

Emergency Response Manual

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*Revision History – see SharePoint

For quick reference and emergency contacts use Emergency Flip Chart INCEME-PL002 Located in Woodchem control room.

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1.0 OVERVIEW

Woodchem Australia Pty Ltd is an amino-formaldehyde resin manufacturer employing approximately 25 staff, operating on a 24/7 basis and has been manufacturing on the present site since 2000.

The majority of products produced at Woodchem Australia are amino formaldehyde resins. These resins are produced by polymerising a combination of formaldehyde, urea and melamine.

Physical properties

Viscosity	Brookfield 100 – 200 cP (similar to motor oil) @ 25°C
Density	1290 kg/m ³ @ 25°C
Flash Point	N/A (Does not support combustion)
Boiling Point	~100°C
Appearance	Clear to white liquid
Texture	Tacky
Odour	Slight amine and/or formaldehyde smell

Urea Formaldehyde Concentrate

Urea Formaldehyde Concentrate is manufactured as a raw material from methanol for amino resin manufacture. UFC is a solution of urea and formaldehyde in water, with some of the urea and formaldehyde reacted to form monomers or oligomers such as dimethylolurea. The free formaldehyde concentration of UFC varies between 20 – 40%. UFC is made at varying solids concentrations from 59 – 85%. It is a combustible liquid (Class C1 as per AS 1940).

A small percentage of this product is sold.

Physical Properties

Viscosity	Brookfield 0 – 200 cP (between water and motor oil) @ 25°C
Density	1200 - 1350 kg/m ³ @ 25°C
Flash Point	85°C
Boiling Point	~100°C
Appearance	Clear to translucent liquid
Texture	Slightly tacky
Odour	Strong formaldehyde odour



Formaldehyde Solutions

Formaldehyde solutions are manufactured from methanol as a raw material for amino resin manufacture. Formaldehyde solutions are a solution of formaldehyde and water with less than 1% methanol content. Currently this solution is produced at ~42%. It is a combustible liquid (Class C2 as per AS 1940).

A small percentage of this product is sold.

Physical Properties

Viscosity	Brookfield 0 – 20 cP (water) @ 25°C
Density	1050 - 1200 kg/m ³ @ 25°C
Flash Point	97°C
Boiling Point	~100°C
Appearance	Clear liquid
Texture	Slightly oily
Odour	Strong formaldehyde odour

2.0 INTRODUCTION AND DEFINITION OF AN EMERGENCY

- 2.1** This document is to serve as a guideline to all personnel on the Woodchem site as to how best to respond in the event of an Emergency. The format of this document is, where appropriate, in the format recommended by NSW Department of Planning Hazardous Industry Planning Advisory Paper Number 1 (HIPAP 1)
- 2.2** An Emergency is a potential or actual hazardous situation that requires the immediate action of Woodchem personnel to protect, both on site and off site, people, property and the environment. The hazardous situation may originate at Woodchem or be an offsite hazardous situation that has the potential to impact Woodchem.
- 2.3** The following situations all have a low likelihood of occurrence but the potential for high consequence. They are given here to illustrate some situations that would require emergency response. Controls are in place to reduce the risk of these situations. Refer to 10.0 Emergency Procedures and 16.0 Special Cases. Additionally, regular workplace inspections are undertaken to identify any areas of the facility that may require attention and/or plant maintenance.
- Serious accident/injury on site requiring emergency service support
 - Major fire at the adjacent facilities
 - On site fire that cannot or has not been extinguished immediately by onsite firefighting equipment
 - Loss of containment of methanol – from truck, unloading area, methanol tank, or pumps and pipes leading to and from the methanol tank.
 - Methanol fire or explosion
 - Heat transfer fluid fire
 - Gas leak or fire at auxiliary boiler or gas lines

- Explosion
- Structural failure
- Loss of containment of formaldehyde or urea formaldehyde concentrate (UFC)
- Loss of containment of other materials
- Gelation of resin reactor
- Security threat (i.e. bomb threat, armed intruder etc.)

3.0 EMERGENCY PLANNING ASSUMPTION

- 3.1** This plan was developed to minimise the impact of an emergency through the use of appropriately trained personnel that have been exercised on a regular basis, the use of fully maintained and appropriate equipment as listed in the Emergency Services Information package. The plan by itself may not be able to prevent emergencies, but it should be able to promote minimising impacts on human health, the environment and property.
- 3.2** It is expected that Police and Ambulance will arrive within [REDACTED] and Fire brigade within [REDACTED] from local branches. If unavailable the response time will be greater, approximately [REDACTED] from Bathurst.
- 3.3** Contingency Planning consists firstly of a range of independent equipment that is listed in the ESIP it is not expected that all will fail in any given group. Many of the pieces of equipment are duplicated at Borg Panels and are available for use during an emergency. Contact Panels Chief Warden for assistance. If in the unlikely event, all equipment is unavailable use alternate means as much as safely possible, e.g. loaders with dirt or ash to put out ground fire, source mobile pumps from the Water Plant and use dams for water supply until emergency services arrive. Specific options are

[REDACTED]

[REDACTED]

- **Polluted Water Retention:** Any water that escapes from dangerous goods bunds flows to flush dam 4. If this is full the submersible pump at the weir can pump the water to the water treatment plant slab and finally to the sludge dam (capacity approx. 10 megalitres). From the sludge dam the water can be pumped into any of the process water dams that have a total capacity in excess of 20 megalitres a penstock located in the outflow swale of first flush 4 can be closed as well increasing capacity of water retention on site.
- **Communications:** Use Emergency Mobile Phone and/or UHF Radios channels and numbers are documented in the contact list.



4.0 TERMS AND DEFINITIONS

CABA (SCBA)	Compressed Air Breathing Apparatus
DEMO	District Emergency Management Officer
EPA	Environmental Protection Agency
ESIP	Emergency Services Information Package
Formaldehyde Solution	A Solution of formaldehyde in water
FECC	Facility emergency control Centre
JSA	Job Safety Analysis, a form of risk assessment
LEMC	Local Emergency Management Committee
MCC	Motor Control Centre (building with the main isolation switches and programmable logic controllers)
MCP	Manual Call Point, a break glass style button used to activate alarm system
MDF	Medium Density Fibreboard
MHF	Major Hazard Facility
SDS	Safety Data Sheet
OTC	Oberon Timber Complex, the site that includes Borg Panels and Woodchem Australia.
PPE	Personal Protective Equipment
UFC	Urea Formaldehyde Concentrate, a solution of partially reacted urea and formaldehyde
UN Numbers	Are four-digit numbers that identify hazardous substances
WCA	Woodchem Australia

5.0 AIM AND OBJECTIVES OF THE MANUAL

5.1 This manual serves as the documented emergency response plan for Woodchem Australia. The manual aims to provide a system and resources to deal with emergencies in a manner that, in order of importance:

- Protects people, both onsite and offsite
- Protects the environment
- Protect property, both onsite and offsite
- Returns the business to safe operation as quickly as possible

5.2 The objective of this manual is to ensure:

- That all site personnel, emergency respondents and the community are protected from harm.
- That, at all times, there is a high level of awareness of any potential issues that could lead to an emergency situation.
- That in the event of an emergency that there is a quick and efficient response to limit the impact of an emergency.
- That the emergency is managed until the Emergency Services arrive and take control
- That support is given to the Emergency Services including information, knowledge, skills and equipment.

6.0 ROLES OF AGENCIES, GROUPS, INDUSTRY AND THE COMMUNITY

6.1 Active Roles in an Emergency

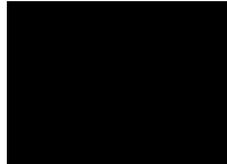
6.1.1 Emergency Services (Police, Fire Brigade & Rural Fire Service, Ambulance)

The assistance of Emergency Services will be requested if the emergency cannot be safely and effectively managed by Woodchem personnel. The request will be made, via 000, as soon as possible once the decision to call for assistance has been made, or if there is any doubt whether the situation can be managed internally. Once the Emergency Services arrive they will assume control of the emergency, however, all assistance requested from the Emergency Services of Woodchem personnel will be given. The following are the anticipated roles (if required) for the emergency services

- Police:** Control of security threats and individuals posing a threat to people or business. Control of any required evacuation of people off site. Control and/or removal of trespassers, external traffic control. Police will also be in control of investigations into fatalities.
- Fire Brigade:** Suppression and control of fires and/or fire risks (assisted by Rural Fire Service). Control of spill response (including loss of containment of gas) especially involving hazardous materials.
- Ambulance:** Treatment and transport of injured people.
- SES:** Rescue and support for other emergency services

6.1.2 Neighbouring Industry

Woodchem Australia neighbours with the Australian Panels facility. Many of the emergency resources are shared including,



6.1.3 Roles of Australian Panels

Australian panels personnel are available to assist in actions needed to address an emergency, including but not limited to, heavy machinery operation, assistance in organisation by Panels Chief Warden, support for firefighting and clean-up.

6.2 Consultative

6.2.1 Local Emergency Management Committee

A Woodchem representative will attend the Local Emergency Management Committee (LEMC) meetings as an active participant.

6.2.2 Community Consultation Committee

Quarterly meetings are held between Oberon community members and representatives of businesses in the OTC and other industrial businesses in Oberon. These meetings are intended for community consultation including incident management and emergency response. There is also Community Hotline on 1800 802 795.

6.2.3 The Fire Brigade & Rural Fire Service

The Fire Brigade & Rural Fire Service may be consulted with any changes that are made to the Emergency Response Manual. Also any written advice from FSNSW will be regarded.

7.0 HAZARDS

7.1 Dangerous Goods & Other Hazardous Materials

See Appendix III, Emergency Services Information Package for list of hazardous substances.
 See Appendix IV, MHF Safety Case – Manifest for list of dangerous goods.

7.2 Details of Other Hazards/Pollutants

Significant quantities of various non-hazardous materials are stored and used on the site which has potential of resulting in an environmental incident following loss of containment. These chemicals include urea, melamine and Additive WT.
 Other hazardous, non-dangerous materials are stored and used on site which also has potential of resulting in an environmental incident following loss of containment. These substances include finished resins and diesel fuel. A full inventory of other materials can be found on the Woodchem SharePoint page under Substances, with the exception of sediment laden surface water (listed in Table 1).
 Pre-emptive actions for potential pollutants are detailed in ENVMAN-PL001 Environmental Management Plan (see Section 8.0 below).

Table 1 Pollution Inventory

Potential Pollutant	Location on site	Type of containment	Maximum quantity on site
Sediment laden surface water/stormwater	All exposed areas	Surface water management system: grassed or shotcrete swales, gate valves, emergency catchment and first flush basin	N/A
Firefighting water	All areas with potential for fire	Bunds at potential high risk locations (see Appendix V for locations) First Flush Dam 4 Panels Water Treatment Plant Panels Sludge Dam	N/A



7.3 Natural Hazards

Natural Hazards have been considered and the response for each is below:

i. Earthquakes

Significant earthquakes are extremely unlikely in this area. All structures are built to regulation for this area. In the event of significant earthquakes all personnel are to follow evacuation procedures.

ii. Flood

Flooding is extremely unlikely (other than localised around drains) due to our elevation and surrounding terrain.

iii. Lightning Strike

There are several lightning rods around site for protection. Lightning in itself is not going to directly cause any Emergency situation other than injury to a person. Lightning may cause fires; these are to be dealt with as any fire.

iv. High Wind Speed

All structures are built to regulation, if high wind speed becomes a danger follow emergency shutdown procedures and remain inside the building.

8.0 TYPES AND LEVELS OF EMERGENCY

Table 2 lists identified chemical hazards at the Woodchem facility, and the degree of emergency associated with each hazard at local, site and external levels. Section 3 of the Woodchem Environmental Management Plan (ENVMAN-PL001) provides details for pre-emptive actions to be taken to minimise or prevent any risk or harm arising from the operation of the Woodchem facility for the following aspects:

- Surface water;
- Groundwater;
- Process water;
- Fire water;
- Odour;
- Dust;
- Air emissions;
- Noise;
- Traffic management;
- Meteorological monitoring;
- Waste management; and
- Soil management.

Section 3 of ENVMAN-PL001 also contains a risk assessment for the above aspects.

