

# POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

MacIntyre Gin

Namoi Cotton Ltd

For Notification Procedure, please turn to Sections 13 and 14 For Incident Response Protocol, please turn to Section 11



## 1. INTRODUCTION

Namoi Cotton Ltd ("Namoi Cotton") is an Australian cotton ginner and cotton seed trader, joint venture participant in a cotton marketing business which owns and operates warehouse sites, joint venture participant in a commodity packing business and joint venture participant in a cotton classing business.

## 2. PURPOSE AND SCOPE

The PIRMP documents the risk assessment process implemented at Namoi Cotton and the activities that create pollution risks associated with the site. All risks and any subsequent pollution incidents however would be managed through the implementation of this PIRMP and associated emergency policies and procedures. The PIRMP also details the pre-emptive actions that have been implemented for the site, these include:

- specific measures implemented to minimise the risk of a pollution incident occurring due to spillage, storage of hazardous materials or fire;
- inventory of potential pollutants on site;
- minimum safety equipment requirements;
- communications with the authorities and the community;
- minimising harm to persons;
- training of personnel; and
- testing of the PIRMP.

The PIRMP details the notification procedures to be used in the event of a pollution incident.

## SITE DETAILS

The MacIntyre Cotton Gin Site is located on Kildonan Road near Goondiwindi in Queensland. The MacIntyre Cotton Gin Site is owned and operated by Namoi Cotton. The site currently operates as a cotton ginning site. Cotton ginning operations are undertaken from March to November, twentyfour hours a day, seven days a week.

The surrounding area which may potentially be impacted by a pollution incident occurring at the MacIntyre Cotton Gin Site, in addition to the site itself, may include the following:

- landholders adjacent to the site;
- watercourses and floodways (including inundation areas and adjacent landholders); and 
   the
   nearby township of Goondiwindi.

## 3. POLLUTION HAZARDS

For the site possible pollution hazards identified include:

• spills or leaks resulting in land contamination;

- spills or leaks resulting in water contamination;
- spills or emissions resulting in air pollution;
- water pollution;
- fire;
- dust emissions resulting in air pollution; and
- explosions.

Please refer to section 17 and Appendix 5 for risk assessment details.

## 4. DEFINITION OF A POLLUTION INCIDENT

For Namoi Cotton for the Site a 'pollution incident' is categorised as:

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

## 5. REPORTING A POLLUTION INCIDENT - LEGAL DUTY TO NOTIFY

A pollution incident that is considered to cause or have the **potential to cause material harm to the environment** (to be determined by Namoi Cotton) will be reported to the Qld Department of Environment and Heritage Protection.

All Namoi Cotton employees and contractors are responsible for alerting the Site Manager (if unavailable the Acting Site Manager) to all environmental issues or hazards which may result in an environmental incident, regardless of the nature or scale. **PLEASE REFER TO NOTIFICATION FLOW CHART IN APPENDIX 2.** This chart outlines the process if the Site Manager is unavailable.

## 6. PIRMP REVIEW AND UPDATE

The PIRMP is to be updated if one or any combination of the following occurs:

- annually; or
- when a potential pollutant or chemical is introduced to the site that may be stored in quantities that may cause a pollution incident; or
- when a potentially polluting activity that may cause a pollution incident changes or commences on the site; or
- when a regulating authority requests the PIRMP to be updated.

## 7. DISTRIBUTION REGISTER

A hard copy of the PIRMP will also be located in the cotton gin console on site and will be provided to all personnel responsible for implementing the PIRMP.

Please note that Namoi Cotton will not be responsible for maintaining uncontrolled copies beyond ensuring the most recent version is maintained on the Namoi Cotton computer system.

## 8. POLLUTUION INCIDENT RESPONSE PROTOCOL

If a pollution incident occurs at the site the following steps should be followed by the Site Manager or Acting Site Manager, Environment, Health and Safety Manager, General Manager and EPA Compliance Liaison Officer.

Below is the Incident Response Protocol:



## A. Assess Risk Materiality (pollution incident occurs) – Phase 1

- Firstly, call 000 if the incident presents an immediate threat to human health or property or there are injured persons.
- Ensure the safety of all persons on the site.
- Identify the severity, risks, and extent of the incident:
  - What is the substance emitted?
  - What are its properties?
  - Is there a risk to health and safety?
  - Do you have the necessary PPE to manage the emission?
  - What is the volume of the emission?
- If the emission has the potential to cause material harm to persons or property or the environment, execute the next phase of the PIRMP NOTIFY PHASE 2.
- Assess potential for off-site impacts to the community and the environment.

## B. Notify – Phase 2

Contact key individuals:

- Individuals responsible for activating the PIRMP (nominated site representatives), please refer to contact details in Section 9 and **Appendix 2**.
- Individuals authorised to notify and co-ordinate relevant authorities (nominated representatives), please refer to contact details in Section 10.
- Notify Qld Department of Environment and Heritage Protection if it is determined that the pollution incident is a material harm incident to the environment.

## C. Stop – Phase 3

- Read "Safety Data Sheet" and label for response (if applicable).
- If safe to do so stop the source of the emission.
- If pollutant or contaminant cannot be identified wait for relevant public service (e.g. Fire and Rescue) or instruction from the Environment, Health and Safety Manager (Northern).
- Manage incident in accordance with the site PIRMP.

