Piping and hoses are regularly inspected as part of the preventative maintenance program. Tank contained in a bunded area on hard stand. Stormwater drainage network able to be closed with flood gate prior to migration off-site. Any runoff from this area is captured in the first flush system and subject to a specific dewatering procedure prior to release.	3	3	2
Bulk dangerous goods stored on-site –	Leak or spill of Acticide BW20 potentially contaminating land, surface water, groundwater and air and causing harm to human health and/or environment.	3	5	4	Stored in DG1 and DG3 - Bulk Store and Manufacturing Plant (Liquid Alley). Stormwater drains are located outside	Piping and hoses are regularly inspected as part of the preventative maintenance program. Tank contained in a bunded area on hard stand.	3	3	2

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
Acticide BW20	Likelihood of this incident would be increased by: A bunding failure; A tank failure; Poor maintenance of piping and hoses.				the building to the north and east. Multiple spill kits and hard stand mean that migration to stormwater, land or groundwater is unlikely.	Stormwater drainage network able to be closed with flood gate prior to migration off-site. Any runoff from this area is captured in the first flush system and subject to a specific dewatering procedure prior to release.			
Bulk dangerous goods stored on-site – Teric N9	Leak or spill of Teric N9 potentially contaminating land, surface water, groundwater and air and causing harm to human health and/or environment. Likelihood of this incident would be increased by: A bunding failure; A tank failure; Poor maintenance of piping and hoses.	3	5	4	Stored in DG1 and DG3 - Bulk Store and Manufacturing Plant (Liquid Alley). Stormwater drains are located outside the building to the north and east. Multiple spill kits and hard stand mean that migration to stormwater, land or groundwater is unlikely.	Piping and hoses are regularly inspected as part of the preventative maintenance program. Tank contained in a bunded area. Stormwater drainage network able to be closed with flood gate prior to migration off-site. Any runoff from this area is captured in the first flush system and subject to a specific dewatering procedure prior to release.	3	3	2
Bulk dangerous goods stored	Leak or spill of Texanol potentially contaminating land, surface water, groundwater and air and causing harm to human health or environment.	3	5	4	Located in Tank Farm #1 – Stormwater Pit to the east – Potential for end pathway to be the	Piping and hoses are regularly inspected as part of the preventative maintenance	2	3	1

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
on-site – Texanol	Likelihood of this incident would be increased by: A bunding failure; A tank failure; Poor maintenance of piping and hoses.				easement however stormwater gated at main driveway.	program. Tank contained in a bunded area on hard stand. Stormwater drainage network able to be closed with flood gate prior to migration off-site. Any runoff from this area is captured in the first flush system and subject to a specific dewatering procedure prior to release.			
Bulk dangerous goods stored on-site – Propylene Glycol	Leak or spill of Propylene Glycol potentially contaminating land, surface water, groundwater and air and causing harm to human health or environment. Likelihood of this incident would be increased by: A bunding failure; A tank failure; Poor maintenance of piping and hoses.	3	5	4	Located in Tank Farm #1 – Stormwater Pit to the east – Potential for end pathway to be the easement however stormwater gated at main driveway.	Piping and hoses are regularly inspected as part of the preventative maintenance program. Tank contained in a bunded area on hard stand. Stormwater drainage network able to be closed with flood gate prior to migration off-site. Any runoff from this area is captured in the first flush system and subject to a specific dewatering procedure prior to release.	2	3	1
Bulk dangerous	Leak or spill of Diesel potentially contaminating land, surface water,	3	3	2	The diesel tank is located in CG9 - between the	Located under cover on hardstand in small tank within the	2	3	1

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
goods stored on-site – Diesel Tank	groundwater and air and causing harm to human health and/or environment. Likelihood of this incident would be increased by: Poor maintenance of hardstand; A tank failure; Poor maintenance of piping and hoses.				Contractors Work Shop and Main Fire Panel D. There is potential for spills to drain to stormwater outside the building and off-site to the north based on proximity to stormwater drains and drainage pathway, however considered unlikely given small quantity of diesel stored and on hard stand under cover.	maintenance shed. Break glass fire alarm located within the building.			
Bulk dangerous goods stored on-site – IBC or Drums – diesel and WD40	Leak or spill of finished product potentially contaminating land, surface water, groundwater and air and causing harm to human health or environment. Likelihood of this incident would be increased by: Bunding failure; Overflow of banded pallets	2	5	3	The diesel drums are located in CG7 – Maintenance Shop. There is potential for spills to drain to stormwater outside the building and off-site to the north based on proximity to stormwater drains and	IBCs and drums are in good condition and stored in banded areas and/or on banded pallets. Diesel drums are inspected upon delivery to ensure they are in good condition. Drums are stored on a banded pallets under cover. This is a manual process, decanting is a manned process.	1	2	1

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
	from multiple drum failure.				drainage pathway, however considered unlikely given small quantity of diesel stored and on hard stand under cover.				
Bulk dangerous goods stored on-site – Finished Product	Leak or spill of finished product potentially contaminating land, surface water, groundwater and air and causing harm to human health or environment. Likelihood of this incident would be increased by: Bundling failure; Overflow of banded pallets from multiple drum failure.	3	4	3	Located in Architectural Warehouse – Stormwater Pits in the north east and south east immediately adjacent to the warehouse. Potential for end pathway to be the easement however stormwater flood gate can be closed to prevent off-site migration.	3	3	2	
Bulk dangerous goods stored on-site - IBC or Drums - General	Leak or spill of finished product potentially contaminating land, surface water, groundwater and air and causing harm to human health or environment.	2	4	2	Stored in Bulk Store and Manufacturing plant (Liquid Alley). Stormwater drains are located outside the building to the north and east. Multiple spill kits	1	2	1	