Table 2 Hazard Identification

Hazard	Local Emergency Services may be required. Effects are to be expected to be confined to specific areas (bunds) within the facility and no escalation is anticipated.	Site Emergency Services should be required. Effects can be expected to spread to or affect all parts of the facility, but not off-site.	External Emergency Services will be required. Expected to affect both within the facility and beyond the boundary of the facility.	Factors which could increase risk
<p>Methanol fire</p> <p><u>Likelihood:</u> Unlikely <u>Consequence:</u> Disastrous</p>	<p>An emergency resulting from the ignition of minor leaks or minor spills from truck discharge lines, discharge valves, couplings, pumps, valves or lines. Could occur in the truck unloading area, the pumps and valves adjacent to the methanol tank, valves to the formaldehyde plant or any of the pipes to and from the methanol tank.</p>	<p>An emergency resulting from the ignition of significant leaks or significant spills from truck discharge lines, discharge valves, couplings, pumps, valves or lines, or the methanol tank. Could occur in the truck unloading area, the pumps and valves adjacent to the methanol tank, valves to the formaldehyde plant or any of the pipes to and from the methanol tank.</p> <p>These leaks or spills can be contained by spill kits and fines or within the onsite dams.</p>	<p>An emergency resulting from a major loss (> 10 tonnes) of methanol from a methanol tanker, the methanol tank or a ruptured pipe and associated bunds</p> <p>If this loss is not contained by the first flush basins then methanol could enter creeks including the King Stockyard Creek via the V Notch at the Borg Panels site.</p> <p>Off-site fire in a methanol tanker.</p>	<ul style="list-style-type: none"> - Mechanical failure - Discharge lines and coupling inspections not completed - Operator inexperience - Tank and bund inspections not completed - Isolation failure during filter cleaning - Construction activity
<p>Heat transfer fluid fire</p> <p><u>Likelihood:</u> Extremely Unlikely <u>Consequence:</u> Major</p>	<p>An emergency resulting from a minor leak in a line. This would be contained in the bunded area.</p> <p>If appropriate, these leaks or spills can be contained by spill kits and fines or within the onsite dams.</p>	<p>An emergency resulting from a significant leak in a line.</p> <p>This would be contained in the bunded area.</p> <p>If appropriate, these leaks or spills can be contained by spill kits and fines or within the onsite dams.</p>	<p>Unlikely</p>	<ul style="list-style-type: none"> - Mechanical failure - SCADA formaldehyde plant shutdown trigger failure or disable - Loss of containment from impact
<p>Methanol Explosion</p> <p><u>Likelihood:</u> Extremely Unlikely <u>Consequence:</u> Disastrous</p>	<p>Ignition of methanol in the formaldehyde plant vaporiser.</p>	<p>An emergency resulting from an explosion from a methanol tanker or the methanol tank.</p>	<p>Off-site explosion in a methanol tanker.</p> <p>Off-site fire resulting from an explosion of a tanker.</p>	<ul style="list-style-type: none"> - Mechanical failure - Methanol flow meter failure - Incorrect oxygen analyser reading - Unsuitable transport operator - Methanol tank floating roof failure



Formaldehyde gas leak <u>Likelihood:</u> Unlikely <u>Consequence:</u> Moderate	Minor gas leak at a flange or valve at the formaldehyde plant. Gas is toxic and flammable.	Major gas leak resulting in a major failure in a flange, vessel, pipe or valve at the formaldehyde plant. Gas is toxic and flammable.	Unlikely	<ul style="list-style-type: none"> - Mechanical failure - Incorrect assembly during maintenance works - Construction activity - Rupture disc fatigue
Gas leak (including methanol vapour) <u>Likelihood:</u> Unlikely <u>Consequence:</u> Major	Minor gas leak at a flange or valve from a gas cylinder, gas pipe or fitting at the formaldehyde plant. Gases are toxic and flammable.	Significant gas leak at a flange or valve from a gas cylinder, gas pipe or fitting, or a vessel at the formaldehyde plant. Gases are toxic and flammable.	A major gas leak at the site level could lead to an explosion that could result in an off-site fire.	<ul style="list-style-type: none"> - Mechanical failure - Incorrect gas cylinder storage - Construction activity - Natural gas works - Hazardous zone ignition control failure - Hot work
Gas explosion <u>Likelihood:</u> Extremely Unlikely <u>Consequence:</u> Major	Ignition of minor gas leak at boiler or in a confined space near a gas leak.	Ignitions of significant gas leak or major gas build up at boiler or in a confined space near a gas leak.	Unlikely	<ul style="list-style-type: none"> - Mechanical failure - Hot work - Natural gas works - Construction activity - Boiler inspection non-compliance
Methanol spill <u>Likelihood:</u> Unlikely <u>Consequence:</u> Major	<p>An emergency resulting from minor leaks or minor spills from truck discharge lines, discharge valves, couplings, pumps, valves or lines. Could occur in the truck unloading area, the pumps and valves adjacent to the methanol tank, valves to the formaldehyde plant or any of the pipes to and from the methanol tank.</p> <p>These fluids could be contained by the use of spill kits or fines.</p>	<p>An emergency resulting from significant leaks or significant spills from truck discharge lines, discharge valves, couplings, pumps, valves or lines, or the methanol tank. Could occur in the truck unloading area, all the pumps and valves adjacent to the methanol tank, valves to the formaldehyde plant or any of the pipes to and from the methanol tank.</p> <p>These leaks or spills can be contained by spill kits and fines or within the onsite dams.</p>	<p>An emergency resulting from a major loss of methanol from a methanol tanker, the methanol tank or a ruptured pipe. Loss would need to exceed 10 tonnes of material. If this loss is not contained by the first flush basins then methanol could enter creeks including the King Stockyard Creek via the V Notch at the Borg Panels site.</p> <p>Off-site leak in a methanol tanker.</p>	<ul style="list-style-type: none"> - Mechanical failure - Methanol hose inspection non-compliance - Unsuitable/inexperienced transport operator - Construction activity - PVS/VVS non-compliance - Tank and bund inspections not completed - Significant rain event



<p>Formaldehyde or UFC spill</p> <p><u>Likelihood:</u> Unlikely</p> <p><u>Consequence:</u> Major</p>	<p>An emergency resulting from minor leaks or spills from the formaldehyde plant, any pumps lines or valves, storage tanks or truck loading lines, valves and truck tank.</p> <p>These fluids could be contained by the use of spill kits or fines.</p>	<p>An emergency resulting from significant leaks or spills from the formaldehyde plant, any pump lines or valves, storage tanks or truck loading lines, valves and truck tank.</p> <p>These leaks or spills can be contained by spill kits and fines or within the onsite dams.</p>	<p>An emergency resulting from major leaks or spills from the formaldehyde plant, any pumps lines or valves, storage tanks or truck loading lines, valves and truck tank.</p> <p>Loss would need to exceed 10 tonnes of material. If not contained by the first flush basins then methanol could enter creeks including the King Stockyard Creek via the the Borg Panels site.</p> <p>Any significant or major loss from material from a tanker off site.</p>	<ul style="list-style-type: none"> - Mechanical failure - Isolation failure during process sampling - Unsuitable material used for transport or storage - Construction activity - Alternate storage or transport methods due to upset conditions - Significant rain event
<p>Structural failure</p> <p><u>Likelihood:</u> Extremely Unlikely</p> <p><u>Consequence:</u> Disastrous</p>	<p>An emergency resulting from a small impact by a vehicle or object that could lead to further structural failures, or shutdowns. No injuries related to incident.</p>	<p>An emergency resulting from an impact by a vehicle or object that could lead to loss of containment of dangerous goods or environmental pollutants. Damage that has caused injury, fires, or the potential of a fire.</p>	<p>An emergency resulting from a major structural failure that leads to loss of containment of chemicals, fire, serious injury or death, the potential for serious on site and off sites fires or environmental damage.</p>	<ul style="list-style-type: none"> - Construction activity
<p>Major fire at an adjacent facility</p> <p><u>Likelihood:</u> Extremely Unlikely</p> <p><u>Consequence:</u> Moderate</p>	<p>A small localised fire at a neighbouring site not immediately impacting of likely to impact Woodchem</p>	<p>A fire at a neighbouring plant that is not controlled and could potentially affect Woodchem.</p>	<p>A fire at an adjacent site that is not under control and threatens Woodchem, in particular the methanol storage tank.</p>	<ul style="list-style-type: none"> - Material stockpile - Unkept vegetation - Bushfire danger period
<p>Loss of containment of solid or liquid non-dangerous goods</p> <p><u>Likelihood:</u> Unlikely</p> <p><u>Consequence:</u> Moderate</p>	<p>Loss of a small quantity of chemical contained within bunded areas.</p>	<p>Loss of containment of quantity of chemical resulting in contamination of soil or on-site dams.</p>	<p>Loss of containment of significant quantity of chemical resulting in pollution of air, water and/or soil outside the Woodchem site.</p>	<ul style="list-style-type: none"> - Mechanical failure - Isolation failure - Significant rain event - Construction activity - PVS/MVS non-compliance



9.0 EMERGENCY FUNCTIONS AND ORGANISATION STRUCTURE

9.1 Emergency Functions

At all times each role is to be conducted with the safety of all persons, including the individual fulfilling the role, which may be affected by the emergency situation as the primary objective

The individual responsibilities of each role can be delegated, unless otherwise specified, but must only be assigned to employees with the skills and knowledge to fulfil the role.

9.1.1 Chief Warden

- i) The Chief Warden is the Facility Emergency Control.
- ii) The Shift Leader takes the role of the Chief Warden.
 - For succession if Shift Leader is not on site see Emergency Flip Chart INCEME-PL002
- iii) The role of Chief Warden is initiated when an emergency alarm is activated.
- iv) Termination of the role of Chief Warden occurs when:
 - The Chief Warden gives the all clear. (This cannot be given until Emergency Services hand control of the site back) OR
 - The Chief Warden hands control of the site back to the senior manager (This cannot be done until all immediate threats to people, environment and property are over)

9.1.2 Chief Wardens Responsibilities

- i) Managing any emergency situation in such a manner as to protect People, Environment and Property both onsite and offsite.
- ii) Deciding whether to give All Clear, escalate the emergency alarm and initiate an emergency response
- iii) Communicating the situation with the MDF Chief Warden
- iv) Deciding to call the Emergency Services
- v) Communicating the situation with neighbours if they may be impacted
- vi) Deciding if full evacuation or partial evacuation is required
- vii) Control of the emergency response until Emergency Services arrive (if called)
- viii) Act as the primary liaison for the Emergency Services including coordinating assistance requested

9.1.3 Communications and Environmental Officer

- i) The most senior manager on site assumes the role of Communications & Environmental Officer or nominate a suitable employee
 - For succession if no senior manager is on site see Emergency Flip Chart INCEME-PL002
- ii) The role of the Communications and Environmental Officer is initiated when an emergency alarm is activated
- iii) The role of Communications and Environmental Officer continues until the Chief Warden gives the all clear and the Communications and Environmental Officer is satisfied the role can be terminated.

9.1.4 Communications and Environmental Officer's Responsibilities

- i) Manage all communications that are not directly required for Emergency Response
- ii) Provide assistance to the Chief Warden in regards to how to best protect the environment during the emergency

**9.1.5 Australian Panels Chief Warden**

- i) The role of Borg Panels Chief Warden is assumed by the press supervisor at Borg Panels
 - For succession if no Panels Supervisor on site see Emergency Flip Chart INCEME-PL002
- ii) The role's activation and termination are under Borg Panels control however in case of an emergency at Woodchem this role can be considered permanently in operation

9.1.6 Australian Panels Chief Wardens Responsibilities (In relation to Woodchem)

- i) Investigation of any alarm that is activated across the OTC
- ii) Communication of result of investigation with Woodchem Emergency Warden
- iii) Point of contact for Woodchem Chief Warden for any matter arising that requires action from Borg Panels
- iv) Monitor and maintain the fire protection systems
- v) Provide assistance and advice to the Chief Warden
- vi) Operation of the alarm system and intercommunication system.
- vii) Assisting Emergency Services in locating and isolating of water shut off values and gas lines.
- viii) Ensuring that the fire pumps are manned and that the pressure sustaining valves are operating correctly.
- ix) Assisting in the location of specialised equipment located on site.

9.1.7 Emergency Services

- i) The role in a Woodchem emergency for the Emergency Services begins once the call to 000 is made until the Emergency Services hand back control of the site to the Chief Warden

9.1.8 Emergency Services Responsibility

- i) The Emergency Services take control of the site and the responsibility for the emergency response once they arrive at site.

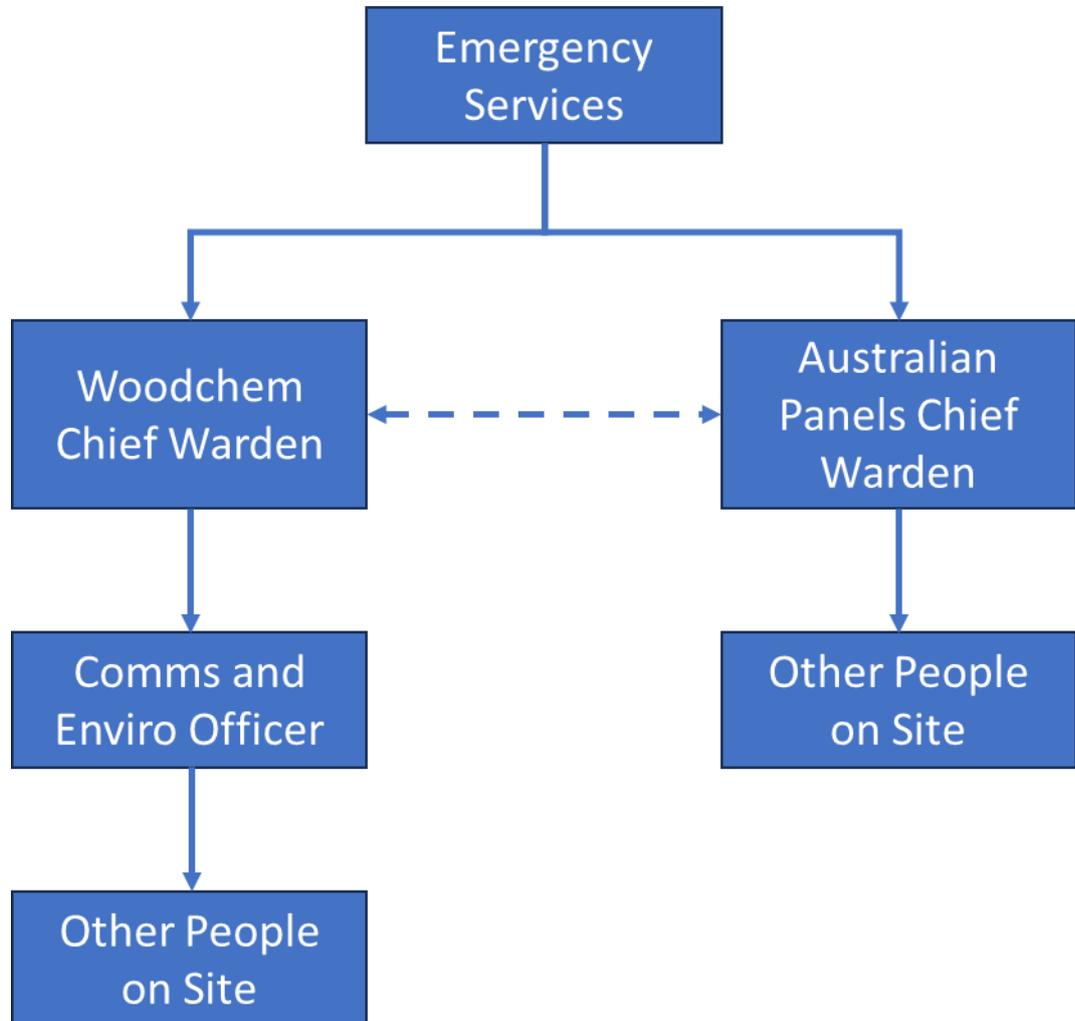
9.2 Identification of Wardens

The Chief Warden will be identified by a yellow safety hat.