## D. Contain Incident – Phase 4

- Utilise barriers (absorbent booms, banks of soil or any other safe objects) or spill absorbent to prevent the emission or leak from spreading.
- The main priority is to prevent the emitted or leaked material from discharging off site.
- If necessary minimise the impact of potential off-site spreading.

## E. Clean Up – Phase 5

- Clean up and remedial actions to restore the environment.
- Disposal of pollutants in accordance with legislation and guidance from management.
- Refer to PIRMP for clean-up information.

#### F. Review

- Conduct an investigation into the incident and assist the Qld Department of Environment and Heritage Protection and investigators with external enquiries (if applicable).
- Complete internal reporting.
- Test the effectiveness of the PIRMP within one month after the incident to ensure controls are replenished.

## 9. CONTACT DETAILS – INTERNAL

For internal notification, contact details are as follows:

If a material pollution incident occurs at the site or outside the site as a consequence of the site activities then the Site Manager or Acting Site Manager or senior employee for the site must promptly notify (by telephone) the Environment, Health and Safety Manager and General Manager

on the details below (if they are unavailable then the Executive General Manager or EPA Compliance Liaison Officer should be contacted promptly). Do not hesitate to call these representatives regardless of the time.

If an employee or contractor for the site discovers a pollution incident they must report the pollution incident to the Site Manager or Acting Site Manager which in turn must notify the individuals via the process specified above. Contact details are as follows:

Contacts	Title	Contact Numbers
Ernie Silcock	Site Manager - MacIntyre	Wk: 07 4671 2277
		Mob: 0429 724 699
John Fox	Environment, Health and Safety	Wk: 02 6790 3079
	Manager	Mob: 0429 903 079
	General Manager	
Shane McGregor	Executive General Manager	Mob: 0438 903 084
	Operations	
Andrew Metcalfe	EPA Compliance Liaison Officer	Wk: 07 4631 6103
John Stevenson	Chief Executive Officer	Wk: 07 4631 6104

The Environment, Health and Safety Manager and the General Manager must promptly (within two hours of discovering a pollution incident is present) advise the Chief Executive Officer and the EPA Compliance Liaison Officer of any notification they decide is a pollution incident.

## **10. NOTIFICATION PROCESS FOR MATERIAL HARM**

The Environment, Health and Safety Manager will notify the Qld Department of Environment and Heritage Protection ("QLD EPA") Pollution Line on 1300 130 372 immediately (i.e. promptly and without delay) of pollution incidents which have occurred in the course of the site's activities, in the following circumstances (i.e. pollution incident which cause or threaten **material harm**). Material harm will be assessed by Namoi Cotton management.

Pollution incidences that could constitute material harm may include such things as:

- water or sediment discharge that does not meet water quality standards;
- chemical spill into a waterway for example:
  - fuels and oils
  - LG gas explosions or leaks
  - $\circ\quad$  cotton trash washing away in a flood event
- dust plume from ginning plant;
- sewerage leak; or
- fire.

## **11. RESPONSIBILITIES AND DUTIES**

If a pollution incident occurs in the course of an activity at the site so that material harm to the environment is caused or threatened, the person carrying out the activity must immediately implement this PIRMP. In the event that the person authorised to activate the PIRMP is not able to be contacted, the person notifying the activity must follow the notification process set out in **Appendix 2**.

## **12. REPORTING**

The Site Manager and the Environment, Health and Safety Manager must keep the following information:

- (a) the time, date, nature, duration and location of the pollution incident;
- (b) the location of the place where pollution is occurring or is likely to occur;
- (c) The nature, the estimated quantity or volume and the concentration of any pollutants involved, if known;
- (d) the circumstances in which the pollution incident occurred (including the cause of the pollution incident, if known); and
- (e) the action taken or proposed to be taken to deal with the pollution incident and any resulting pollution or threatened pollution, if know.

This information will be recorded in the Pollution Incident Notification Form (please see **Appendix 3**) and submitted/communicated to the Environment, Health and Safety Manager and the EPA Compliance Liaison Officer specified in the PIRMP.

## **13. FOLLOW UP ACTION**

Subsequent to a pollution incident the following must be undertaken:

- Undertake further monitoring/testing if required;
- Complete pollution incident report;
- Organise restocking of spill equipment;
- Implement corrective actions to avoid reoccurrence; and 
  Test the PIRMP within one month of a material incident.

## **14. POTENTIAL POLLUTANTS – MAJOR HAZARDS**

All chemicals at Namoi Cotton are included in a central register available at key locations around the site. All chemicals are accompanied by the relevant Material Safety Data Sheets (MSDS) as required by work health and safety regulations.

Potential pollutants created as part of ginning operations and commodity storage operations, and thus excluded from registers, include:

- dust;
- water storages;
- methane for fires (chemical or gas);
- sediment laden surface water runoff from disturbed areas; and
- effluent waste.

These materials are in a constant state of flux as a result of operations. The management of the pollutants are also set out in the Namoi Cotton OH&S data area available to employees on the Namoi Cotton intranet.

Appendix 4 displays the location of potential pollutants.

## **15. INVENTORY OF POTENTIAL POLLUTANTS**

A list of hazardous substances and quantities stored are available in Appendix 4.

## **16. RISK ASSESSMENT**

Environmental Risks have been identified using the Environmental Risk Assessment process set out in this section. The Environmental Risk Assessment process was developed to identify, describe and rate potential hazards. All Environmental Risks currently identified have been outlined in **Appendix 5. Appendix 5** will be updated if future Environmental Risks are identified.