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
	Likelihood of this incident would be increased by: Bunding failure; Poor condition of IBCs or Drums; Overflow of banded pallets from multiple IBC/drum failure.			4	and hard stand mean that migration to stormwater, land or groundwater is unlikely.			1	
Used drums stored on-site.	Co – mingling of former chemicals and rain water and potentially contaminating land, surface water and groundwater. Likelihood of this incident would be increased by: Bunding failure; Dewatering without following procedure or undertaking testing.	3	5	4	Located in Empty Drum Bund – Main stormwater drain runs alongside bund, bund is not covered and allows rainwater to build up. If bund water builds up to point of overflow before dewatering occurs, the flood gate can be closed prior to runoff leaving site.	Drums are stored in a hardstand, banded area which is enclosed by a fence. Any dewatering of the banded area is subject to the bund dewatering procedure and is testing prior to disposal.	3	3	2
Used pots stored on-site.	Co – mingling of former chemicals and rain water potentially contaminating land, surface water and groundwater. Likelihood of this incident would be increased by: Storage of pots outside; Poor maintenance of hardstand;	3	5	4	Pots are located in the Manufacturing Plant. Stormwater drains are located outside the building to the north and east. Multiple spill kits and hard stand mean that	Stored on hardstand under cover in the manufacturing plant. Spill kits placed throughout the manufacturing plant.	3	1	1

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
	Removal of spill kits.			3	migration to stormwater, land or groundwater is unlikely.			1	
Bulk dangerous goods stored on-site – Bulk Powder	Uncontrolled air emissions (dust) causing harm to human health and/or environment. Likelihood of this incident would be increased by: Poor maintenance; Inadequate inspections of extraction systems and bags.	2	5	3	Stored in dry raw material store. Potential exists for an external uncontrolled emission if a bag was to break, the exposure pathway likely to be localised and would depend on the wind direction at the time.	2	4	2	
Small quantities dangerous goods stored on-site – Solvents, paints and aerosol paint cans	Leak or spill of small quantities of dangerous goods potentially contaminating land, surface water, groundwater and air and causing harm to human health or environment. Likelihood of this incident would be increased by: Poor upkeep of hardstand storage areas; Removal of spill kits from storage area.	2	5	3	Located in R&D in Operations Building and White Knight Warehouse – Stormwater Pits in the south immediately adjacent to the buildings.	2	3	1	

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
Bag House Dust	Uncontrolled air emissions (dust) causing harm to human health and/or environment. Likelihood of this incident would be increased by: Poor maintenance; Inadequate inspections of extraction systems and filters.	2	5	3	Stored in dry raw material store. Potential exists for an external uncontrolled emission if a bag was to break, the exposure pathway likely to be localised and would depend on the wind direction at the time.	Extraction systems are serviced regularly and inspected, and filters changed when required.	2	4	2
Product mixing and blending	Uncontrolled air emissions (VOCs, odour) causing harm to human health and/or environment. Likelihood of this incident would be increased by: Poor maintenance; Inadequate inspections of extraction systems and filters.	2	5	3	Stored in dry raw material store. Potential exists for an external uncontrolled emission, the exposure pathway likely to be localised and would depend on the wind direction at the time, however considered unlikely as VOC modelling based on engineering numbers indicates dispersion from stack is adequate.	Fume extraction. Extraction systems are serviced regularly and inspected, and filters changed when required. VOC modelling based on engineering numbers indicates active monitoring not required.	2	3	1

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
Contaminated Stormwater – Bunded Areas	Contaminated wastewater released to stormwater causing contamination to land, water and air causing harm to human health or environment. Likelihood of this incident would be increased by: Uncontrolled dewatering activities; Failure of the stormwater flood gate.	2	5	3	All bunded areas on site including tanks and lay down areas. Potential for end pathway to be the easement however stormwater flood gate can be closed to prevent off-site migration.	Dewatering procedure in place requiring a sample be taken, and water tested for contamination prior to release. Stormwater drainage network able to be closed with flood gate prior to migration off-site.	2	3	1
Hazardous Waste – Liquid Waste	Leak or spill of wastewater potentially contaminating land, surface water, groundwater and air and causing harm to human health or environment. Likelihood of this incident would be increased by: Tank failure; Bund failure; Uncontrolled waste disposal and lack of waste tracking/ compliance program; Wastewater disposal undertaken by staff without adequate training.	1	3	1	Production Waste Water (not classified as hazardous) stored at Waste Water Tank at Tank Farm 2. R & D Waste Water collected in IBC. IBC stored at White Knight Warehouse.	Waste is collected by licenced EPA waste collection provider who must undergo PPG Environmental compliance audits. PPG waste management training for all personnel.	1	1	1