9.3 Shutdown Periods



9.4 Organisational Structure



The Emergency Flip Chart INCEME-PL002 also contain detailed information for the organisational structure during an emergency.

10.0 EMERGENCY PROCEDURE

10.1 Methods of Communication During an Emergency

Communications regarding the occurrence of an emergency, any actions required during the emergency situation and the “all clear” being given shall be conducted between the Chief Warden (or designate), all persons at the workplace and emergency services via a variety of means:

- i) Verbal (face to face)
- ii) UHF radio
- iii) Mobile phone (emergency mobile phone based in the control room or personal phone may be used)
- iv) Manual Call Points
- v) Emergency Public Address system



10.2 Initial Response by those Detecting an Emergency

The following are guides as to what actions should be taken for various emergency situations. At all times ensure that your safety and the safety of others are considered before approaching an emergency. If assistance is available, then some of the steps below can be conducted concurrently. **Loss of containment of formaldehyde solutions and methanol of > 2,000 kgs** are considered Major Incident Events and emergency services are likely required to attend site.

10.2.1 Hazardous chemical exposure to person

Incident	<ul style="list-style-type: none"> Hazardous Chemical Exposure to Person
Identification	<i>How are we made aware of the emergency situation?</i> <ul style="list-style-type: none"> Activation of Manual Call Point alarm system Visual identification
Consequence	<i>What will happen without action?</i> <ul style="list-style-type: none"> Risk of injury or death to workers or others due to exposure to hazardous substances
Actions	<i>How will we respond to the emergency situation?</i> <ul style="list-style-type: none"> Activate Emergency Response Procedures including activation of manual call point Remove the affected person from the source of exposure if safe to do so Contact emergency services First aid trained personnel to treat the exposed persons as per the below table (note: treat unknown substances as methanol) Isolate the source of the exposure if safe to do so If the chemical is identified, refer to the SDS for further treatment instructions and provide to emergency services personnel and/or doctor/physician Contact management and/or Human Resources coordinator for assistance at the first available opportunity Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<i>What is available to respond to the emergency situation?</i> <ul style="list-style-type: none"> Safety showers Eye wash stations PPE rated for all substances on site Domestic shower for extended decontamination



	Formaldehyde/UFC	Methanol	Caustic/Acid	Resin (either in-process or complete)	Melamine
Precautions before treatment (Ensure you are not exposed)	Use respirators or breathing apparatus to prevent inhalation until removed from area Wash down objects, clothing and people with clean running water and/or use gloves as necessary.	Use respirators or breathing apparatus to prevent inhalation until removed from area. Wash down objects, clothing and people with clean running water and/or use gloves as necessary. Do not take ignition sources near exposed areas.	Wash down objects, clothing and people with clean running water and/or use gloves as necessary.	Wash down objects, clothing and people with clean running water (this will also cool any elevated temperature in-process resin) Use gloves as necessary.	Wash down objects, clothing and people with clean running water and/or use gloves as necessary. Avoid breathing dust, use a P2 mask as a minimum
Ingestion	Rinse mouth with water. Do NOT induce vomiting. Transport to hospital without delay.	Rinse mouth with water. Do NOT induce vomiting. Transport to hospital without delay.	Rinse mouth with water. Do NOT induce vomiting. Transport to hospital without delay.	Rinse mouth with water. Do NOT induce vomiting.	Rinse mouth with water. Do NOT induce vomiting.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Apply artificial respiration if not breathing. Transport to hospital without delay.	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Apply artificial respiration if not breathing. Transport to hospital without delay.	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Apply artificial respiration if not breathing. Transport to hospital without delay.	Remove victim to fresh air and keep at rest in a position comfortable for breathing.	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin	Remove immediately all contaminated clothing. Rinse skin with large amounts of water/shower.	Remove immediately all contaminated clothing. Rinse skin with large amounts of water/shower.	Remove immediately all contaminated clothing. Rinse skin with large amounts of water/shower.	Remove immediately all contaminated clothing. Rinse skin with large amounts of water/shower.	Remove immediately all contaminated clothing. Rinse skin with large amounts of water/shower.
Eyes	Hold eyelids apart and flush continually with running water, ensuring entire eye is irrigated by occasionally lifting the eyelids. Continue flushing for at least 15 minutes or until advised otherwise by a poisons information centre Transport to hospital without delay.	Hold eyelids apart and flush continually with running water, ensuring entire eye is irrigated by occasionally lifting the eyelids. Continue flushing for at least 15 minutes or until advised otherwise by a poisons information centre. Transport to hospital without delay.	Hold eyelids apart and flush continually with running water, ensuring entire eye is irrigated by occasionally lifting the eyelids. Continue flushing for at least 15 minutes or until advised otherwise by a poisons information centre. Transport to hospital without delay.	Hold eyelids apart and flush continually with running water. Continue flushing for at least 15 minutes or until advised otherwise by a poisons information centre.	Hold eyelids apart and flush continually with running water. Continue flushing for at least 15 minutes or until advised otherwise by a poisons information centre.



10.2.2 Methanol fire in truck unloading area

Incident	<ul style="list-style-type: none"> Methanol fire in methanol truck unloading area
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Infrared fire detection alarm in control room Activation of tanker deluge system Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding grassed areas Escalation of fire to methanol tank bund Escalation of fire to formaldehyde plant area Risk of injury or death to workers or others from fire Risk of injury or death to workers or others from combustion by-products Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Isolate source of release remotely if possible Capture spilled methanol in evaporation pit by closing drain valve if safe to approach area Activate tanker deluge system if not already activated Activate fire suppression systems including foam blanketing of fire and surrounding areas Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Infrared fire detection (in case of escalation to tank bund) for automatic fire suppression activation Tanker deluge system Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Bunded areas reduce area of effect <p>Note:</p> <ul style="list-style-type: none"> Methanol is miscible in water and mixtures become non-flammable when below 20% concentration.



10.2.3 Methanol fire in the methanol tank

Incident	<ul style="list-style-type: none"> Methanol fire in methanol tank
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Infrared fire detection alarm in control room Visual observation of heat damage in surrounding area (peeling paint, burning ancillary equipment etc) Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding grassed areas Loss of methanol tank integrity – possible structural collapse Escalation of fire to formaldehyde plant area Escalation of fire to methanol tanker unloading area Risk of injury or death to workers or others from fire Risk of injury or death to workers or others from combustion by-products Risk of injury or death to responders from structural collapse Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Isolate fuel source if safe to do so Remove methanol tanker from unloading area if safe to do so (activate tanker deluge if not safe) Activate methanol tank deluge system Activate fire suppression systems including foam blanketing of tank and surrounding areas Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Infrared fire detection for automatic fire suppression activation Tank deluge system Methanol tank engineered floating roof (passive) Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Bunded areas reduce area of effect <p>Note:</p> <ul style="list-style-type: none"> Methanol is miscible in water and mixtures become non-flammable when below 20% concentration.



10.2.4 Methanol fire in tank bund only – not in tank

Incident	<ul style="list-style-type: none"> Methanol fire in methanol tank bund only (NOT in tank)
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Infrared fire detection alarm in control room Ancillary equipment SCADA failure due to heat/fire damage Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding grassed areas Escalation of fire to methanol tank Loss of methanol tank integrity – possible structural collapse Escalation of fire to formaldehyde plant area Risk of injury or death to workers or others from fire Risk of injury or death to workers or others from combustion by-products Risk of injury or death to responders from structural collapse Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Isolate fuel source if safe to do so Activate fire suppression systems including foam blanketing of tank and surrounding areas Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Infrared fire detection for automatic fire suppression activation Tank deluge system Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Bunded areas reduce area of effect <p>Note:</p> <ul style="list-style-type: none"> Methanol is miscible in water and mixtures become non-flammable when below 20% concentration.



10.2.5 Methanol fire at pumps or valves between the unloading area and tank, and between the tank and the formaldehyde plant

Incident	<ul style="list-style-type: none"> Methanol fire at pumps or valves between unloading area and methanol tank, or between tank and formaldehyde plant
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Infrared fire detection alarm in control room Ancillary equipment SCADA failure due to heat/fire damage Visual observation of heat damage in surrounding area (peeling paint, burning grass, burning ancillary equipment etc) Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding grassed areas Escalation of fire to formaldehyde plant area Escalation of fire to methanol tanker unloading area Risk of injury or death to workers or others from fire Risk of injury or death to workers or others from combustion by-products Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Isolate fuel source if safe to do so Activate methanol tanker deluge system Activate fire suppression systems including foam blanketing of tank and surrounding areas Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Infrared fire detection for automatic fire suppression activation Methanol tanker deluge system Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Bunded areas reduce area of effect <p>Note:</p> <ul style="list-style-type: none"> Methanol is miscible in water and mixtures become non-flammable when below 20% concentration.



10.2.6 Methanol fire at the formaldehyde plant

Incident	<ul style="list-style-type: none"> Methanol fire at the formaldehyde plant
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Automatic SCADA plant shutdown due to elevated RTD temperatures Rupture of frangible bursting discs due to elevated pressure upon ignition Visual observation of heat damage in area (peeling paint, burning equipment etc) Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding grassed areas Escalation of fire to HTF vessels (flammable material) Risk of injury or death to workers or others from fire Risk of injury or death to workers or others from combustion by-products Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Isolate fuel source if safe to do so (methanol tank outlet valve) Activate fire suppression systems including foam blanketing of surrounding areas Cool HTF vessels if safe to do so to reduce chance of escalation Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Bunded areas reduce area of effect <p>Note:</p> <ul style="list-style-type: none"> Methanol is miscible in water and mixtures become non-flammable when below 20% concentration.



10.2.7 Methanol fire on site roadways

Incident	<ul style="list-style-type: none"> Methanol fire on site roadways
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Visual observation of combustion in area (heat haze, burning surrounds) Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to formaldehyde plant area Escalation of fire to resin plant area Escalation of fire to occupied control room/office areas Risk of injury or death to workers or others from fire Risk of injury or death to workers or others from combustion by-products Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Isolate fuel source if safe to do so Activate fire suppression systems including foam blanketing of surrounding areas Attempt to dam downstream direction and any drains, swales, pits etc. if burning methanol is mobile Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Earthmoving mobile plant (front end loader, excavator, bulldozer on Borg site) Bunded areas may reduce area of effect <p>Note:</p> <ul style="list-style-type: none"> Methanol is miscible in water and mixtures become non-flammable when below 20% concentration.



10.2.8 Methanol fire off site

Incident	<ul style="list-style-type: none"> Methanol fire offsite <p>Note: Few controls are available to Woodchem if methanol tankers are burning offsite, emergency services would be heavily relied upon. Woodchem can supply small-scale equipment and substance advice.</p>
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Visual observation of combustion in area (heat haze, burning surrounds) Contact from transport operator Notification from external (community, neighbouring sites)
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to nearby facilities Risk of injury or death to workers or others from fire Risk of injury or death to workers or others from combustion by-products Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Contact emergency services Evacuate non-essential persons from area Isolate area from access if possible Activate any fire suppression systems available Attempt to dam downstream direction if burning methanol is mobile Assess action effectiveness Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Methanol truck fire systems including fire extinguishers and BLEVE overpressure relief valves Foam fire extinguishers Roadside hydrants and boosters Earthmoving mobile plant (loaders, excavators etc.) <p>Note:</p> <ul style="list-style-type: none"> Methanol is miscible in water and mixtures become non-flammable when below 20% concentration.



10.2.9 Heat transfer fire – formaldehyde plant

Incident	<ul style="list-style-type: none"> Heat transfer fluid fire at the formaldehyde plant
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Automatic SCADA plant shutdown due to elevated RTD temperatures Rupture of frangible bursting discs due to elevated pressure upon ignition Automatic SCADA plant shutdown due to drop in HTF level following bursting disc rupture Visual observation of fire or heat damage Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding areas Possible rupture of adjacent structures allowing formaldehyde gas release Risk of injury or death to workers or others from fire Risk of injury or death to workers or others from combustion by-products Risk of injury or death to workers or others from structural collapse Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Activate fire suppression systems including foam blanketing of surrounding areas Cool HTF capture tank on north-east corner of formaldehyde plant if possible and safe to do so Attack fire from distance outside radiant zone with local or portable fire response resources if safe to do so Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Dry chemical fire extinguishers Water fire extinguishers Carbon dioxide fire extinguishers Fire hose reels Fire hydrants Bunded areas reduce area of effect <p>Note:</p> <ul style="list-style-type: none"> Direct water spray should not be used to attack fire due to risk of scattering burning material. SCBA must be used in close proximity to fire due to hazardous phenyl oxide and carbon oxide combustion products, as well as possible formaldehyde release



10.2.10 Methanol explosion anywhere

Incident	<ul style="list-style-type: none"> Methanol explosion on site
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Automatic SCADA plant shutdown and frangible bursting disc rupture due to elevated pressure upon ignition Activation of methanol tank fire suppression systems (infra-red detector) Visual and audible observation Transport operator notification Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding areas from combustion Escalation of fire to other areas of plant from methanol mobility Possible rupture of adjacent structures allowing formaldehyde gas release Risk of injury or death to workers or others from fire or explosion Risk of injury or death to workers or others from combustion by-products Risk of injury or death to workers or others from structural collapse Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Evacuate all persons downstream of possible methanol mobility Isolate source of release if possible and safe to do so Activate fire suppression systems including foam blanketing of surrounding areas Attack fire from distance outside radiant zone with local or portable fire response resources if safe to do so Attempt to dam any mobile methanol with earth or other inert material Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fixed fire monitors (with integrated foam supply) Methanol tanker deluge system Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Earthmoving equipment (front-end loader, excavator, bulldozer on Borg site) Bunded areas reduce area of effect <p>Note:</p> <ul style="list-style-type: none"> Methanol is miscible in water and mixtures become non-flammable when below 20% concentration.