The following tables outline the Environmental Risk Assessment process using three steps to identify the appropriate management measures required.

Below is a brief summary of the process:

- Likelihood Criteria Table Matrix on page 13 is used to determine the likelihood that the risk will happen and have an impact on the environment. When considering the Likelihood section the Environmental Risk Assessment team will take into account the quantity, past performance and physical possibilities;
- Consequence Criteria Table Matrix on page 14 is used to determine the potential consequence rating of the risk identified;
- From the two tables mentioned above, a risk rating can then be assigned by using "Environmental Risk Rating Matrix" on page 14 to determine how severe the potential impact will be;
- The Risk Severity Rating Table Matrix on page 15 can then be used to assess what level of management each type of risk will require.

Where a significant risk to the environment has been identified, environmental protection measures to reduce the risk to an acceptable level shall be immediately implemented. Items with a medium or low risk shall also have practicable management measures implemented if these can further reduce risk.

	Occurrence (likelihood)	Description
Α	Rare/improbable	The event may only occur in exceptional circumstances (about once every 10 to 25 years or greater).
В	Unlikely/remote	The event may occur at some time (about once every 5 to 10 years).
С	Possible	The event is likely to occur at some time (about once every year).
D	Likely	The event will probably occur in most circumstances (at least once every 6 months).
Ε	Almost certain	The event is expected to occur in most circumstances (at least once every month).

## Likelihood Criteria Table Matrix

## **Consequence Criteria Table Matrix**

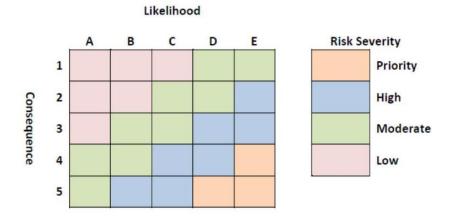
	Consequence (impact)	Description
1	Insignificant/ negligible	Insignificant environmental release and no notable impact to environment; and Clean-up in the course of normal activities.
2	Minor/low environmental release and minor/low impact; Minor specific clean-up action required; and No impact outside site boundary or restricted to windblown rubbish.	
3	Moderate	Possible breach of POEOG with moderate environmental release; Moderate clean-up costs; Release off site (excluding windblown rubbish); and No sustained environmental harm.

4	Major	Major environmental release; Environmental harm is permanent. Major clean-up costs; Release of pollution off site (excluding windblown rubbish); and Likelihood of QLD EPA fine.
5	Catastrophic	Long-term environmental harm. Permanent irreparable damage to the environment; Very high clean-up costs; Release of pollution off site (excluding windblown rubbish); and Likelihood of QLD EPA prosecution.

## Clean-up cost guidance

Description	Clean up cost guide (related specifically to the clean-up activity)
Minor clean-up costs	<\$3,000
Moderate clean-up costs.	\$3,000-\$10,000
Major clean-up costs.	\$10,000-\$100,000
Very high clean-up costs.	>\$100,000

## Environmental Risk Rating Matrix



## **Risk Severity Rating Table Matrix**

<b>Risk Severity</b>	Risk Reduction Required
Priority	Immediate action required.
High	Priority action warranted within 1-3 months.
Moderate	Action warranted within 3-6 months.
Low	Management action should be considered, particularly for low-level impacts that nevertheless occur on a continual basis with annual review.

Nisk Natilig	Risk Rating Reporting Framework									
Risk Reduc	tion Actions									
Residual Risk Category	Low Residual Risk	Moderate Residual Risk	High Residual Risk	Priority Residual Risk						
Actions	Continue task or activity within existing systems, processes and controls	Continue task or activity considering all practicable controls to reduce risk Active monitoring of the risk is required	Adopt and implement all practicable risk reduction measures to reduce risk Active management of the risk is required	Do not commence work / Stop task or activity and notify management immediately Take immediate action to reduce the level of risk						
Source of	Risk Mana	gement Action Respons	ibility							
Risk										
Task Specific		Gin Manager/EH&S Manager	EH&S Manager If risk reduction not achieved – Executive General Manager	Executive General Manager If risk reduction not achieved – CEO						
Site Specific	Listed on relevant risk assessment	Gin Manager/EH&S Manager If risk reduction not achieved Executive General Manager	EH&S Manager If risk reduction not achieved – Executive General Manager	Executive General Manager If risk reduction not achieved – CEO						
Company Wide		Executive General Manager If risk reduction not achieved – CEO	Executive General Manager If risk reduction not achieved – CEO	Executive General Manager If risk reduction not achieved – Board						

## **17. PRE-EMPTIVE ACTIONS TO REDUCE RISK OF HARM**

**Risk Rating Reporting Framework** 

The Environment, Health and Safety Manager in consultation with the person(s) responsible for the activity (Site Manager) will determine how the risks can be successfully remedied to ensure sound environmental management. This process will be undertaken with the supervision of the General Manager and Executive General Manager.

This may include updating the Namoi Cotton workplace policies or associated documents to cover any further identified management measures and mitigation strategies.

During the Environmental Risk Assessment the key environmental risks identified were:

- 1. Fire Cotton Seed, Bales, Modules and Cotton Mulch ;
- 2. Cotton Mulch escaping off-Site in a severe weather event (flood);
- 3. Redundant Plant and Equipment Leaving the Site in a severe weather event;
- 4. Plastic generated through operations leaving the Site by wind/flood;
- 5. Large spills (oil/gas/fuel/diesel), storage spill or delivery spill; and
- 6. Dust.