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
Bulk Storage of first flush system	Leak or spill of wastewater potentially contaminating land, surface water, groundwater and air and causing harm to human health or environment. Likelihood of this incident would be increased by: Failure of the stormwater flood gate; Uncontrolled dewatering activities; Overtopping of first flush system.	2	5	3	The first flush tank is located to the north west of Tank Farm #2 adjacent to a stormwater pit. Potential for end pathway to be the easement however stormwater flood gate can be closed to prevent off-site migration.	Stormwater flood gate to prevents overflow from first flush system from migrating site. 40,000L tank, at tank 20,000L a warning light is tripped. Procedure in place for dewatering before any release of first flush can occur.	2	3	1
Fire/ explosion – Equipment ignition source	Fire causing harm to human health. Likelihood of this incident would be increased by: Failure of fire fighting system; Ignition source brought to site by untrained employee.	1	4	1	Site wide.	Firefighting system, Employee training on fire prevention/ response and chemical handling. Site is a non-hazardous facility, no chemicals kept on-site that provide a chemical ignition source.	1	3	1
Fire/ explosion – Equipment ignition source	Fire causing harm to environment. Likelihood of this incident would be increased by: Failure of firefighting system; Ignition source brought to site by untrained employee;	1	4	1	Site wide.	Firefighting system, Employee training on fire prevention/ response and chemical handling. Site is a non-hazardous facility, no chemicals kept on-site that provide a chemical ignition source. Spill kits available to	1	3	1

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Potential Hazards	Potential Pollution Incident(s)	Risk rating before controls			Potential Exposure Pathway (closest stormwater access, unsealed area).	Existing Risk Controls	Risk rating with existing controls		
		S	L	R			S	L	R
	No spill kits or training to assist in prevention of fire water reaching stormwater drainage system; Failure of stormwater flood gate.					prevent fire water reaching stormwater. Stormwater flood gate to prevents stormwater leaving site.			

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RISK ASSESSMENT MATRIX

Severity	1 Low Severity	2 Medium	3 Serious	4 Major	5 Catastrophic
Health Onsite People	1 Medical Treatment (Gov't Reportable) or multiple First Aid	1 Lost Time or multiple Med Treatments (Gov't Reportable)	1 Permanent Disability or Multiple Lost Time (PPG I&I w/ disability)	1 fatality or multiple permanent disability cases	Multiple fatalities
Health Offsite People	No injury or health impact	Exposure with no medical treatment; possible complaints	1 non-permanent injury or exposure requiring hospital visit; possible citizen shelter-in-place order	1 permanent disability; or multiple non-permanent injuries or exposure requiring hospitalization >24 hours; or possible public evacuations	1 fatality or multiple permanent injuries
Environment Onsite	PPG Reportable Spill	Government Reportable Spill	Large spill or spill requiring remediation	Spill requiring significant remediation or total evacuation / shutdown	Irreversible severe damage
Environment Offsite	No offsite impact	Off-site odour; small spill with no long-term clean-up	Spill requiring minor remediation or personnel evacuation	Limited area with prolonged clean up or long-term damage	Catastrophic or extensive impact far beyond the facility boundary or prolonged clean-up of extensive area offsite

Likelihood				
1 Highly Improbable	2 Improbable (possible but have not heard of in industry)	3 Rare (Once within the operating life of 10 similar units)	4 Occasional (Within the operating life of this unit)	5 Probable (More than once in the operating life of this unit)

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5 Probable (More than once in the operating life of this unit)	2	3	4	4	4
4 Occasional (Within the operating life of this unit)	1	2	3	4	4
3 Rare (Once within the operating life of 10 similar units)	1	1	2	3	4
2 Improbable (possible but have not heard of in industry)	1	1	1	2	3
1 Highly Improbable	1	1	1	1	2
	1 Low Severity	2 Medium	3 Serious	4 Major	5 Catastrophic

Rank	Action Level	To Management Levels:	Within:	Resolve	Complete
4	Immediate Action	Plant Manager & EHS Manager	1 week from detection	< 30 days	< 12 months
3	Mitigation Recommended	EHS Manager	30 days from detection	< 4 months	< 24 months
2	Confirm safeguards; Recommendations Optional	Department Head	45 days	< 6 months	< 24 months
1	No action required	-			

For items in the red zone (Risk Rank 4), the facility shall implement temporary measures necessary to safely permit continued operation until permanent mitigation is completed.

Communicate: Communicate risk level to Management Level designated.

Resolve: Develop plans and obtain approval for permanent mitigation measures from designated Management Level. Temporary actions, if required, are in place.

Complete: Implement mitigation measures. Verify mitigation is implemented as planned and is operational