10.2.11 Natural Gas leak/explosion

Incident	<ul style="list-style-type: none"> Natural gas leak or explosion
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Leak detection from aromatic additive (mercaptan) Visual and audible observation Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding areas Risk of injury or death to workers or others from toxic gas release Risk of injury or death to workers or others from fire or explosion Risk of injury or death to workers or others from combustion by-products Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Isolate natural gas manual isolation valve if safe to do so Contact gas supplier (Jemena) Ventilate affected area to dissipate natural gas Attack fire from distance outside radiant zone with local or portable fire response resources if safe to do so – do not enter buildings in case of explosion Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Natural gas passive cutoff/relief systems valve – exterior of main building ground level on southern side Natural gas manual isolation valve – exterior of main building ground level on southern side Foam fire extinguishers Fire hose reels Fire hydrants <p>Note: Areas adjacent to natural gas lines contain dangerous goods including:</p> <ul style="list-style-type: none"> Flammable materials (class 3) – segregated oil storage shed south end of warehouse near gas isolation point Flammable materials and compressed gases (class 3 and 2) – workshop room south of gas boiler Corrosive materials (class 8) – utilities room pallet racking opposite gas boiler Corrosive materials (class 8) – resin manufacture room north of gas boiler



10.2.12 Formaldehyde or methanol gas leak

Incident	<ul style="list-style-type: none"> Formaldehyde or methanol gas leak at formaldehyde plant
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Automatic SCADA plant shutdown due to pressure drop if leak is significant Personnel exposure (distinct smell and irritation) Formaldehyde detector readings (manual detection if suspected) Visual and audible observation (compromised gaskets or flanges may be visible, high airflow rates will cause “whistling” sound) Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Deflagration from ignition of leaking gas (both formaldehyde and methanol gases are flammable) Escalation of fire to other areas of plant Risk of injury or death to workers or others from fire or explosion Risk of injury or death to workers or others from toxic release Risk of injury or death to workers or others from structural collapse Offsite impact from fire escalation Offsite impact from toxic release
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Isolate source of release if possible and safe to do so Activate fire suppression systems including foam blanketing of surrounding areas Attack any fire from distance outside radiant zone with local or portable fire response resources if safe to do so Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note:</p> <ul style="list-style-type: none"> Full-face respirator complete with ABEK class filter cartridges or SCBA must be used during response. Ignition sources must not be used in the affected area Response must not be attempted alone due to risk of respiratory distress.
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Bunded areas reduce area of effect <p>Note:</p> <ul style="list-style-type: none"> Formaldehyde and methanol gases are quickly dispersed in fresh air to reduce concentrations below flammable range, ignition most likely close to point of gas release.



10.2.13 Methanol spill – less than 400 litres

Incident	<ul style="list-style-type: none"> Methanol spill – less than 400 litres
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Visual and smell observation SCADA tank deviation alarms Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of loss of containment Risk of ignition of spilled methanol Risk of injury or death to workers or others from methanol exposure Local (onsite) environmental contamination Offsite environmental contamination
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures (dependent on leak location) Contact emergency services Evacuate non-essential persons from area Isolate source of leak if safe to do so Remove or de-energise all electrical equipment in spill vicinity if safe to do so If banded, dilute using bulk amounts of water to reduce chance of ignition If unbanded, contain spill using earth or other inert non-flammable material and cover with firefighting foam Attempt to pump liquids to bulk wastewater tanks or IBCs Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note:</p> <ul style="list-style-type: none"> Full-face respirator complete with AX class filter cartridges or SCBA must be used during response. Ignition sources must not be used in spill response Approach any liquids from an upwind direction. Response must not be attempted alone due to risk of respiratory distress.
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Banded areas may reduce area of effect depending on spill location Earthmoving equipment (front-end loader, excavator, bulldozer) on Borg site Confined space atmosphere monitor (flammable atmosphere detection) <p>Note:</p> <ul style="list-style-type: none"> Methanol is Class 3 (flammable liquid) and Class 6 (toxic) Dangerous Goods. Methanol is miscible in water and becomes non-flammable below 20% concentration Volatile fumes may overwhelm responders or bystanders without appropriate breathing protection.



10.2.14 Methanol spill – greater than 400 litres

Incident	<ul style="list-style-type: none"> Methanol spill – greater than 400 litres
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Visual and smell observation SCADA tank deviation alarms Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Risk of injury or death to workers or others from ignition of spilled methanol Risk of injury or death to workers or others from methanol exposure Local (onsite) environmental contamination Offsite environmental contamination Offsite harm from methanol exposure
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area and restrict entry Isolate source of leak if safe to do so Remove or de-energise all electrical equipment in spill vicinity if safe to do so If banded, dilute using bulk amounts of water to reduce chance of ignition If unbanded, contain spill using earth or other inert non-flammable material and cover with firefighting foam Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note:</p> <ul style="list-style-type: none"> Full-face respirator complete with AX class filter cartridges or SCBA must be used during response. Ignition sources must not be used in spill response Approach any liquids from an upwind direction. Response must not be attempted alone due to risk of respiratory distress.
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Banded areas may reduce area of effect depending on spill location Earthmoving equipment (front-end loader, excavator, bulldozer) on Borg site Confined space atmosphere monitor (flammable atmosphere detection) <p>Note:</p> <ul style="list-style-type: none"> Methanol is Class 3 (flammable liquid) and Class 6 (toxic) Dangerous Goods. Methanol is miscible in water and becomes non-flammable below 20% concentration Volatile fumes may overwhelm responders or bystanders without appropriate breathing protection.



10.2.15 UFC or formaldehyde spill (unbundled) and flowing

Incident	<ul style="list-style-type: none"> UFC or formaldehyde leak – unbundled and flowing
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Visual and smell observation Possible SCADA tank deviation alarms Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding areas Risk of injury or death to workers or others from formaldehyde exposure Local (onsite) environmental contamination Offsite impact from formaldehyde exposure Offsite environmental contamination
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures (dependent on leak location and mobility direction) Contact emergency services Evacuate non-essential persons from area Isolate source of leak if safe to do so Restrict access downstream of affected area if possible Ventilate affected area to dissipate formaldehyde fumes Cool any elevated temperature liquid using water spray to reduce formaldehyde fume release Attempt to dam mobile liquid using spill kit supplies, wood fines, earth or other inert materials Attempt to pump liquids to bulk wastewater tanks Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note:</p> <ul style="list-style-type: none"> Full-face respirator complete with ABEK class filter cartridges or SCBA must be used during response. Approach any liquids from an upwind direction. Response must not be attempted alone due to risk of respiratory distress.
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Onsite spill kits Wood fines, earth and other inert materials Earthmoving equipment (front-end loader, excavator, bulldozer) on Borg site Fire hose reels Diaphragm and centrifugal pumps with associated hoses to assist liquid transfer Site drainage flows to capture dam to restrict area of effect <p>Note:</p> <ul style="list-style-type: none"> UFC and formaldehyde solutions are Class 8 (corrosive) Dangerous Goods. Volatile fumes may overwhelm responders or bystanders without appropriate breathing protection.



10.2.16 UFC or formaldehyde spill unbunded and immobile

Incident	<ul style="list-style-type: none"> UFC or formaldehyde leak – unbunded and immobile
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Visual and smell observation Possible SCADA tank deviation alarms Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Risk of injury or death to workers or others from formaldehyde exposure Local (onsite) environmental contamination Offsite impact from formaldehyde exposure Offsite environmental contamination
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures (dependent on leak location and mobility direction) Contact emergency services Evacuate non-essential persons from area Isolate source of leak if safe to do so Ventilate affected area to dissipate formaldehyde fumes Cool any elevated temperature liquid using water spray to reduce formaldehyde fume release Attempt to absorb liquid using spill kit supplies, wood fines, earth or other inert materials Attempt to pump bulk liquids to storage tanks Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note:</p> <ul style="list-style-type: none"> Full-face respirator complete with ABEK class filter cartridges or SCBA must be used during response. Approach any liquids from an upwind direction. Response must not be attempted alone due to risk of respiratory distress.
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Onsite spill kits Wood fines, earth and other inert materials Earthmoving equipment (front-end loader, excavator, bulldozer) on Borg site Fire hose reels Diaphragm and centrifugal pumps with associated hoses to assist liquid transfer <p>Note:</p> <ul style="list-style-type: none"> UFC and formaldehyde solutions are Class 8 (corrosive) Dangerous Goods. Volatile fumes may overwhelm responders or bystanders without appropriate breathing protection.



10.2.17 UFC or formaldehyde spill banded (< 2000 kg)

Incident	<ul style="list-style-type: none"> UFC or formaldehyde leak – unbanded and immobile
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Visual and smell observation Possible SCADA tank deviation alarms Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Risk of injury or death to workers or others from formaldehyde exposure Local (onsite) environmental contamination Offsite impact from formaldehyde exposure Offsite environmental contamination
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures (dependent on leak location and mobility direction) Contact emergency services Evacuate non-essential persons from area Isolate source of leak if safe to do so Ventilate affected area to dissipate formaldehyde fumes Cool any elevated temperature liquid using water spray to reduce formaldehyde fume release Attempt to absorb liquid using spill kit supplies, wood fines, earth or other inert materials Attempt to pump bulk liquids to storage tanks Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note:</p> <ul style="list-style-type: none"> Full-face respirator complete with ABEK class filter cartridges or SCBA must be used during response. Approach any liquids from an upwind direction. Response must not be attempted alone due to risk of respiratory distress.
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Onsite spill kits Wood fines, earth and other inert materials Earthmoving equipment (front-end loader, excavator, bulldozer) on Borg site Fire hose reels Diaphragm and centrifugal pumps with associated hoses to assist liquid transfer <p>Note:</p> <ul style="list-style-type: none"> UFC and formaldehyde solutions are Class 8 (corrosive) Dangerous Goods. Volatile fumes may overwhelm responders or bystanders without appropriate breathing protection.



10.2.18 UFC or formaldehyde spill banded (> 2,000 kg)

Incident	<ul style="list-style-type: none"> UFC or formaldehyde leak – banded, greater than 5 tonnes
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Visual and smell observation SCADA tank deviation alarms SCADA tank farm spill detection device activation Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of loss of containment could overwhelm bund capacity Risk of injury or death to workers or others from formaldehyde exposure Local (onsite) environmental contamination Offsite impact from formaldehyde exposure Offsite environmental contamination
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures (dependent on leak location) Contact emergency services Evacuate non-essential persons from area Isolate source of leak if safe to do so Ventilate affected area to dissipate formaldehyde fumes Cool any elevated temperature liquid using water spray to reduce formaldehyde fume release Attempt to pump liquids to bulk wastewater tanks Assess action effectiveness Evacuate site if situation escalates (e.g. bund failure) Consider the need to inform external parties once situation is under control Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note:</p> <ul style="list-style-type: none"> Full-face respirator complete with ABEK class filter cartridges or SCBA must be used during response. Approach any liquids from an upwind direction. Response must not be attempted alone due to risk of respiratory distress.
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Banded areas (passive) – engineered to hold minimum 110% of largest storage vessel in each bund Fire hose reels Diaphragm and centrifugal pumps with associated hoses to assist liquid transfer Bulk waste water tanks Resin or UFC tanks can be repurposed for temporary incident response <p>Note:</p> <ul style="list-style-type: none"> UFC and formaldehyde solutions are Class 8 (corrosive) Dangerous Goods. Volatile fumes may overwhelm responders or bystanders without appropriate breathing protection.



10.2.19 Unknown liquid spills

Incident	<ul style="list-style-type: none"> Unknown liquid spill <p>Note: Many dangerous goods are present on the Woodchem site. Until otherwise determined, use PPE and response tactics to all unknown chemicals as per methanol response as this gives the most protection to responders.</p>
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Visual and smell observation SCADA tank deviation alarms Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Risk of injury or death to workers or others from ignition of flammable liquid Risk of injury or death to workers or others from hazardous chemical exposure Local (onsite) environmental contamination Offsite environmental contamination Offsite harm from hazardous chemical exposure
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures (dependant on spill location) Contact emergency services Evacuate non-essential persons from area and restrict entry Perform risk assessment including substance identification if possible (contact management team for assistance) Isolate source of leak if safe to do so If unbunded, attempt to contain spill using earth or other inert material Clean up spill into appropriate containers once identified using standard spill response procedures Assess action effectiveness Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note:</p> <ul style="list-style-type: none"> Full-face respirator complete with ABEK class filter cartridges or SCBA must be used during response. Ignition sources must not be used in spill response. Approach any liquids from an upwind direction. Response must not be attempted alone due to risk of respiratory distress.
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants Bunded areas may reduce area of effect depending on spill location Earthmoving equipment (front-end loader, excavator, bulldozer) on Borg site Confined space atmosphere monitor (flammable atmosphere detection) <p>Note:</p> <ul style="list-style-type: none"> No substances on the Woodchem site have been identified as having adverse reactions with water or AFFF. Methanol is Class 3 (flammable liquid) and Class 6 (toxic) Dangerous Goods. Formaldehyde and UFC solutions are Class 8 (corrosive) Dangerous Goods. Methanol is miscible in water and becomes non-flammable below 20% concentration. Volatile fumes may overwhelm responders or bystanders without appropriate breathing protection. Elevated temperature liquids may be cooled using water spray from a safe distance.