The key to effective prevention of harm to the environment is risk assessment, procedure development, monitoring and training. During operational activities, Namoi Cotton's inspections and preventive actions include:

activity specific and daily risk checks;

- development of work procedures in consultation with relevant Namoi Cotton staff to manage and mitigate environmental risks;
- daily inspections of active work Site;
- issue and quick close-out of non-compliance notices;
- on-going environmental training; and
- environmental audits .

The Namoi Cotton intranet contains Site Waste Management Plans and Pollution Incident Response Management Plans to assist employees to manage environmental risk and incidents.

In addition, the following guidance measures are to be implemented (if appropriate) to minimise the Environmental Risk of a pollution incidents occurring due to spillage, leaks, storage of hazardous materials, water storage discharge, dust or fire.

## Spills and leaks (chemicals, fuel, hazardous liquids, Cotton Mulch)

- Plan and implement works involving the use of chemicals, dangerous goods or other potential contaminants, to minimise the possibility of pollution.
- Use and store chemicals and dangerous goods strictly in accordance with relevant legislation, manufacturer instructions.
- Establish transport, handling, storage and application methods (with the relevant method statement) to prevent chemical, fuel and lubricant spillage on or around the site.
- Keep adequate quantities of emergency response materials, such as oil spill kits, absorbent materials, sand bags, flocculating agents and pH buffer solutions, readily available and in designated compounds.
- Provide bunded areas for refuelling or maintenance of plant and equipment, mixing cutting oil with bitumen or spill Kits for managing spill areas.
- Ensure chemical drums removed from bunded areas are returned to a secured storage area.
- The major response to spills and leaks will involve containing the offending material.
- Where safe to do so, install containment measures such as sandbags, booms, earth bunds or cut drains to capture and retain spilled material and prevent it from leaving the site, entering any watercourse or external property.
- Inspect the Site post heavy rain events or flood events.

## Storage of liquids (chemicals, fuel, hazardous materials)

• Bund and cover liquid storage areas – liquids stored can be captured within the bund. If there is no bunding at present, Management is investigating bunding and in the interim the process is to store liquid waste of all kinds in safe areas to minimise escape off-Site, with the mitigation steps for any spill to be enacted in the above section.

## Water storage discharge

- Regularly inspect drainage to Site dams, exit channels and gates and site levee.
- Carry out maintenance to site drainage.

#### Fire

- Fire fighting equipment will be available on Site to facilitate an immediate response to a fire incident and help ensure that safety of public and property.
- No non-ginning activities with the potential to generate sparks will take place in the open on total fire ban days.
- Provide personnel involved in work where there is a risk of fire with adequate training about fire prevention, safety and basic fire fighting skills.
- Isolate hot modules or bales or cotton seed.
- Monitor cotton seed temperatures.
- Advise growers to not deliver hot modules.

## Dust

- Monitor dust created by mobile plant operation for site.
- Use water trucks to reduce mobile plant dust.
- Monitor dust from gin cyclones.
- Maintain dust houses.

## **18. SAFETY EQUIPMENT/DEVICES TO MINIMISE RISK**

The Site Manager in consultation with the Environment, Health and Safety Manager shall ensure that emergency equipment is available at the site, and appropriately located and maintained in good working order.

An equipped first aid kit that can be utilised in an emergency is located at the cotton gin building site.

Materials for handling environmental spills, etc. will include oil spill kits and sand bags, together with other items as deemed to be appropriate.

Specialised equipment available for an emergency response will be maintained in a "fit for purpose" state. On call equipment will be obtained through hire companies when necessary.

The Site Manager in consultation with the Environment, Health and Safety Manager

- shall maintain a list of safety and environmental emergency response equipment held at the premises;
- ensure the ongoing availability of an adequate stock of consumable equipment; and
- ensure all emergency equipment is being inspected, tested and maintained as necessary.

## **19. TRAINING**

The General Manager, in consultation with the Environment, Health and Safety Manager, will determine the specific competencies required to respond to an emergency situation for the site and the training required.

Training will be provided to:

- provide (or refresh) specific skills such as emergency response drills, evacuations, fire wardens, first aid, etc;
- enable the proficient use of specialised equipment;
- ensure detailed familiarity with the provisions of this PIRMP;
- ensure learnings from mock evacuation and other emergency management exercises are communicated; and
- ensure knowledge of legislative and statutory requirements.

This training will generally be provided through -

- site and employment inductions
  - o provided to all employees and permanent subcontractors prior to commencement on site; and
  - o content includes basic emergency procedures and pollution incident reporting.
- refresher training
  - o mainly covers safety issues but can be used as refresher training on response procedures, dealing with the public, locations and use of response equipment.

## **20. AUDITS AND REVIEW**

Testing of the PIRMP every 12 months will ensure that information in the PIRMP is accurate and capable of being implemented effectively. The PIRMP will also be tested within one month of any pollution incident. The site will maintain all PIRMP implementation and testing records.