Spill Response – General

ACTION	SUMMARY
RAISE ALARM	Alert ERS to the situation – locate ERS member or phone 1111 or to security at 02 97257953 or 0428609 953. If immediate danger of fire / explosion trigger by pressing a break glass. Ensure safety of all staff by evacuating staff from area/s, as necessary.
PERSONAL SAFETY	ERS to rescue staff and ensure area clear (wear PPE as directed by relevant MSDS (Annex D) or as needed) Immediately treat any exposed staff, e.g. Safety Shower, Eye Wash.
CONTAIN EMISSION	TAKE IMMEDIATE STEPS TO PREVENT FURTHER spills, shut down equipment, wet down etc., to prevent emissions from spreading or migrating off-site.
MAKE SAFE	Turn off any equipment that may make the situation worse – such as ignite a flammable chemical emission. Barricade the area.
COMMUNICATE INFORMATION	Alert: Shift Supervisor, CW / DCW, security, reception Report the spill (depending on severity): Operations Manager, EHS and Other Production Teams as needed. Obtain MSDS for substance/s
ERS	Confirm via radio the incident details with the CW / Security. If required and not already done - alert the Emergency Services. The fire brigade must be called for significant dangerous goods spills. The ERS for the affected area will delegate duties. ERS will be under the control of emergency services on their arrival. Do not hurry if no immediate danger. Discuss and decide on the safest course of action that prevents spreading the spill or causing injuries. Consult as required (e.g. EHS / R&D)
NOTIFICATION TO AUTHORITIES (Only if spill deemed of significant quantity or locality to migrate off-site)	If the spill has the potential to harm the environment; the EHS Manager to contact the following authorities immediately in order as listed: <ul style="list-style-type: none"> • Environment Protection Authority (EPA – 131 555) whoever is the Appropriate • Bankstown Council • SafeWork NSW • Fire and Rescue NSW The following information is required when providing notification to the authorities: <ul style="list-style-type: none"> • Time, date and location of the incident • Nature of the incident – i.e. the estimated quantity and volume and concentration of pollutants (if known) • Circumstances of incident (include the cause if known) • Action taken or proposed to be taken to manage incident • Other information prescribed by the authorities <i>(Note: If any of the above information is not known at the time of notification, it must be made available immediately once it becomes known.)</i> Neighbours/public need only be contacted / evacuated if there is a threat of the spill affecting them or if this is determined by emergency services. Additional notification as directed by Regulatory authority or emergency services.
PUBLISHING MONITORING DATA AND MEDIA	Monitoring data is to be made available for public access. Only the site manager or delegate is authorised to speak to the media on the company's behalf. Determine if the event meets the criteria of a PPG reportable incident. Utilise PPG critical incident group if required (24/7).

CLEAN UP / ALL-CLEAR	Proceed with clean-up to restore environment Call Emergency spill clean-up services if necessary (see contact list). All clear is given by the Fire Brigade or CW
REVIEW	Conduct investigation as per procedure EHS-VIL-09-001 Draft Incident Report & submit to appropriate regulatory agencies (if required) Review PIRMP for accuracy, currency and suitability – make any changes if required.

Spill Response – Acticide BW20

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ACTION	SUMMARY
TREAT AS FOR OTHER GENERAL SPILLS (SEE ABOVE), EXCEPT:	
RAISE ALARM	<p>Alert ERS to the situation – locate ERS member or phone 1111 or to security at 02 97257953 or 0428609 953.</p> <p>Trigger fire alarm by pressing a break glass if full evacuation required.</p> <p>Call 000 for Fire Brigade and possibly Ambulance.</p> <p>Advice for firefighters - Wear self-contained breathing apparatus.</p> <p>Inform authorities in case of contamination of water or sewage system.</p>
PERSONAL SAFETY	<p>Immediately treat any exposed staff, e.g. Safety Shower, Eye Wash.</p> <p>Ensure safety of all staff by evacuating staff from area/s, as necessary.</p> <p>ERS to wear any required PPE.</p> <p>Under certain fire conditions, traces of toxic gases cannot be excluded, e.g.:</p> <p>Nitrogen oxides (NOx)</p> <p>Carbon monoxide (CO)</p> <p>Sulphur dioxide (SO₂)</p>
NOTIFICATION TO AUTHORITIES	<p>If the spill has the potential to harm the environment; the EHS Manager to contact the following authorities <i>immediately in order as listed:</i></p> <ul style="list-style-type: none"> • Environment Protection Authority (EPA – 131 555) whoever is the Appropriate • Bankstown Council • SafeWork NSW • Fire and Rescue NSW <p>The following information is required when providing notification to the authorities:</p> <ul style="list-style-type: none"> • Time, date and location of the incident • Nature of the incident – i.e. the estimated quantity and volume and concentration of pollutants (if known) • Circumstances of incident (include the cause if known) • Action taken or proposed to be taken to manage incident • Other information prescribed by the authorities <p><i>(Note: If any of the above information is not known at the time of notification, it must be made available immediately once it becomes known.)</i></p> <p>Neighbours/public need only be contacted / evacuated if there is a threat of the spill affecting them or if this is determined by emergency services.</p> <p>Additional notification as directed by Regulatory authority or emergency services.</p>
FIRST AID	<p>Ambulance attendance may be required – call 000.</p> <p>Triage affected employees remotely from any possible spread of the spill. Give them fresh air. Artificial respiration / Oxygen may be required.</p>
CONTAIN SPILL	<p>Approach spill from upwind, wearing appropriate PPE. Ventilate area of leak or spill. Isolate area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible.</p> <p>As the product is hazardous for the aquatic environment, it must be prevented from reaching surface water.</p> <p>Prevent from spreading (e. g. by enclosing with a ring of chemical absorbent).</p> <p>Collect large amounts in suitable container. Cover the rest with absorbent, mix intensively and collect mechanically. Suitable binder: multi-purpose absorbent.</p> <p><u>Consider calling Solveco if spill clean-up is required:</u> (Contact: 98337035)</p>

NEIGHBOURS	For large spills where the product may have entered the stormwater network with the potential to spread rapidly – immediately contact neighbours and alert them to possible need for emergency management. Follow all advice of fire brigade on arrival.
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Potential Health Effects:

Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.
Very toxic to aquatic life with long lasting effects.