10.2.20 Serious Injury

Incident	<ul style="list-style-type: none"> • Serious injury
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> • Visual observation • Call for help from injured party or other persons • Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> • Worsening of injury or death of injured person
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> • Implement emergency response procedures including activation of Manual Call Point to alert site • Contact emergency services • Assess situation to protect responders, bystanders and patient from residual danger • Evacuate non-essential personnel from area • Commence first aid if appropriately trained (or call for first aid assistance). Consider patient decontamination requirements. • Ensure vicinity of patient is undisturbed other than to assist the injured party or make the area safe • Once patient is stable or emergency services have assumed control, contact management and WHS officer for further assistance and reporting advice (can be done earlier if personnel available)
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> • First aid trained personnel: <ul style="list-style-type: none"> ○ Woodchem production personnel ○ Woodchem management personnel ○ Borg Panels shift leaders ○ Borg Panels nominated first aid responders • Occupational first aid kits • Defibrillator • Decontamination showers • Eye wash stations



10.2.21 Major fire at an adjacent facility

Incident	<ul style="list-style-type: none"> Major fire at an adjacent facility
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Visual observation Activation of fire systems from Borg facility Notification from external parties (community, neighbouring sites, emergency services) Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to Woodchem site
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Contact emergency services Implement plant emergency shutdown procedures Activate methanol tank fire suppression monitors (set to broad water spray) to protect tank in case of fire or ember encroachment Assist with initial fire response if resources available and safe to do so Evacuate site if situation escalates
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Dry chemical fire extinguishers Water fire extinguishers Carbon dioxide fire extinguishers Fire hose reels Fire hydrants



10.2.22 Grass fires

Incident	<ul style="list-style-type: none"> Grass fire onsite
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Infrared fire detection alarm in control room Ancillary equipment SCADA failure due to heat/fire damage Visual observation of flames, smoke or heat haze Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding areas Escalation of fire to formaldehyde plant area Escalation of fire to methanol tank bund Escalation of fire to methanol tanker unloading area Risk of injury or death to workers or others from fire Risk of injury or death to workers or others from combustion by-products Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Attempt to suppress fire using fire hoses, hydrants and monitors if trained and safe to do so Wet all surrounding areas using fire hoses, hydrants and monitors Activate methanol tanker deluge system and allow excess water to overflow evaporation pit, creating water course If fire approaches methanol tank bund, activate all fire monitors and direct broad water spray towards tank to cool tank and prevent embers from landing Assess action effectiveness Evacuate site if situation escalates
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Infrared fire detection for automatic fire suppression activation Fixed fire monitors (with integrated foam supply) Remote activation of fire suppression systems Foam fire extinguishers Fire hose reels Fire hydrants <p>Note:</p> <ul style="list-style-type: none"> Fire monitor foam must only be used if personnel, plant or methanol tank is endangered due to possible environmental harm.



10.2.23 Internal Fires

Incident	<ul style="list-style-type: none"> Internal building fire
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Ancillary equipment SCADA failure due to heat/fire damage Visual observation of flames, smoke or heat haze Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Escalation of fire to surrounding areas Risk of injury or death to workers or others from fire Risk of injury or death to workers or others from combustion by-products Risk of injury or death from structural collapse Offsite impact from fire escalation Offsite impact from combustion by-products
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures Contact emergency services Evacuate non-essential persons from area Attempt to suppress fire using fire hoses and hydrants if trained and safe to do so Wet all surrounding areas using fire hoses and hydrants Assess action effectiveness Evacuate site if situation escalates <p>Note:</p> <ul style="list-style-type: none"> Fire fighting attempts by workers must be made from a distance due to the risk of structural collapse
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Water fire extinguishers Carbon dioxide fire extinguishers Dry chemical fire extinguishers Foam fire extinguishers Fire hose reels Fire hydrants



10.2.24 Structural failure

Incident	<ul style="list-style-type: none"> • Structural collapse
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> • Ancillary equipment SCADA failure • Visual observation of collapse • Activation of Manual Call Point alarm system
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> • Rupture of vessels exposing workers or others to hazardous materials • Risk of injury or death from further structural collapse • Offsite impact from hazardous material loss of containment
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> • Implement emergency response procedures including activation of Manual Call Point to alert site • Implement plant emergency shutdown procedures • Contact emergency services • Evacuate non-essential persons from area • Attempt to limit spread of material from any ruptured vessels if safe to do so • Assess action effectiveness • Evacuate site if situation escalates
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> • Onsite spill kits • Earthmoving equipment (loaders, bulldozers, excavators) available on Borg site • Bunded areas may reduce area of effect of any released materials • Crossmuller construction crew available for stabilising compromised structures



10.2.25 Generic Emergency Situation

Incident	<ul style="list-style-type: none"> Generic Emergency Situation Including Security Threats and Natural Disasters
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Activation of Manual Call Point alarm system Visual identification External notification
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Risk of injury or death to workers or others Risk of offsite impact
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures (dependant on spill location) Contact emergency services Evacuate non-essential persons from affected area Isolate source of leak if safe to do so <p>Note: Security threats and natural disasters are considered low probability but high consequence threats. All response shall be guided by the appropriate emergency services.</p>
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Undefined. Any supplied resources shall be as per emergency services guidance.



10.2.26 Spill of Non-Dangerous Solid Chemical

Incident	<ul style="list-style-type: none"> Spill of Non-Dangerous Solid Chemical
Identification	<i>How are we made aware of the emergency situation?</i> <ul style="list-style-type: none"> Visual and smell observation Activation of Manual Call Point alarm system
Consequence	<i>What will happen without action?</i> <ul style="list-style-type: none"> Risk of injury or death to workers or others from chemical exposure Local (onsite) environmental contamination Offsite environmental contamination
Actions	<i>How will we respond to the emergency situation?</i> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site Implement plant emergency shutdown procedures (dependant on spill location) Evacuate non-essential persons from area and restrict entry Isolate source of leak if safe to do so Clean up spill into appropriate containers using standard spill response procedures Assess action effectiveness If spill poses an environmental threat, contact relevant parties including EPA Evacuate site if situation escalates Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<i>What is available to respond to the emergency situation?</i> <ul style="list-style-type: none"> Onsite spill kits Bunded areas may reduce area of effect depending on spill location Earthmoving equipment (front-end loader, excavator, bulldozer) on Borg site



10.2.27 Gelation of Resin Reactor

Incident	<ul style="list-style-type: none"> • Gelation of Resin Reactor
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> • Rapid increase in resin temperature (gelation imminent) • Rapid decrease in resin pH (gelation imminent) • Reactor agitator amps alarm (gelation imminent) • No flow from sample tap (gelation has already occurred) • Reactor agitator tripping out (gelation has already occurred)
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> • Risk of injury or death to workers or others from chemical exposure due to loss of containment from resin reactor • Risk of injury or death to workers or others from reactor blast overpressure • Local (onsite) environmental contamination
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> • Implement emergency response procedures including activation of Manual Call Point to alert site • Evacuate non-essential persons from area and restrict entry • If resin is still in liquid state (indicated by reactor agitator running and ability to obtain sample from sample tap), attempt to recover out of control resin as per <i>PRDRES-WI001 How to Recover Out of Control Resin</i> • Assess action effectiveness • Evacuate site if situation escalates (constant or increasing temperature, or loss of material observed) • Contact emergency services • Implement plant emergency shutdown procedures at gatehouse control room • Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> • Earthmoving equipment (front-end loader, excavator, bulldozer) on Borg site • Fire hose reels • Diaphragm and centrifugal pumps with associated hoses to assist liquid transfer



10.2.28 Overpressure of formaldehyde plant vaporizer / reactor

Incident	<ul style="list-style-type: none"> Overpressure of formaldehyde plant reactor / vaporizer
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Rapid increase in reactor and vaporizer temperature Rapid increase in reactor pressure
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Activation of rupture discs and potential localised fire at rupture disc vents. Risk of injury or death to workers or others from vessel blast overpressure if rupture discs fail to activate Local (onsite) environmental contamination
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site If rupture discs are activated with localised fire, evacuate non-essential personnel from area Implement plant emergency shutdown procedures and attempt to suppress fire using fire hoses and hydrants if trained and safe to do so If rupture discs fail to activate with increasing pressure and temperature, immediately evacuate all personnel to gatehouse Implement plant emergency shutdown procedures at gatehouse control room Assess action effectiveness Contact emergency services Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note: Activation of reactor rupture disc will vent methanol. AX filters must be used if attempting to suppress fire.</p>
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fire hose reels Fire hydrants Fire extinguishers



10.2.29 Overpressure of formaldehyde plant condenser / steam separator

Incident	<ul style="list-style-type: none"> Overpressure of formaldehyde plant condenser / steam separator
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> Rapid increase in air pad pressure and HTF temperature Rapid increase in condenser steam pressure
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Activation of condenser rupture disc if on tube side and decrease in HTF level Activation of steam relief valve if on shell side Risk of injury or death to workers or others from vessel blast overpressure if rupture disc and relief valve fail to activate Local (onsite) environmental contamination
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site If rupture disc and steam relief valve are activated, evacuate non-essential personnel from area Implement plant emergency shutdown procedures. If rupture disc and steam relief valve fail to activate with increasing pressure and temperature, immediately evacuate all personnel to gatehouse Implement plant emergency shutdown procedures at gatehouse control room Assess action effectiveness Contact emergency services Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note: Activation of condenser rupture disc will vent HTF above its flash point into the holding tank. Avoid entering area and allow HTF to cool.</p>
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fire hose reels Fire hydrants Fire extinguishers



10.2.30 Overpressure of formaldehyde plant ECS

Incident	<ul style="list-style-type: none"> Overpressure of formaldehyde plant ECS
Identification	<p><i>How are we made aware of the emergency situation?</i></p> <ul style="list-style-type: none"> SCADA alarms Rapid increase in blower inlet pressure Rapid increase in ECS temperature
Consequence	<p><i>What will happen without action?</i></p> <ul style="list-style-type: none"> Activation of absorber tower rupture disc Risk of injury or death to workers or others from vessel blast overpressure if rupture disc fails to activate Local (onsite) environmental contamination
Actions	<p><i>How will we respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site If rupture disc is activated, evacuate non-essential personnel from area Implement plant emergency shutdown procedures If rupture disc fails to activate with increasing pressure and temperature, immediately evacuate all personnel to gatehouse Implement plant emergency shutdown procedures at gatehouse control room Assess action effectiveness Contact emergency services Decontaminate incident responders and response equipment at end of incident using standard procedures
Resources	<p><i>What is available to respond to the emergency situation?</i></p> <ul style="list-style-type: none"> Fire hose reels Fire hydrants Fire extinguishers



10.2.31 Overpressure of water tube boiler

Incident	<ul style="list-style-type: none"> Overpressure of water tube boiler
Identification	<i>How are we made aware of the emergency situation?</i> <ul style="list-style-type: none"> SCADA alarms Rapid increase in boiler pressure
Consequence	<i>What will happen without action?</i> <ul style="list-style-type: none"> Activation of boiler steam relief valves Risk of injury or death to workers or others from vessel blast overpressure if relief valves fail to activate
Actions	<i>How will we respond to the emergency situation?</i> <ul style="list-style-type: none"> Implement emergency response procedures including activation of Manual Call Point to alert site If relief valves are activated, evacuate non-essential personnel from area Stop boiler via E-stop, is safe to do so Isolate gas supply at isolation valve, is safe to do so Implement plant emergency shutdown procedures If relief valves fail to activate with increasing pressure, immediately evacuate all personnel to gatehouse Implement plant emergency shutdown procedures at gatehouse control room Assess action effectiveness Contact emergency services
Resources	<i>What is available to respond to the emergency situation?</i> <ul style="list-style-type: none"> N/A



10.2.32 Formaldehyde Tank 30 fire

Incident	<ul style="list-style-type: none"> • Fire in formaldehyde Tank 30
Identification	<i>How are we made aware of the emergency situation?</i> <ul style="list-style-type: none"> • SCADA alarms • Rapid increase in Tank 30 temperature
Consequence	<i>What will happen without action?</i> <ul style="list-style-type: none"> • Tank failure resulting in bund fire • Risk of injury or death to workers or others from thermal radiation
Actions	<i>How will we respond to the emergency situation?</i> <ul style="list-style-type: none"> • Implement emergency response procedures including activation of Manual Call Point to alert site • Immediate turn off steam to Tank 30 on SCADA and isolate steam control valve to Tank 30 in main tank farm • Implement plant emergency shutdown procedures and attempt to cool tank / suppress fire using fire hoses and hydrants if trained and safe to do so • Assess action effectiveness • Contact emergency services • Decontaminate incident responders and response equipment at end of incident using standard procedures <p>Note: ABEK1 filters must be used if attempting to suppress formaldehyde fire.</p>
Resources	<i>What is available to respond to the emergency situation?</i> <ul style="list-style-type: none"> • Fire hose reels • Fire hydrants • Fire extinguishers



10.3 Decontamination procedures

Responders to incidents may be exposed to hazardous substances. In these cases, decontamination should occur after initial response prior to returning to normal duties. The *Procedure for Decontamination of Personnel DECONT-PR* describes these in detail.

Resources available for personnel decontamination include, but are not limited to:

- i) Safety showers (connected to reticulated town water system)
- ii) Eye wash stations (connected to reticulated town water system)
- iii) Contaminated PPE disposal bins
- iv) Domestic shower facility

11.0 EMERGENCY RESOURCES

11.1 Facility Emergency Control Centre (FECC)

In the event of an emergency the FECC will be the Control Room provided that it is outside any heat radiant zone and provided that there is not a likelihood of there being an explosion at either the methanol tank or within the boiler room. This room contains the following:

- i) CB UHF radios
- ii) A copy of the Emergency Response Manual
- iii) The control panel for the methanol tank deluge system
- iv) Control systems for the formaldehyde plant and the resin reactors
- v) Mobile phone and landline
- vi) Emergency alarm control
- vii) SDS for all chemicals used in production including SDS for UFC, formaldehyde solution, and methanol.

In the event that the emergency threatens the FECC the control operations would proceed to the gate house (Gate 5) if safe to do so. This room contains the following:

- i) A copy of the Emergency Response Manual
- ii) SDS for all chemicals used in production including SDS for UFC, formaldehyde solution, and methanol



11.2 First Aid

11.2.1 First Aid Kits

First aid kit is located in The Control Room (FECC)

11.2.2 First Aid Personnel

All production operators are trained in Provide First Aid.

All First Aid staff shall be specifically trained in the first aid provision for people exposed to formaldehyde, methanol and acids and bases. This shall include decontamination procedures.

11.3 Emergency Equipment

All Emergency Equipment will be tested regularly.

11.4 Emergency Alarm System (monitored by off-site services when ROMTECK is active)

Woodchem and Borg Panels site have connected alarm systems. An alarm activated at any point will be seen and heard at all sites.