## 21. REVIEW

## **Control and Review History**

Version	Date Reviewed	Amendment	
1	25 July 2014	Bailey Garcha	-
2	1 July 2020	John Fox	
3	23 April 2021	John Fox	Personnel changes

#### **APPENDIX 1**

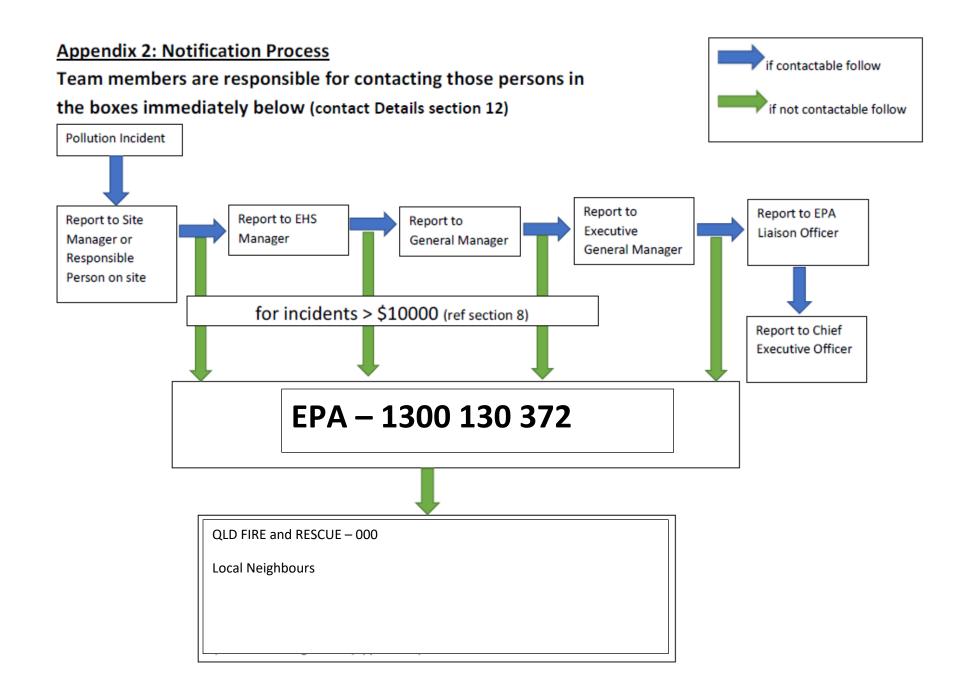
## NEIGHBOUR CONTACT DETAILS

Wayne Zellers	
Dyson Road	
07 4671 5775	
West of silos	
John Taylor	
Dyson Road	
07 4671 0092	
West of silos	
R & AL Wallace	
Road	
07 4671 5483	
West of silos	
Tim Coupe	
Kildonan Road	
07 4671 2568	
South of silos	
Lindsay Ward	
Kildonan Road 07	
4671 1103	
East of silos	
MacIntyre Warehouse	
Jamie Quinnell	
07 4671 1449	
0418 112 230	

**APPENDIX 2** 

NOTIFICATION FLOW CHART

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# **Appendix 2 Contacts**

Contacts	Title	Contact Numbers				
Ernie Silcock	Site Manager - MacIntyre	Wk: 07 4671 2277 Mob: 0429 724 699				
John Fox	Environment, Health and Safety Manager	Wk: 02 6790 3079 Mob: 0429 903 079				
	General Manager					
Shane McGregor	Executive General Manager Operations	Mob: 0438 903 084				
Andrew Metcalfe	EPA Compliance Liaison Officer	Wk: 07 4631 6103				
John Stevenson	Chief Executive Officer	Wk: 07 4631 6104				

## **APPENDIX 3**

POLLUTION INCIDENT NOTIFICATION FORM



## Namoi Cotton Ltd Pollution Incident Notification Form

1) INCIDENT DATE & TIME:

2) REPORTED (BY) DATE, TIME, NAME & POSITION:

3) INCIDENT LOCATION:

4) ACTIVITY BEING UNDERTAKEN AT THE TIME OF INCIDENT:

5) WHO WAS INVOLVED IN THE INCIDENT:

6) INCIDENT DESCRIPTION & CIRCUMSTANCES (provided accurate information only, if some parameters (i.e. chemical type) are unknown DO NOT SPECULATE):

7) TYPE OF INCIDENT (injury/damage/near miss/environmental):

8) EXTENT OF / POTENTIAL FOR POLLUTION (i.e. quantity of spill, duration):

9) MAXIMUM REASONABLE POTENTIAL FOR POLLUTION FROM THESE CIRCUMSTANCES:

10) INITIAL REMEDIAL ACTIONS TAKEN:

11) NOTIFICATION PROVIDED TO (name and position):

12) OTHER INFORMATION

#### **APPENDIX 4**

## SITE HAZARDOUS POLLUTANTS LIST

	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
	hydraulic	acetylene	engine	gear	miscellaneous	waste	LPG (L)	diesel	petrol	thinners	paints	herbicide	Insecticide	grease
	oils	(kg)	oils	oils	lubricants i.e.	oil		(L)	(L)	(L)	(L)	(L) or (kg)	(L) or (kg)	(kg)
	(L)		(L)	(L)	WD-40 TAC2	(L)								
					(L)									
MacIntyre Gin	39000L	180kg	445L	325L	20L	5000L	84000L	10000L	60L	60L	60L	400L	5kg	10Kg

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## **APPENDIX 5**

ENVIRONMENTAL RISK ASSESSMENT

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## Site Risk Assessment – MacIntyre Cotton Gin Site