First Aid Information:

General information Personal protection for the First Aider.
After inhalation Supply fresh air; consult doctor in case of symptoms.
After skin contact
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation occurs, get medical attention.
After eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a doctor immediately.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Most important symptoms and effects, both acute and delayed Allergic skin reactions.
Information for doctor Probable mucosal damage may contraindicate the use of gastric lavage.
Indication of any immediate medical attention and special treatment needed
Treat skin and mucous membrane with antihistamine and corticoid preparations.
Rinse eyes thoroughly with physiological saline.

Spill Response – Ammonia

ACTION	SUMMARY
TREAT AS FOR OTHER GENERAL SPILLS (SEE ABOVE), EXCEPT:	
RAISE ALARM	Alert ERS to the situation – locate ERS member or phone 1111 or to security at 02 97257953 or 0428609 953. Trigger fire alarm by pressing a break glass if full evacuation required. Call 000 for Fire Brigade and possibly Ambulance.
PERSONAL SAFETY	Immediately treat any exposed staff, e.g. Safety Shower, Eye Wash. Ensure safety of all staff by evacuating staff from area/s, as necessary. ERS to wear any required PPE.
NOTIFICATION TO AUTHORITIES	If the spill has the potential to harm the environment; the EHS Manager to contact the following authorities <i>immediately in order as listed</i> : <ul style="list-style-type: none"> • Fire and Rescue NSW • Environment Protection Authority (EPA – 131 555) whoever is the appropriate • Bankstown Council • SafeWork NSW The following information is required when providing notification to the authorities: <ul style="list-style-type: none"> • Time, date and location of the incident • Nature of the incident – i.e. the estimated quantity and volume and concentration of pollutants (if known) • Circumstances of incident (include the cause if known) • Action taken or proposed to be taken to manage incident • Other information prescribed by the authorities <i>(Note: If any of the above information is not known at the time of notification, it must be made available immediately once it becomes known.)</i> Neighbours/public need only be contacted / evacuated if there is a threat of the spill affecting them or if this is determined by emergency services. Additional notification as directed by Regulatory authority or emergency services.
FIRST AID	Ambulance attendance may be required – call 000. Triage affected employees remotely from any possible spread of the gas plume. Give them fresh air. Artificial respiration / Oxygen may be required.
CONTAIN SPILL	DO NOT APPROACH SPILL UNTIL EMERGENCY SERVICES HAVE ALLOW RE-ENTRY TO AREA. Approach spill from upwind, wearing appropriate PPE. Ventilate area of leak or spill. Isolate area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Absorb small spills with sand (inert). ERS team can clean up small spills. <u>Call 000 Emergency services to clean up the big spills.</u>
NEIGHBOURS	For large spills where the gas plume can spread rapidly – immediately contact neighbours and alert them to possible need for evacuation. Follow all advice of fire brigade on arrival.

Potential Health Effects:

Ammonia is very alkaline and reacts corrosively with all body tissues.

Inhalation: Corrosive. Extremely destructive to tissues of the mucous membranes and upper respiratory tract. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Inhalation may be fatal as a result of spasm

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inflammation and oedema of the larynx and bronchi, chemical pneumonitis and pulmonary oedema.

Ingestion: Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach, leading to death. Can cause sore throat, vomiting, diarrhoea.

Skin Contact: Dermal contact with alkaline corrosives may produce pain, redness, severe irritation or full thickness burns. May be absorbed through the skin with possible systemic effects.

Eye Contact: Corrosive. Can cause blurred vision, redness, pain, severe tissue burns and eye damage. Eye exposure may result in temporary or permanent blindness.

Chronic Exposure: Prolonged or repeated skin exposure may cause dermatitis. Prolonged or repeated exposure may cause eye, liver, kidney, or lung damage.

First Aid Information:

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Spill Response – Primal RHS - 884

ACTION	SUMMARY
TREAT AS FOR OTHER GENERAL SPILLS (SEE ABOVE), EXCEPT:	
RAISE ALARM	Alert ERS to the situation – locate ERS member or phone 1111 or to security at 02 97257953 or 0428609 953. Trigger fire alarm by pressing a break glass if full evacuation required. Call 000 for Fire Brigade and possibly Ambulance.
PERSONAL SAFETY	Immediately treat any exposed staff, e.g. Safety Shower, Eye Wash. Ensure safety of all staff by evacuating staff from area/s, as necessary. ERS to wear any required PPE.
NOTIFICATION TO AUTHORITIES	If the spill has the potential to harm the environment; the EHS Manager to contact the following authorities <i>immediately in order as listed:</i> <ul style="list-style-type: none"> • Environment Protection Authority (EPA – 131 555) whoever is the appropriate • Bankstown Council • SafeWork NSW • Fire and Rescue NSW The following information is required when providing notification to the authorities: <ul style="list-style-type: none"> • Time, date and location of the incident • Nature of the incident – i.e. the estimated quantity and volume and concentration of pollutants (if known) • Circumstances of incident (include the cause if known) • Action taken or proposed to be taken to manage incident • Other information prescribed by the authorities <i>(Note: If any of the above information is not known at the time of notification, it must be made available immediately once it becomes known.)</i> Neighbours/public need only be contacted / evacuated if there is a threat of the spill affecting them or if this is determined by emergency services. Additional notification as directed by Regulatory authority or emergency services.
FIRST AID	Ambulance attendance may be required – call 000. Triage affected employees remotely from any possible spread of the spill. Give them fresh air.
CONTAIN SPILL	Approach spill, wearing appropriate PPE. Ventilate area of leak or spill. Isolate area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. <u>Consider calling Solveco if spill clean-up is required: (Contact: 98337035)</u>
NEIGHBOURS	For large spills where the gas plume can spread rapidly – immediately contact neighbours and alert them to possible need for evacuation. Follow all advice of fire brigade on arrival.