11.4.1 Activation

- i) Smoke Detection
 - There are smoke detectors located at
 - Control Room
 - Motor Control Centre (MCC)



- ii) **Water Flow through Fire Systems**
Flow switches located on the Fire Monitors and the Methanol Tank Internal Deluge System will activate if there is water flow through these devices.

- iii) **Manual Call Point (MCP)**

- a) **Red MCP (Break glass type buttons)**

- There is red “break glass” type buttons located around the site and at every exit to a building. Activating these MCP’s will activate the Emergency Alarm System.

- b) **White MCP (break glass type buttons)**

- There is one white MCP’s at the control room entrance. Activating this is the only way to activate the Emergency Alarm System into Full Site Evacuation Mode. The white MCP’s are only to be activated by the Chief Warden.

11.5 Utility control points

The location of the gas, water and power isolation points are shown on the site plan, drainage and alarm location drawing Appendix V.

12.0 EMERGENCY ALARM MODES

The emergency alarms have three modes of operation, Alert, Local Emergency and Full Site Evacuation. There is also a siren that can be activated on the control system for operators working on the computer. This siren is only audible in the resin hall. Specific actions to be taken for each mode and the siren are in Clause 13.3.

12.1 Alert Mode



12.1.1 Purpose

Gives warning that a potential or actual emergency situation is occurring in another location to your current area (e.g. Woodchem, Borg Panel press building, Mouldings etc.).

12.1.2 Activation

The Alert Mode is activated when the Emergency alarm System is activated in a location other than your current area .

12.1.3 Description of Alarm

The Blue emergency lights will flash and a unique audible alarm will sound.

12.2 Emergency Mode



12.2.1 Purpose

Gives warning that a potential or actual emergency situation is occurring in your area.

12.2.2 Activation

The Emergency Alarm activates if the Emergency Alarm System has been activated in your area.

12.2.3 Description of Alarm

The Red emergency lights will flash and a unique audible alarm will sound.

12.3 Full Site Evacuation Mode



12.3.1 Purpose

Gives warning that potential or actual emergency situation is occurring in the OTC that may require the entire OTC to be evacuated.

12.3.2 Activation

- i) Activation of a White MCP is the only way to activate this alarm.
- ii) Only the Chief Warden is to activate this alarm.

12.3.3 Description of Alarm

The Red and Blue emergency lights will flash and a unique audible alarm will sound.

12.4 Control System Siren



12.4.1 Purpose

Immediately draw attention of operators working in the resin hall or warehouse to the control room. Note that activating the siren does not activate the emergency alarm system.

12.4.2 Activation

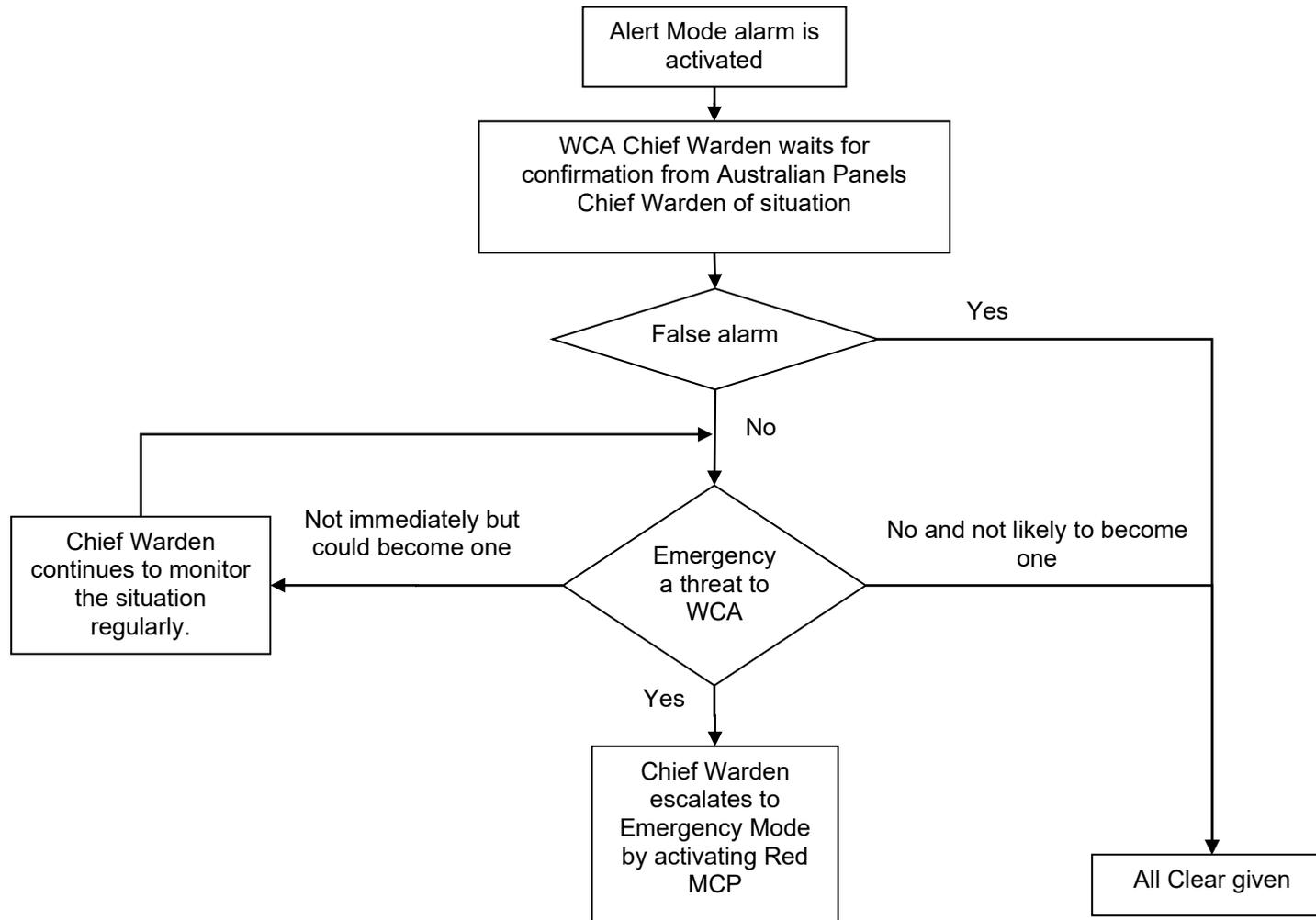
Siren is activated on the control system by clicking on the icon as shown above. Icon is located on the top left of the control system.

12.4.3 Description of Alarm

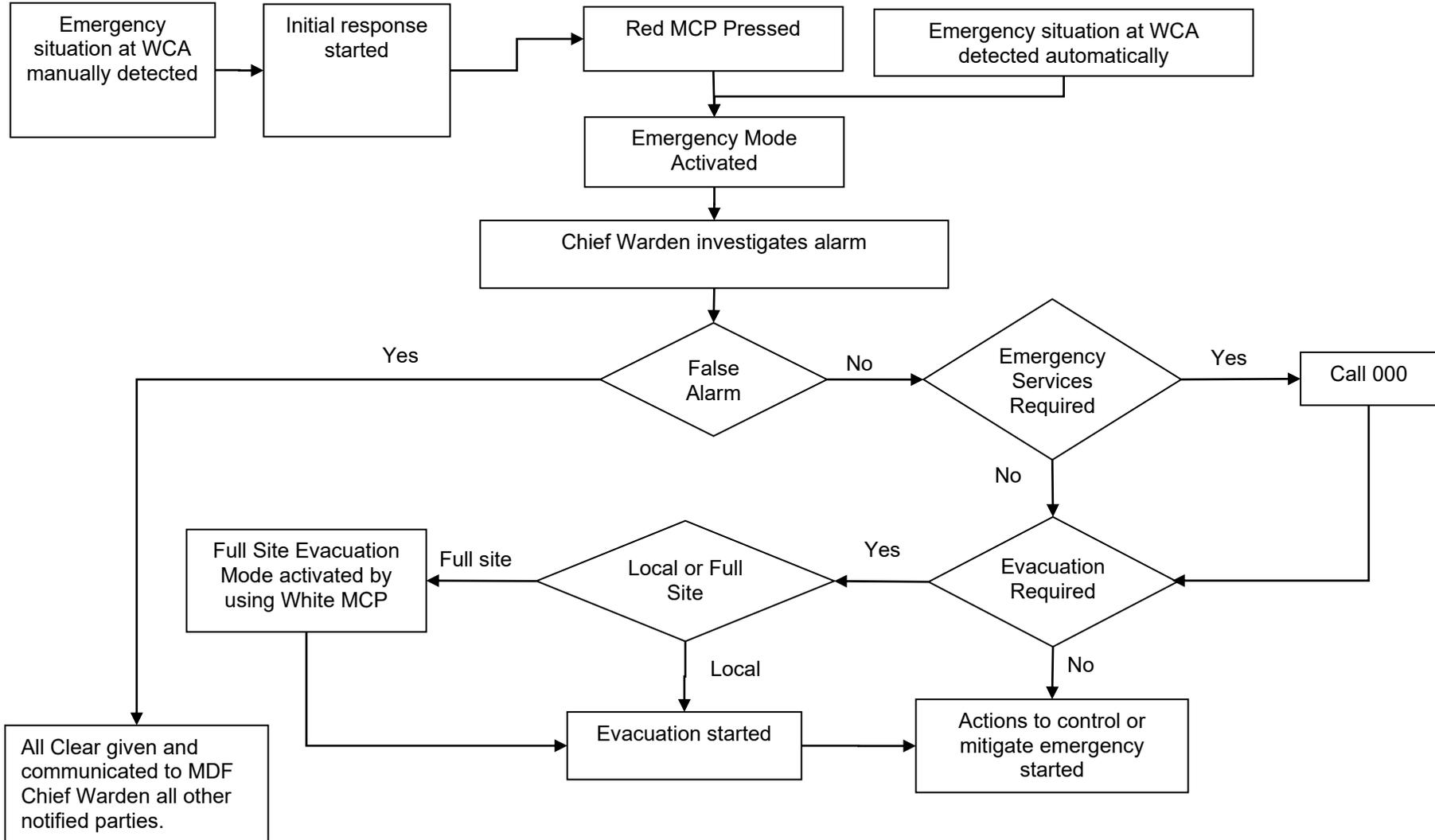
A loud siren will sound with no emergency lights.

13.0 ACTIVATION OF EMERGENCY RESPONSE

13.1 Figure 1: Emergency Response Flow Chart for Alert Mode



13.2 Figure 2: Emergency Response Flow Chart for Emergency Mode



13.3 Immediate Actions on Emergency Alarm

Table 3 Immediate Actions on Emergency Alarm

	Alert Mode 	Emergency Mode AND Full Site Evacuation Mode 
All	<ul style="list-style-type: none"> ▪ Cease Hot Work – Make area safe ▪ Return to ground level ▪ Exit Confined Spaces ▪ Lower any suspended loads if possible ▪ Pause any transfer of liquids or urea and close at least one valve on either side of any hoses. ▪ Prepare to muster if alarm escalates 	<p>As per All actions under Alert Mode and</p> <ul style="list-style-type: none"> ▪ Make your way promptly to the initial muster point ▪ Wait for further instructions from the Chief Warden
Operators	<p>As per All actions above except</p> <ul style="list-style-type: none"> ▪ Resin Operators continue with batch but do not start any more. ▪ Formaldehyde Operators continue running the plant if already running but do not start any changeovers nor start the plant. 	<p>As per All actions above and left and</p> <ul style="list-style-type: none"> ▪ Communicate with Chief Warden your whereabouts.
Chief Warden	<p>As per All actions above and</p> <ul style="list-style-type: none"> ▪ Investigate alarm by contacting the MDF Chief Warden at Conti Control Room (ext. 6006 or 0409 476 250) ▪ Determine whether to give All Clear or escalate to Local Emergency or Site Evacuation. ▪ Inform all on site of determination 	<p>As per All actions above and</p> <ul style="list-style-type: none"> ▪ Ensure all people signed in are mustered ▪ Investigate alarm – Use Alarm Panel to locate alarm and organise a physical investigation of the alarm (IF FULL SITE EVACUATION MODE IS ACTIVATED CALL AUSTRALIAN PANELS CHIEF WARDEN TO INVESTIGATE (EXT 6180 OR 0409 476 250) ▪ Determine whether: <ul style="list-style-type: none"> • Further investigation is required • All Clear can be issued • Proceed with local evacuation (either full or partial) • Escalate to Site Evacuation (If not already activated) ▪ Inform the Australian Panels Chief Warden, of the decision. ▪ Ensure Emergency Services are called if required

**13.4 Evacuation Plan**

- i) The emergency plan is activated as soon as the alarm is raised via the red MCP button (or the white MCP button).
- ii) The Chief Warden shall implement the Emergency Plan at a site level, off-site level or at a local level, or decide to terminate the emergency.
- iii) The Chief Warden shall direct operators to shut down their respective processes using the Emergency Shutdown Procedures.
- iv) The Chief Warden will ensure that a handheld CB radio is collected.
- v) The Chief Warden shall ensure that the emergency mobile phone is collected.
- vi) The Chief Warden shall delegate a leader for the control room muster.
- vii) The Chief Warden will be informed of any people not accounted for in the muster.
- viii) Those not assisting the Chief Warden shall be at the official muster point. Evacuated area must not be re-entered unless instructed by Chief Warden or Emergency Services.
- ix) If required, the control room muster shall be moved to the emergency muster point. If a direct route is not safe different route or location for the emergency muster point will be chosen or the alternate muster point will be used. If an off-site muster is required, it shall be the sports ground on the corner of Albion Street and Lowes Mount Road.
- x) Once at the emergency muster point the delegate shall take responsibility for the site musters safety and welfare and continue to regularly communicate with the Chief Warden.
- xi) The Chief Warden will inform the Australian Panels Chief Warden that the evacuation is complete and how many are still on the Woodchem site.
- xii) The emergency plan is deactivated as soon as the emergency is over, or the cause of the evacuation has been investigated, and it is determined that there is no emergency.