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk			nt Risk	Pre-emptive / Management Actions or Corrective Action Plan		r Residual Ri		Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Cotton Mulch/ Bale/ Module/ Seed/ Commodities Fires ("Products")	Fires	Air Soil water	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	3	Moderate	<ul> <li>Regularly inspect Products for hot spots.</li> <li>Isolate Products suspected of having hot spots.</li> <li>Advise Growers not to deliver Products with hot spots.</li> <li>Water trucks available on Site.</li> <li>Supply and maintenance of fire fighting equipment.</li> <li>Train staff on procedures to isolate Products with hot spots and to manage Products which may be subject to fire.</li> <li>Site Waste Management Policy.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> </ul>	С	2	Moderate	$1^{st}$ – Gin Manager $2^{nd}$ – EH&S Manager $3^{rd}$ – Chief Operations Officer $4^{th}$ – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	1	nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan		idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Dirty Water Runoff	There may be excessive runoff from large rain events that could possibly enter the diversion drains and Site dam	Surface water (Rain)	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	С	3	Moderate	<ul> <li>Run off drainage directed to on Site storage dam.</li> <li>Regular inspection of drainage.</li> <li>Maintenance of drainage.</li> <li>Emergency drainage implemented if required.</li> <li>Site Waste Management Policy.</li> <li>Train staff on drainage maintenance.</li> <li>Train staff on clean up process if required.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	В	2	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	I	nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Cotton Mulch	Cotton Mulch	Surface water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	3	Moderate	<ul> <li>Cotton Mulch from the ginning process is to remain on Site in windrows for organic breakdown, unless approved otherwise by the Chief Operations Officer and CEO.</li> <li>Staff need to check the integrity of the Site levee (if applicable) on a regular basis.</li> <li>Maintenance of levee if required.</li> <li>Monitor Cotton Mulch on a regular basis for wind blowing, odour, leaching and run-off from Site.</li> <li>Inspect Cotton Mulch promptly after storm or flood event.</li> <li>If necessary install dirt bunding around Cotton Mulch if there is an imminent risk of it escaping off-Site.</li> <li>Train staff in the management of Cotton Mulch stored on Site.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>Site Waste Management Policy. □ PIRMP developed for the Site.</li> <li>Continued project to investigate the use of Cotton Mulch for fuel generation.</li> <li>Continued testing of Cotton Mulch for environmental risks (if any).</li> </ul>	В	2	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential	Description of	Potential Release	Potential Receptor			nt Risk	Pre-emptive / Management Actions or	Res	idual	Risk	Responsibility
Pollutant/Act ivity	Hazard	pathway (Media)	Pollution Risk	Likelihood	Consequence	Likelihood	Corrective Action Plan	Likelihood	Consequence	Risk	
Redundant Plant and Equipment	Property and items	Air Surface water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	3	Moderate	<ul> <li>During the Environmental Risk</li> <li>Assessment various redundant plant and equipment was identified. Currently the process is to log what items can be reused and what items can be salvaged by an external salvage contactor. Due to the remote location of the Sites this will be a continuing process over the next 12 months. After the identification of reuseable items and collection of items by the external salvage contractor the balance of non-useable items will be disposed of after such review by Management.</li> <li>In the interim the following actions are applicable:</li> <li>Store redundant plant and equipment securely.</li> <li>Train staff in the storage of redundant plant and equipment.</li> <li>Check the redundant plant and equipment after severe storms and flood events.</li> <li>Site Waste Management Policy.</li> <li>Environmental training/certification for staff.</li> </ul>	В	2	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential	Description of	Potential Release	Potential Receptor	l	nhere	nt Risk	Pre-emptive / Management Actions or	Res	idual	Risk	Responsibility
Pollutant/Act ivity	Hazard	pathway (Media)	Pollution Risk	Likelihood	Consequence	Likelihood	Corrective Action Plan	Likelihood	Consequence	Risk	
Plastic	Fire, Blowing offSite	Air Surface water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	3	Moderate	<ul> <li>Recycle cotton module plastic.</li> <li>Recycle other plastic if possible.</li> <li>Dispose of plastic which is not recyclable in waste bins.</li> <li>Store plastic which is ready to be collected by recycling contractor in secure area.</li> <li>To minimise plastic on Site have the recycled plastic and waste bins collected by external contractors on a regular basis.</li> <li>Inspect Site for wind blown plastic items on a regular basis.</li> <li>Train staff on plastic recycling and disposal process.</li> <li>Site Waste Management Policy.</li> <li>Environmental related training/certification for staff.</li> </ul>	В	2	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential	Description of	Potential Release	Potential Receptor	I	nhere	nt Risk	Pre-emptive / Management Actions or	Res	idual	Risk	Responsibility
Pollutant/Act ivity	Hazard	pathway (Media)	Pollution Risk	Likelihood	Consequence	Likelihood	Corrective Action Plan	Likelihood	Consequence	Risk	
Empty Chemical Drums	Leaching and could end up offSite during an extreme weather event	Air Surface water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	3	Moderate	<ul> <li>Regularly check site for empty Chemical Drums.</li> <li>Store Chemical Drums in the appropriate area.</li> <li>Store away from drainage areas and waterways.</li> <li>Train staff on Chemical Drums storage and disposal process.</li> <li>Arrange for collection of Chemical Drums by Drummuster or dispose of at waste facility to reduce the quantity of Chemical Drums on Site.</li> <li>Site Waste Management Policy.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	В	2	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential	Description of	Potential Release	Potential Receptor		Inhere	nt Risk	Pre-emptive / Management Actions	Res	idual	Risk	Responsibility
Pollutant/Activity	Hazard	pathway (Media)	Pollution Risk	Likelihood	Consequence	Risk	or Corrective Action Plan	Likelihood	Consequence	Risk	
Waste oil vat on Site	Accidental spill, leak or loss of integrity of storage container	Surface water (Rain), General spill, Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	В	3	Moderate	<ul> <li>Restrict the quantity stored on Site, currently 5,000L.</li> <li>Undertake regular inspections for leaks of storage containers and rectify container leaks promptly.</li> <li>Redesign of the storage and use process for waste oil vats to mitigate spills.</li> <li>Train staff on the use of waste oil vats and transfer of waste oil to and from containers.</li> <li>Supply spill kits to mitigate the spread of spills and train staff to use spill kits.</li> <li>Site Waste Management Policy for spills.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the waste oil vats away from drainage areas and boundaries near waterways.</li> <li>Arrange for the collection of used waste oil on a regular basis by an external contractor to minimise the quantity of oil stored on Site.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	В	2	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer
							implementation of Bunded Storage Area. Residual risk assumes currently not implemented.				