Potential Health Effects:

Skin corrosion/irritation

May cause transient irritation.

Serious eye damage/eye irritation

No eye irritation

First Aid Information:

Inhalation: Move to fresh air.

Skin contact: Wash with water and soap as a precaution. If skin irritation persists, call a physician.

Eye contact: Rinse with plenty of water. If eye irritation persists, consult a specialist.

Ingestion: Drink 1 or 2 glasses of water. Consult a physician if necessary. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Notes to physician: Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Spill Response – Teric N9

ACTION	SUMMARY
TREAT AS FOR OTHER GENERAL SPILLS (SEE ABOVE), EXCEPT:	
RAISE ALARM	Alert ERS to the situation – locate ERS member or phone 1111 or to security at 02 97257953 or 0428609 953. Trigger fire alarm by pressing a break glass if full evacuation required. Call 000 for Fire Brigade and possibly Ambulance.
PERSONAL SAFETY	Immediately treat any exposed staff, e.g. Safety Shower, Eye Wash. Ensure safety of all staff by evacuating staff from area/s, as necessary. ERS to wear any required PPE.
NOTIFICATION TO AUTHORITIES	If the spill has the potential to harm the environment; the EHS Manager to contact the following authorities <i>immediately in order as listed:</i> <ul style="list-style-type: none"> • Environment Protection Authority (EPA – 131 555) whoever is the appropriate • Bankstown Council • SafeWork NSW • Fire and Rescue NSW The following information is required when providing notification to the authorities: <ul style="list-style-type: none"> • Time, date and location of the incident • Nature of the incident – i.e. the estimated quantity and volume and concentration of pollutants (if known) • Circumstances of incident (include the cause if known) • Action taken or proposed to be taken to manage incident • Other information prescribed by the authorities <i>(Note: If any of the above information is not known at the time of notification, it must be made available immediately once it becomes known.)</i> Neighbours/public need only be contacted / evacuated if there is a threat of the spill affecting them or if this is determined by emergency services. Additional notification as directed by Regulatory authority or emergency services.
FIRST AID	Ambulance attendance may be required – call 000. Triage affected employees remotely from any possible spread of the spill. Give them fresh air.
CONTAIN SPILL	Approach spill, wearing appropriate PPE (as per msds). Ventilate area of leak or spill. Isolate area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Do not allow run-off from fire fighting to enter drains or water courses. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust) <u>Consider calling Solveco if spill clean-up is required:</u> (Contact: 98337035)
NEIGHBOURS	For large spills where the gas plume can spread rapidly – immediately contact neighbours and alert them to possible need for evacuation. Follow all advice of fire brigade on arrival.

Potential Health Effects:

Harmful if swallowed.
Causes serious eye damage.
Toxic to aquatic life with long lasting effects.

First Aid Information:

General advice:

Move out of dangerous area.

Consult a physician.

Show the material safety data sheet to the doctor in attendance (Annex D).

Do not leave the victim unattended.

If inhaled:

If unconscious place in recovery position and seek medical advice.

If symptoms persist, call a physician.

In case of skin contact:

If skin irritation persists, call a physician.

If on skin, rinse well with water.

If on clothes, remove clothes.

In case of eye contact:

Small amounts splashed into eyes can cause irreversible tissue damage and blindness.

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses.

Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed:

Keep respiratory tract clear.

Do NOT induce vomiting.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Spill Response –Propylene Glycol