Note: If a full evacuation of Woodchem is ordered the Chief Warden shall join the muster.

14.0 EMERGENCY SERVICES**14.1 Timing of Request for Assistance from Emergency Services**

If the Chief Warden decides Emergency Services are required, and they have not already been called, the Chief Warden shall ensure that they are called at the earliest possible time.

14.2 Initial Contact and Advice to Emergency Services

This is available in the Emergency Flip Chart INCEME-PL002

14.3 Contact Details and Notification Protocol

Emergency Flip Chart INCEME-PL002 contains contact details for services/utilities, adjacent neighbours and Borg employees relevant to Woodchem. The table below provides information for key personal who are responsible for managing the response on site, and those who are authorised to notify the relevant authorities.

Any incident determined to be notifiable to SafeWork as per Work Health and Safety (WHS) legislation shall be reported to SafeWork NSW as soon as practicable. Guidance on determination of Notifiable Incidents is available from SafeWork Australia, also through consultation with Woodchem management and/or WHS officers.

Whole of site (Oberon) radio channels are identified in Table 4.

Table 4 Oberon Site Radio Channels

Area	UHF Channel
MDF Productions	15
Particleboard Productions	29
Mouldings	14
Chip & Log Yard	19
Borg Security Gate & Warehouse	30
Water Treatment Plant	34
Woodchem	35
Emergency*	26

*If an emergency channel is needed then UHF Channel 26 should be used.
Use of the public address system at the EWIS panels to communicate to all persons on site to use UHF26 or go through each channel to announce sole use of UHF26.

15.0 ENVIRONMENTAL EMERGENCY

A Pollution Incident Response Management Plan (PIRMP) must be prepared for all Projects based in NSW that hold an Environmental Protection Licence (section 153A, POEO Act). EPA Environmental guidelines: Preparation of pollution incident response management plans section 3.2 allows for existing emergency plans to be used where that plan meets the requirements of the specified sections of the POEO Act and POEO(G) Regulation. This Emergency Response Manual meets the necessary regulatory requirements, covering the matters listed in section 153C of the POEO Act and is kept, tested and implemented in accordance with sections 153D, 153E and 153F of the POEO Act and with the POEO(G) Regulation. Therefore, this Emergency Response Manual is the equivalent of a PIRMP and is to be followed in the event of a pollution incident.

15.1 Definition of a Pollution Incident

A pollution incident that requires notification to authorities is defined in section 147 of the Protection of the Environment Operations Act 1997 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) If results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and
- b. Loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Note: anyone on site can activate the PIRMP though external notification is the responsibility of management.

See Appendix VI, Environmental Emergency Document Reference List for pollution incident response source documents.

15.2 Pollution Incident Response Procedure

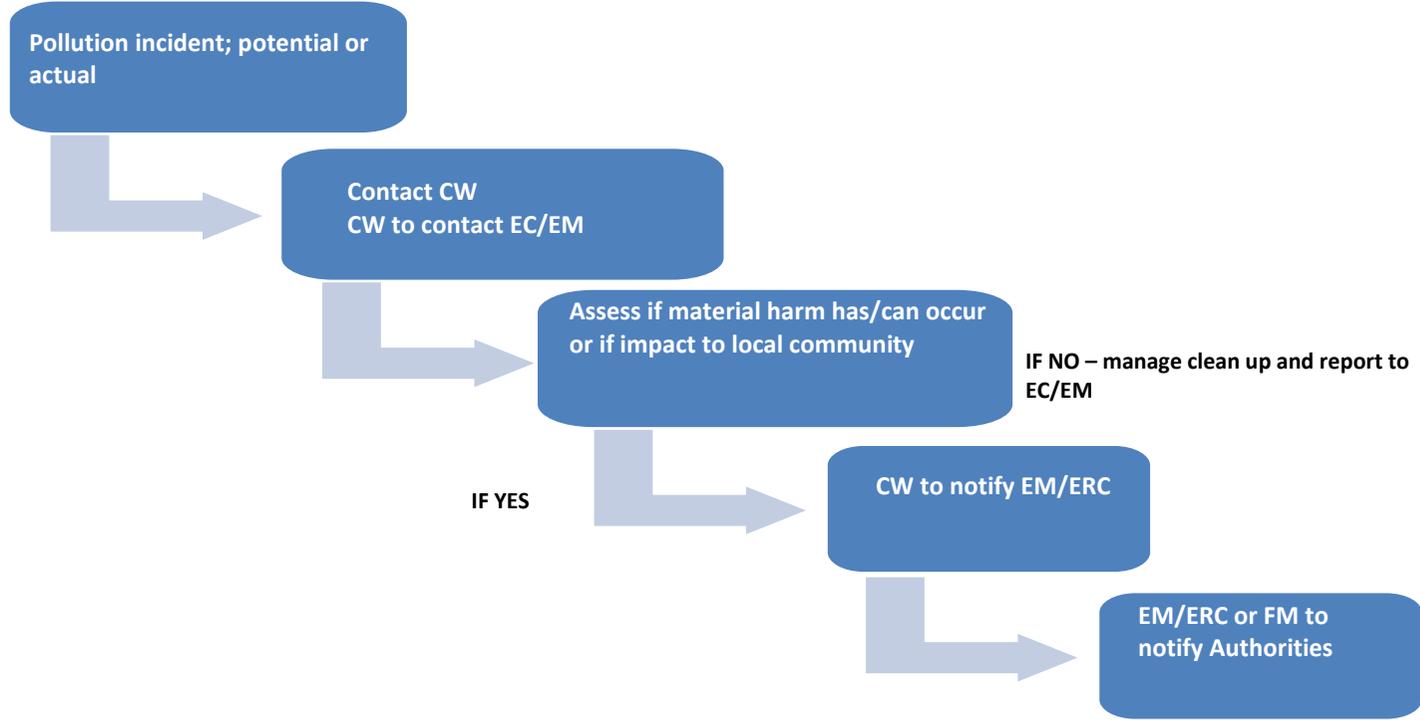
As soon as a pollution incident, or potential incident, occurs personnel shall immediately take action to minimise the impact on health, safety and the environment. The person who discovered this is to enact the pollution incident response procedure (this procedure) and take charge until relieved by a more senior employee or emergency services personnel, and follow the Internal Notification Protocol as shown in the below Figure 3.

If the pollution incident has potential to impact on occupiers of premises in the vicinity of Woodchem, these occupiers shall be contacted by the Chief Warden to advise them of the incident and provide information on any likely consequences.

All persons contacted in relation to the pollution incident shall be kept informed regarding the pollution incident including:

- (i) any escalation of the risks to health, safety or the environment
- (ii) any change in the nature of the risks to health, safety or the environment (e.g. methanol spill catches fire)
- (iii) The completion of the emergency response after all risks to health, safety and the environment have been controlled

Figure 3: Internal Notification Protocol



(**CW** Chief Warden, **EC** Environmental Coordinator, **EM** Environmental Manager, **ERC** Environmental and Regulatory Compliance, **FM** Facility Manger)

15.3 Action Immediately After an Actual or Potential Pollution Incident

The Emergency Flip Chart INCEME-PL002 contains a checklist for what to do in the event of a pollution event.

15.4 Environmental Notification Requirements

The following authorities must be contacted by the Environment Manager or if not contactable, the Chief Warden, in the order below immediately for pollution incidents that threaten or cause material harm to the environment.

Table 5 External Notification Protocol

Authority	Phone Number
Emergency Services – Fire and Rescue NSW Police NSW Ambulance Service	000*
<p>*Only ring 000 if the incident presents an immediate threat to human health or property and requires Emergency Services. If the incident does not require an initial combat agency or once the 000 call has been made, notify as listed below</p>	
EPA Pollution Hotline	131 555
Ministry of Health – Oberon District Hospital	6336 7200
SafeWork NSW	131 050
Local Authority – Oberon Council	6329 8100
Fire and Rescue	6336 0331 (when HAZMAT not required)

When notifying authorities that a pollution incident has occurred, the following information must be provided:

1. The time, date, nature, duration and location of the incident
2. The location of the place where pollution is occurring or is likely to occur
3. The nature, the estimated quantity or volume and the concentration of any pollutants involved, if known
4. The circumstances in which the incident occurred (including the cause of the incident, if known)
5. The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known.

If information required in items 3, 4 and 5 are not known when the initial notification is made but becomes known afterwards, that information must be provided to the authority immediately after it becomes known.

Table 6 Contact Details & Level of Authority

Name	Position	Phone Number	Notify Authorities (Y/N)
Chief Warden (as identified on Safety Notice Board)	Chief Warden	See Safety Notice Board OR Woodchem radio channel UHF35	Y
Peter Hartland	Woodchem Manager	0428 847 342	Y
Bryan Voon	Woodchem Chemical Process Engineer	0477 678 550	N
Richard Kaine	Facility Manager	0409 151 094	Y
Marcus Dowton	EHSQ Manager	0409 566 249	N
Andrew Brady	Oberon Site Environmental and Safety Manager	0447 765 913	Y
Jacqueline Blomberg	Environmental Manager	0436 609 556	Y
Victor Bendeovski	Environment and Regulatory Compliance	0410 327 635	Y

16.0 COMMUNITY NOTIFICATION AND ACTION PROTOCOL

Notification to any residents, businesses or other premises that may be affected by the incident may include the following:

1. Details of the incident and extent of impact (as known at the time)
2. Safety warnings and recommendations to prevent/minimise impacts, if required
3. Potential impacts on the operation of local businesses, if required.

In the event of an incident which has the potential to impact the local community, the Shift Leader will notify the Woodchem Manager who will determine if community notification is required. Emergency Flip Chart INCEME-PL002 provides a checklist and detailed list of local business neighbours including contact numbers, which is to be referred to if notification is deemed necessary.

Section 10 Emergency Procedure lists the instructions to be followed to control and contain the incident in order to minimise the risk of harm.

The following table lists the mechanisms to be followed in the event that an incident has the potential to impact the surrounding community, in order to minimise the risk of harm.

Table 7 Community Notification and Action Protocol

Pollution Incident Scenario	Potential Impacts	What to do (response)	Who to Notify	When to notify	Communication Mechanism
Chemical spill entering stormwater drain and Kings Stockyard Creek (KSC)	<p>Pollution of Kings Stockyard Creek</p> <p>Exposure to chemicals</p> <p>Community complaints</p>	<p>Bund/contain spill and block stormwater drain to prevent further pollution and notify Shift Supervisor/Chief Warden and Environmental Coordinator</p> <p>If loss not contained by First Flush Basin, close penstock gate valve to MDF Discharge Pond to shut down the stormwater system Implement controls as described in Section 10 Emergency Procedure of this Manual</p> <p>Environmental Coordinator to inspect and assess KSC and apply controls if applicable</p>	Oberon Council	<p>Immediately upon identification of chemical leaving site</p> <p>Early warning where practicable and updates as required</p>	Telephone
Fire water/waste water generated from an emergency not able to be processed at water treatment plant	<p>Pollution of surround land</p> <p>Pollution of Kings Stockyard Creek</p>	<p>If loss not contained by First Flush Basin, close penstock gate valve to MDF Discharge Pond to shut down the stormwater system</p> <p>Notify Water Treatment Plant and Environmental Coordinator</p> <p>Pump waste water from First Flush Basin to Panels Sludge Dam and coordinate management with Water Treatment Plant</p> <p>If off site discharge occurred, Environmental Coordinator to inspect and assess KSC and apply controls if applicable</p>	Oberon Council	<p>Immediately upon identification of waste water leaving site</p> <p>Early warning where practicable and updates as required</p>	Telephone

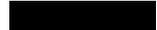
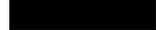


Emissions/Gas/Chemical vapours/Smoke leaving the site	Air quality issues Loss of amenity Community complaints	Cease work activity immediately and notify Shift Supervisor/Chief Warden and when practicable, Environmental Coordinator Shut down relevant plant and investigate source of emission if safe to do so Implement controls as described in Section 10 Emergency Procedure of this Manual Continue with community notifications, providing updates on clean up if progressive	Local Emergency Management Committee Oberon Council Adjacent residences/businesses	Immediately where Community directly affected – where applicable, advise to close doors/windows and remain inside until advised otherwise Early warning where practicable and updates as required	Telephone Email Door knock Letterbox drop
Fire	Heat radiation	Cease work activity immediately and notify Shift Supervisor/Chief Warden and when practicable, Environmental Coordinator Shut down relevant plant and investigate source of emission if safe to do so Implement controls as described in Section 10 Emergency Procedure of this Manual Continue with community notifications, providing updates on clean up if progressive	Local Emergency Management Committee Oberon Council Adjacent residences/businesses	Immediately where Community directly affected – where applicable, advise to close doors/windows and remain inside until advised otherwise Early warning where practicable and updates as required Any offsite exclusion zones or evacuation to be managed by emergency services	Telephone Email Door knock Letterbox drop

16.1 Site Plans

See Appendix V for set of site plans that include:

- premises location including location of closest water way;
- site plan including stormwater drainage and emergency alarm locations;
- tank farm schematic including dangerous goods locations; and
- resin building schematic including dangerous goods locations

**17.0 SPECIAL CASES****17.1 Bomb Threat****17.2 Security Threat****18.0 FIRE/WASTE WATER RESULTING FROM EMERGENCY**

Warning – Only pumps specifically designed for flammable goods can be used to transfer methanol.