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	I	nhere	ent Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Hydrocarbons (Oil for Mobile Equipment)	Oil/Fuel Water Separator (workshop) may overflow or leak or spill	Surface water (Rain) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	В	3	Moderate	<ul> <li>Restrict the quantity stored on Site.</li> <li>Undertake regular inspections for leaks of storage containers and rectify container leaks promptly.</li> <li>Redesign of the storage and use process for oil –mobile plant to mitigate spills.</li> <li>Train staff on the use of and transfer of oil –mobile plant and containers.</li> <li>Supply spill kits to mitigate the spread of spills and train staff to use spill kits.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the oil –mobile plant away from drainage areas and boundaries near waterways.</li> <li>Arrange for the collection of used oil – mobile plant on a regular basis by an external contractor to minimise quantity stored on Site.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	В	2	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard			Inherent Risk			Pre-emptive / Management Actions of Corrective Action Plan		idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
General Site Dust	Mobile plant Site dust	Air	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	D	2	Moderate	<ul> <li>Monitor dust from operations.</li> <li>Use water trucks to mitigate against dust.</li> <li>Train staff on use of water trucks for dust control.</li> <li>Site Waste Management Policy.          Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	В	2	Low	$1^{st}$ – Gin Manager $2^{nd}$ – EH&S Manager $3^{rd}$ – Chief Operations Officer $4^{th}$ – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	Pollution Risk		Pre-emptive / Management Actions or Corrective Action Plan				Responsibility	
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Oils (Engine, Hydraulic) and Diesel	Failure in machinery causing a spill	Surface water (Rain) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	2	Moderate	<ul> <li>Restrict the quantity stored on Site.</li> <li>Undertake regular inspections for leaks of storage containers and rectify container leaks promptly.</li> <li>Redesign of the storage and use process for engine oil to mitigate spills.</li> <li>Train staff on the use of and transfer of engine oil and containers.</li> <li>Supply spill kits to mitigate the spread of spills and train staff to use spill kits.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the engine oil away from drainage areas and boundaries near waterways.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	В	2	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of HazardPotential Potential Release 		•	I	nhere	Pre-emptive / Management Actions or Corrective Action Plan		Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Dust from Ginning Process	Dust environment from ginning	Air	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	С	3	Low	<ul> <li>Monitor dust during operations.</li> <li>Maintenance and inspections of Dust House (if any).</li> <li>Maintenance and inspections of dust Gin cyclones.</li> <li>Train staff in the use of Dust House (if any) and dust Gin cyclones.</li> <li>Site Waste Management Policy.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> </ul>	В	2	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	ollutant/ Hazard pathway (Me		Potential Receptor Pollution Risk	1	nhere	ent Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Diesel	Diesel tank (hose)/separator system may leak over a period of time unnoticed or have its integrity compromised and fail	Surface water (Rain) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	3	Moderate	<ul> <li>Restrict the quantity stored on Site.</li> <li>Undertake regular inspections for leaks of storage containers and rectify container leaks promptly.</li> <li>Redesign of the storage and use process for diesel tanks to mitigate spills.</li> <li>Train staff on the use of and transfer of diesel.</li> <li>Supply spill kits to mitigate the spread of spills and train staff to use spill kits.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the diesel tanks away from drainage areas and boundaries near waterways.</li> <li>Bunded.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	В	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	Inherent Risk			Pre-emptive / Management Actions or Corrective Action Plan	Residual Risk			Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Water Storage Dams	May overflow during extreme wet weather events or have its integrity compromised and fail	Surface water (Rain)	Adjacent Stock Route Adjacent Floodway Local Waterways Adjacent Neighbours	С	3	Moderate	<ul> <li>Undertake regular inspection of the Water Storage Dam and exit drainage and discharge points.</li> <li>Integrity maintenance of Site drainage.</li> <li>Water testing of water discharged from Site.</li> <li>Continued Risk Assessments.</li> <li>Site Waste Management Policy.</li> <li>Environmental related training/certification for staff.</li> </ul>	В	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/Act	Description of	Potential Release	Potential Receptor	I	nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
ivity	Hazard	pathway (Media)	Pollution Risk	Likelihood	Consequence	Likelihood		Likelihood	Consequence	Risk	