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ACTION	SUMMARY
TREAT AS FOR OTHER GENERAL SPILLS (SEE ABOVE), EXCEPT:	
RAISE ALARM	Alert ERS to the situation – locate ERS member or phone 1111 or to security at 02 97257953 or 0428609 953. Trigger fire alarm by pressing a break glass if full evacuation required. Call 000 for Fire Brigade and possibly Ambulance.
PERSONAL SAFETY	Immediately treat any exposed staff, e.g. Safety Shower, Eye Wash. Ensure safety of all staff by evacuating staff from area/s, as necessary. ERS to wear any required PPE. General: Approved respiratory protection, safety glasses, gloves, rubber boots and clothing protection to minimize skin contact. Clothing: Gloves, coveralls, apron, boots as necessary to prevent skin contact. Eyes: Chemical goggles; also wear a face shield if splashing hazard exists. Respiration: Approved organic vapor mist respirator as necessary. Ventilation: Use local exhaust to control vapors/mists.
NOTIFICATION TO AUTHORITIES	If the spill has the potential to harm the environment; the EHS Manager to contact the following authorities <i>immediately in order as listed:</i> <ul style="list-style-type: none"> • Environment Protection Authority (EPA – 131 555) whoever is the appropriate • Bankstown Council • SafeWork NSW • Fire and Rescue NSW The following information is required when providing notification to the authorities: <ul style="list-style-type: none"> • Time, date and location of the incident • Nature of the incident – i.e. the estimated quantity and volume and concentration of pollutants (if known) • Circumstances of incident (include the cause if known) • Action taken or proposed to be taken to manage incident • Other information prescribed by the authorities <i>(Note: If any of the above information is not known at the time of notification, it must be made available immediately once it becomes known.)</i> Neighbours/public need only be contacted / evacuated if there is a threat of the spill affecting them or if this is determined by emergency services. Additional notification as directed by Regulatory authority or emergency services.
FIRST AID	Ambulance attendance may be required – call 000. Triage affected employees remotely from any possible spread of the spill. Give them fresh air.
CONTAIN SPILL	Use the appropriate personal protective equipment. Narrow access to the affected area and eliminate ignition sources. Ventilate the area and prevent the material from entering sewers, streams or aquifers. Eliminate or reduce leak if without risk. For large amounts pump the material into a suitable container, absorb remainder with an inert material and set it according to current regulations. Use Inert material to contain the spill or spills (sand, vermiculita, etc.). <u>Consider calling Solveco if spill clean-up is required:</u> (Contact: 98337035)
NEIGHBOURS	For large spills where the product can spread rapidly – immediately contact relevant neighbours and alert them to possible need for evacuation or spill management. Follow all advice of fire brigade on arrival.

Potential Health Effects:

Primary Routes of Exposure: Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation.

DERMAL: In the skin it causes irritation to the repeated or prolonged contact.

INGESTION: It can cause damage to the digestive system

INHALATION: It does not happen to room temperature and under normal conditions of use. Due to the physical properties of the material, the presence of steam to room temperature is minimum.

One does not hope that effects to the health by the exhibition to steam generated to room temperature exist. Nevertheless it can be disturbed to high temperatures, generating steam that can be irritating.

EYES: It can cause temporary irritation.

First Aid Information:

If possible, place the affected person in a position comfortable and comforting, avoid you lower your body temperature. Get immediate medical attention. All first aid procedures should be reviewed periodically the doctor familiar with the chemical and conditions of use.

First Aid Procedures - Ingestion:

If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

First Aid Procedures - Inhalation:

Move to fresh air. Aid in breathing, if necessary. Get immediate medical attention.

First Aid Procedures - Skin:

Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. Get immediate medical attention.

First Aid Procedures - Eyes:

Immediately rinse eyes with running water for 15 minutes. Get immediate medical attention.

Spill Response – Texanol (NX 795)

ACTION	SUMMARY
TREAT AS FOR OTHER GENERAL SPILLS (SEE ABOVE), EXCEPT:	
RAISE ALARM	Alert ERS to the situation – locate ERS member or phone 1111 or to security at 02 97257953 or 0428609 953. Trigger fire alarm by pressing a break glass if full evacuation required. Call 000 for Fire Brigade and possibly Ambulance.
PERSONAL SAFETY	Immediately treat any exposed staff, e.g. Safety Shower, Eye Wash. Ensure safety of all staff by evacuating staff from area/s, as necessary. Special hazards arising from the substance or mixture In case of fire, the following can be released: Carbon monoxide (CO) Carbon dioxide (CO ₂) Advice for firefighters Protective equipment: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
NOTIFICATION TO AUTHORITIES	If the spill has the potential to harm the environment; the EHS Manager to contact the following authorities <i>immediately in order as listed:</i> <ul style="list-style-type: none"> • Environment Protection Authority (EPA – 131 555) whoever is the appropriate • Bankstown Council • SafeWork NSW • Fire and Rescue NSW The following information is required when providing notification to the authorities: <ul style="list-style-type: none"> • Time, date and location of the incident • Nature of the incident – i.e. the estimated quantity and volume and concentration of pollutants (if known) • Circumstances of incident (include the cause if known) • Action taken or proposed to be taken to manage incident • Other information prescribed by the authorities (Note: If any of the above information is not known at the time of notification, it must be made available immediately once it becomes known.) Neighbours/public need only be contacted / evacuated if there is a threat of the spill affecting them or if this is determined by emergency services. Additional notification as directed by Regulatory authority or emergency services.
FIRST AID	Ambulance attendance may be required – call 000. Triage affected employees remotely from any possible spread of the spill. Give them fresh air.
CONTAIN SPILL	Approach spill, wearing appropriate PPE (as per msds). Ventilate area of leak or spill. Isolate area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Do not allow run-off from firefighting to enter drains or water courses. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust) <u>Consider calling Solveco if spill clean-up is required:</u> (Contact: 98337035)
NEIGHBOURS	For large spills where the gas plume can spread rapidly – immediately contact neighbours and alert them to possible need for evacuation. Follow all advice of fire brigade on arrival.

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Potential Health Effects:

Hazard description: The product may cause slight irritation on repeated or prolonged skin contact.

First Aid Information:

After inhalation: First aid measures not required but get fresh air for personal comfort.

After skin contact: Exposed skin should be washed to prevent irritation caused by prolonged skin contact.

After eye contact: Rinse opened eye under running water.