- 18.1** Waste Water generated in an emergency shall be controlled using the same processes and normal operations in the first instance. (i.e. through Woodchem waste water tanks and to Water Treatment Plant)
- 18.2** Water on site will drain to First Flush Dam 4 (dam below methanol bund) this can be pumped to the Panels Sludge Dam (10 million litre lined dam) by switching valves at the first flush dam weir and starting the submersible pump at the local switch. Call the Water Treatment Plant Coordinator to coordinate the waste water.
- 18.3** There are additional pumps and dams at the Water Treatment Plant that can be used during an emergency. Total process water dam capacity is approximately 36 million litres (~36,000 Tonne)
- 18.4** In the event that the water cannot be processed at the Water Treatment Plant, or there is excess water than storage capacity, the following companies can provide a waste water removal service. Use White Pages online or directory assistance on 1223 for up to date contact numbers
- Veolia Waste (Response time will be generally next day)
 - Transpacific (Response time will be generally the next day)

19.0 TERMINATION OF AN EMERGENCY

- 19.1** The Chief Warden is the only authorised person to terminate an emergency. This may be done in one of two ways
- i) Giving All Clear by notifying employees at the FECC or at the muster point that they can return to the site. This determination means that the site is ready to assume normal activities and can only be made when all of the following have been satisfied:
- a) The Emergency Services have handed the entire site back to WCA Control
 - b) There is no immediate Danger or threat of Danger, including threats to safety, environment or property on or off site.
 - c) The site is in an operational condition
- ii) Handing site back to the senior manager. This determination means that the immediate Emergency is over but further actions are required to bring the site back to an operational condition and/or offsite remedial work is still required. This determination can only be made if all of the following have been satisfied:
- a) The Emergency Services have handed the entire site back to WCA Control (excluding any ongoing investigations)
 - b) There is no further immediate actions that can be taken to control or mitigate any threats to people, property or the environment both onsite and offsite

- c) Any residual dangers onsite have been identified and communicated to the senior manager. Controls for these dangers to prevent any danger to people, other assets and the environment must be in place.

19.2 If the site is handed back to the senior manager, the senior manager must ensure that the following items have been considered and plans in place to address them:

- i) Structural weakness which may have developed as a result of the emergency.
- ii) Collection, storage and disposal of contaminated material resulting from the emergency.
- iii) Re-organisation of activities on site so that normal operation can be resumed
- iv) Communicate the planned start up and any special operating requirements.
- v) Set date and time and sequence of start up.
- vi) Communication of the all clear to all stakeholders.

20.0 REPORTING OF AN EMERGENCY

20.1 In addition to any statutory investigations that may be required after every emergency an internal investigation will also be conducted.

20.2 A team comprising of the Woodchem Manager and the WHS Coordinator shall report verbally as conclusions are reached and complete their written report within 10 working days of the incident. The written report should contain:

- i) Aim and objectives of the report
- ii) Summary of conclusions and recommendations
- iii) Details of the emergency
- iv) Causes or likely causes
- v) Recommendations to eliminate this type, or a similar, type of incident again
- vi) Conclusions

20.3 Based on the recommendations of the report the senior manager will seek to implement the recommendations.

21.0 MANAGEMENT OF THE MANUAL

21.1 This manual will be supported, managed and updated through the following:

- i) As part of the WCA management system this document will be reviewed internally at least once every five years. All employees shall be consulted prior to approval and any recommendations for change or improvement will be made as appropriate.
- ii) This document will be issued to the WCA Control room. All employees will be required to be familiar with this document and to give feedback as they deem necessary. All feedback will be considered and changes made as appropriate.
- iii) This document will be used for training and the education of all existing and new employees through induction and re-induction. Feedback from these inductions will be used to make changes if required. This will be done annually. Records shall be retained.

- iv) All contractors and visitors who will access the site will be inducted in the relevant sections of this document. In particular the Emergency Alarm System, evacuation process, the emergency functions, and their general duties and responsibilities under this manual.
- v) The emergency response to both spills and at least one other emergency event shall be tested on a regular basis to test for deficiencies – this will be done at least once per year. Testing methods used will be desktop simulation and practical exercises. Desktop simulations shall be recorded in SharePoint Documents register. Practical exercises shall be recorded in the SharePoint Drills register. The manual, and subsequent training and education, will be updated as appropriate from any learning's from these exercises. One training exercise will be conducted with emergency services annually

21.2 This document will be reviewed and updated if required, for any of the following:

- i) Changes in legislation
- ii) Changes in technology or process
- iii) Changes in organisational structure
- iv) Changes in products or raw materials
- v) Change in circumstances on site, or any adjacent site, that raises the possibility of an emergency that is not currently dealt with
- vi) Deficiencies identified by investigation and review of accidents, incidents and near misses.
- vii) Any change identified by the Management of Change Procedure.

21.3 The testing of this plan shall be carried out in such a manner as to ensure that the information included in this plan is accurate and up to date, and the plan is capable of being implemented in a workable and effective manner. Any such test is to be carried out:

- Routinely at least once every 12 months, and
- Within one 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.

A debriefing session shall be carried out in consultation with all participating parties and records shall be accessible and maintained indefinitely on Sharepoint.

22.0 SUPPORTING INFORMATION

As discussed with the Emergency Services, the following information will be contained within the manual as a separate information pack:

- i) Safety, health and environmental information for UFC, Formaldehyde and Methanol in the form of SDS's.
- ii) Location map
- iii) Site layout plan
- iv) Emergency contact phone numbers
- v) Relevant information on emergency resources and emergency equipment.

The Woodchem Emergency Response Manual will be distributed to the following internal and external parties:



- i) The Commissioner of Fire and Rescue NSW
- ii) Oberon Council
- iii) Oberon Police
- iv) Borg Panels (via SharePoint)
- v) Woodchem Control Room
- vi) Gates 4 & 5 (hazmat boxes)
- vii) Australian Native Landscapes

- 23.0 APPENDIX I, INCEME-PL001-1 EMERGENCY SHUTDOWN PROCEDURES (SEE SHAREPOINT DOCUMENT REGISTER)**
- 24.0 APPENDIX II, PRDRES-WI001 HOW TO RECOVER AN OUT OF CONTROL RESIN (SEE SHAREPOINT DOCUMENT REGISTER)**
- 25.0 APPENDIX III, INCEME-PL001-2 EMERGENCY SERVICES INFORMATION PACKAGE (SEE SHAREPOINT DOCUMENT REGISTER)**
- 26.0 APPENDIX IV, INCEME-PL003-3 MHF SAFETY REPORT – MANIFEST (SEE SHAREPOINT DOCUMENT REGISTER)**
- 27.0 APPENDIX V, SITE PLANS**
- 28.0 APPENDIX VI, ENVIRONMENTAL EMERGENCY DOCUMENT REFERENCE LIST**

**APPENDIX I
INCEME-PL001-1 EMERGENCY SHUTDOWN PROCEDURES**

In the event of an evacuation **and if time is permitting, and on risk assessment basis**, the following actions are to be taken by plant operators to ensure the safety of rescue and emergency personnel and the preservation of WCA plant, stock and equipment.

Formaldehyde Plant	Resin > 70°C	Resin <70°C
<ol style="list-style-type: none"> 1. Shut off methanol feed pump 2. Ensure auto methanol tank valve is shut 3. Turn distillate/urea water pump off 4. Turn blower off 5. Turn all absorber tower pumps off including base pump 6. Turn off catalytic converter heaters 	<ol style="list-style-type: none"> 1. Shut off steam/heat to reactors 2. Shut off loading/unloading materials to/from reactors 3. Open reactor internal cooling to 100% 4. Raise pH by adding twice the amount of caustic used for the initial kill 5. Shut down boiler (E-Stop) 6. Isolate gas at meter 	<ol style="list-style-type: none"> 1. Shut off steam/heat to reactors 2. Shut off loading/unloading materials to/from reactors 3. Open reactor internal cooling to 100% 4. Raise pH of resin to 0.2 units above usual 5. Shut down boiler (E-Stop) 6. Isolate gas at meter
Call management for further guidance if required or not already informed		

Note that if the emergency is in the vicinity of the top of the reactors do not re-enter the area to save a resin.

Remember PEOPLE before PROPERTY.

Be aware that power failure to the site may occur during an emergency situation.

All truck loading or unloading is to cease immediately upon any alarms.

Truck drivers are to evacuate without attempting to move vehicles unless instructed to do so.



APPENDIX II
PRDRES-WI001 HOW TO RECOVER AN OUT OF CONTROL RESIN

	How to Recover an Out of Control Resin	PRDRES-WI001 Save Date: 22/10/2024 Page 1 of 1
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1. **Introduction**
 Due to various factors it is possible to lose control of the cook stage of a resin which can potentially result in setting the resin in the reactor. This work instruction describes the steps that shall be taken in the event of an emergency situation when control is lost during a resin cook.
2. **Scope**
 This work instruction covers all resin products.
3. **Definitions**
 N/A
4. **References**
 N/A
5. **Warnings**
 - Appropriate PPE must be worn
 - Avoid opening hatches on reactors
6. **Qualifications and Licences**
 Only competent resin production operators or managers are to carry out this work instruction
7. **Equipment**
 N/A
8. **Procedure**

	Reactor 1 & 2	Reactor 4
1.	Immediately add 30kg of caustic	Immediately add 60kg of caustic
2.	Turn off any heating to the reactor	
3.	Turn on 100% cooling to the reactor	
4.	Add 3500kg of Formaldehyde	Add 7000kg of Formaldehyde
5.	Adjust pH to between 8.0 and 9.0 with caustic	
6.	Advise Management	
7.	Await further instructions	



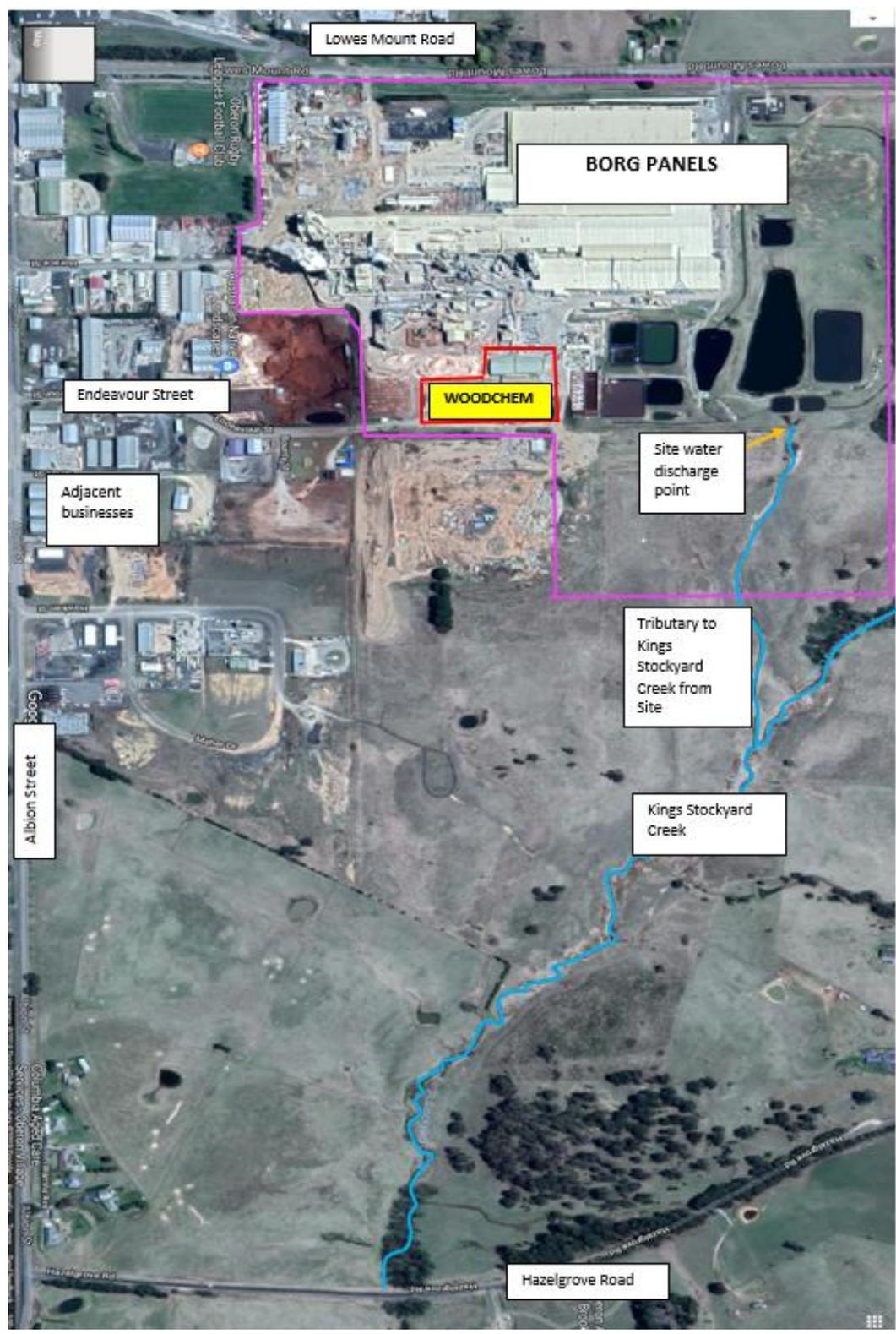
**APPENDIX III
INCEME-PL001-2 EMERGENCY SERVICES INFORMATION PACKAGE**



**APPENDIX IV
INCEME-PL003-3 MHF SAFETY CASE – MANIFEST**

APPENDIX V SITE PLANS

SITE LOCATION MAP



SITE PLAN, DRAINAGE AND ALARM LOCATIONS



- M MANUAL CALL POINT
- M SITE EVACUATION MCP
- W WATER CUT OFF
- G MAIN GAS CUT OFF
- BLIND PIT
- H HYDRANT
- P EMERGENCY MAIN POWER CUT OFF



Woodchem Australia		
Site Schematic	Drawn by: JIG	Checked by: VB
	Date: 24 MAY 2021	Issued: A



TANK FARM INCLUDING DG LOCATIONS





RESIN BUILDING INCLUDING DG LOCATIONS





**APPENDIX VI
ENVIRONMENTAL EMERGENCY DOCUMENT REFERENCE LIST**

1. ENVPLN-001 Environmental Management Plan – Section 3 Strategic Management Plans
2. INCEME-PL001-2 Emergency Services Information Package
3. INCEME-PL002 Emergency Flip Chart
4. INCEME-PL003-3 MHF Safety Case – Manifest
5. Woodchem SharePoint Substances Register
6. Woodchem SharePoint Drills Register
7. Woodchem SharePoint Documents Register