After swallowing: If a large quantity has been ingested or you feel unwell, get medical advice/attention

Air Emission Response – Dust/Odour/VOCs

ACTION	SUMMARY
RAISE ALARM	Evacuate the area, as required Call local fire brigade or 000
PERSONAL SAFETY	ERS to rescue staff and ensure area clear (wear PPE as needed) Immediately treat any exposed staff, e.g. Eye Wash.
CONTAIN EMISSION	TAKE IMMEDIATE STEPS TO PREVENT FURTHER EMISSIONS, if appropriate cover material, turn off equipment/plant, to prevent dust/odour/VOC from migrating further.
MAKE SAFE	Turn off any equipment that may make the situation worse – such as ignite a flammable chemical spill. Barricade the area.
COMMUNICATE INFORMATION	Alert: Shift Supervisor, CW / DCW, security, reception Report the spill (depending on severity): Operations Manager, EHS and Other Production Teams as needed. Obtain MSDS for substance/s Note wind direction at the time and for the duration of the uncontrolled release.
ERS	ERS to contain spill as far as possible / close easement spill gates All equipment contributing to the spill must be shut off immediately if safe to do so. Security to keep driveway clear for emergency services Provide MSDS, volume, etc to fire brigade on arrival Fully cooperate with and assist emergency services or regulatory bodies upon their arrival Do not hurry if no immediate danger. Discuss and decide on the safest course of action that prevents spreading the spill or causing injuries. Consult as required (e.g. EHS / R&D)
NOTIFICATION TO AUTHORITIES	If the spill has the potential to harm the environment; the EHS Manager to contact the following authorities immediately in order as listed: <ul style="list-style-type: none"> • Environment Protection Authority (EPA – 131 555) whoever is the appropriate • Bankstown Council • SafeWork NSW • Fire and Rescue NSW The following information is required when providing notification to the authorities: <ul style="list-style-type: none"> • Time, date and location of the incident • Nature of the incident – i.e. the estimated quantity and volume and concentration of pollutants (if known) • Circumstances of incident (include the cause if known) • Action taken or proposed to be taken to manage incident • Other information prescribed by the authorities (Note: If any of the above information is not known at the time of notification, it must be made available immediately once it becomes known.) Neighbours/public need only be contacted / evacuated if there is a threat of the spill affecting them or if this is determined by emergency services. Additional notification as directed by Regulatory authority or emergency services.
PUBLISHING MONITORING DATA AND MEDIA	Monitoring data is to be made available for public access. Only the site manager or delegate is authorised to speak to the media on the company's behalf. Determine if the event meets the criteria of a PPG reportable incident. Utilise PPG critical incident group if required (24/7).
CLEAN UP / ALL-CLEAR	Proceed with clean-up to restore environment Call Emergency spill clean-up services if necessary (see contact list). All clear is given by the Fire Brigade or CW
REVIEW	Conduct investigation as per procedure EHS-VIL-09-001 Draft Incident Report & submit to appropriate regulatory agencies (if required) Review PIRMP for accuracy, currency and suitability – make any changes if required.

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Fire Incident Response

ACTION	SUMMARY
SOUND ALARM	Activate nearest press glass near you, etc
ATTACK FIRE	If safe to do so, attack the fire using first response techniques (extinguishers, fire blanket, hose reels)
MAKE SAFE	Turn off any equipment that may become dangerous if left unattended. Close containers of flammable substances, etc. This is intended to prevent aggravation of any existing situation or creating secondary incidents
EVACUATE	This must be simultaneous with fighting the fire. Do NOT wait for instructions, evacuate immediately to the front car park Wardens are to clear areas Security to gather the contractor/driver sign in records AND the visitor book (from reception)
ASSEMBLE	At your area assembly point in the front car park Wardens to conduct roll calls at the Evacuation Points in the car park. Security to conduct roll call of visitors / contractors / drivers ERS and CW to be advised of any missing persons. Security to maintain driveway access to the site and prevent non-emergency vehicles from entering or leaving CW / DCW to advise emergency services of nature and location of incident, ERS to assist with connection to fire services, etc.
ERS	Identify the area affected. If safe to do so - attack the fire. Confirm via radio the incident details with the CW / Security If not already done - alert the Emergency Services. The ERS for the affected area will delegate duties ERS will be under the control of emergency services on their arrival.
FIRST AID	First aiders are to set up a first aid station in the main car park and treat any injured employees. They must liaise with the CW and ERS.
NEIGHBOURS / AUTHORITIES / MEDIA / PPG	If the fire has the potential to harm the environment; the EHS Manager to contact the following authorities immediately in order as listed: <ul style="list-style-type: none"> • Fire and Rescue NSW • Environment Protection Authority (EPA – 131 555) whoever is the appropriate • Bankstown Council • SafeWork NSW The following information is required when providing notification to the authorities: <ul style="list-style-type: none"> • Time, date and location of the incident • Nature of the incident – i.e. the estimated quantity and volume and concentration of pollutants (if known) • Circumstances of incident (include the cause if known) • Action taken or proposed to be taken to manage incident • Other information prescribed by the authorities (Note: If any of the above information is not known at the time of notification, it must be made available immediately once it becomes known.) Neighbours/public need only be contacted / evacuated if there is a threat of the spill affecting them or if this is determined by emergency services. Additional notification as directed by Regulatory authority or emergency services.
ALL CLEAR	When advised by emergency services that it is safe to re-enter buildings, the CW shall advise ERS and Wardens. ERS will give three short sirens to indicate the all clear.