Empty Grease/ Diesel/ Fuel Containers "EGDFC"	Leaching and could end up offSite in an extreme weather event	Air Surface water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	3	Moderate	<ul> <li>Regularly check site for empty EGDFC.</li> <li>Store EGDFC in the appropriate storage area.</li> <li>Store away from drainage areas and waterways.</li> <li>Train staff on EGDFC storage and disposal process.</li> <li>Arrange for collection of EGDFC by external contractor or dispose of at waste facility to reduce the quantity of EGDFC's on Site.</li> <li>Site Waste Management Policy.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	В	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	I	nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Diesel/Petrol	Accidental spill, leak or loss of integrity of storage container	Surface water (Rain), General spill, Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	В	3	Moderate	<ul> <li>Restrict the quantity stored on Site, currently 5,000L.</li> <li>Undertake regular inspections for leaks of storage containers and rectify container leaks promptly.</li> <li>Redesign of the storage and use process for fuel tanks to mitigate spills.</li> <li>Train staff on the use of and transfer of fuel from storage tanks and containers.</li> <li>Supply spill kits to mitigate the spread of spills and train staff to use spill kits.</li> <li>Site Waste Management Policy for spills.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the fuel tanks and containers away from drainage areas and boundaries near waterways.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>Site Waste Management Policy.</li> <li>PIRMP developed for the Site.</li> <li>Bunding for fuel tanks.</li> <li>Maintenance of refuelling equipment.</li> </ul>	В	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	I	nhere	ent Risk	Pre-emptive / Management Actions or Corrective Action Plan	Resi	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Sewage	May back up during extreme wet weather events or have a pipe leak or burst	Surface water (Rain) Sewage water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	С	2	Moderate	<ul> <li>Restrict the quantity stored on Site.</li> <li>Undertake regular inspections for sewage system and rectify leaks or issues promptly.</li> <li>Redesign of the storage and use process for sewage to mitigate spills.</li> <li>Carry out maintenance.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up procedures.</li> <li>Isolate sewage away from drainage areas and boundaries near waterways.</li> <li>Arrange for the collection of sewage on a regular basis by an external contractor.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	В	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential	Description of	Potential Release	Potential Receptor	I	nhere	nt Risk	Pre-emptive / Management Actions or	Res	idual	Risk	Responsibility
Pollutant/Act ivity	Hazard	pathway (Media)	Pollution Risk	Likelihood	Consequence	Likelihood	Corrective Action Plan	Likelihood	Consequence	Risk	
Steel/Metal	Property and items	Surface water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	2	Low	<ul> <li>Recycle steel if possible.</li> <li>Dispose of steel which is not recyclable in waste bins.</li> <li>Store steel which is ready to be collected by recycling contractor in secure area.</li> <li>To minimise steel on Site have the recycled steel and waste bins collected by external contractors on a regular basis.</li> <li>Inspect Site for steel on a regular basis.</li> <li>Train staff on steel recycling and disposal process.</li> <li>Continued Risk Assessments.</li> <li>Site Waste Management Policy.</li> <li>Environmental related training/certification for staff.</li> </ul>	В	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk		nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Lubricant	May be spilt within the Site	Surface water (Rain) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	1	Low	<ul> <li>Restrict the quantity stored on Site.</li> <li>Undertake regular inspections for leaks of storage containers and rectify container leaks promptly.</li> <li>Redesign of the storage and use process for lubricants to mitigate spills.</li> <li>Train staff on the use of and transfer of lubricants and containers.</li> <li>Supply spill kits to mitigate the spread of spills and train staff to use spill kits.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the lubricants away from drainage areas and boundaries near waterways.</li> <li>Arrange for the collection of used lubricants on a regular basis by an external contractor to minimise the quantity stored on Site.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> <li>Management investigating the implementation of Bunded Storage Area.</li> </ul>	В	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	I	Inhere	ent Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Grease	May be spilt within the Site	Surface water (Rain) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	1	Low	<ul> <li>Restrict the quantity stored on Site.</li> <li>Undertake regular inspections for leaks of storage containers and rectify container leaks promptly.</li> <li>Redesign of the storage and use process for grease to mitigate spills.</li> <li>Train staff on the use of and transfer of grease containers.</li> <li>Supply spill kits to mitigate the spread of spills and train staff to use spill kits.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the grease away from drainage areas and boundaries near waterways.</li> <li>Arrange for the collection of used waste grease on a regular basis by an external contractor to minimise the quantity on Site.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> <li>Management investigating the implementation of Bunded Storage Area.</li> </ul>	В	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	I	nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Paints	May be spilt within the Site	Surface water (Rain) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	1	Low	<ul> <li>Restrict the quantity stored on Site.</li> <li>Undertake regular inspections for leaks of storage containers and rectify container leaks promptly or dispose in waste bins for the Site.</li> <li>Redesign of the storage and use process for paint to mitigate spills.</li> <li>Train staff on the use of and transfer of paint.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the paint away from drainage areas and boundaries near waterways.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> <li>Management investigating the implementation of Bunded Storage Area.</li> </ul>	B	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	I	nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
General Agricultural Chemicals (Herbicides/ Pesticides "GAC")	May be spilt within the Site	Surface water (Rain) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	1	Low	<ul> <li>Restrict the quantity stored on Site.</li> <li>Undertake regular inspections for leaks of storage containers and rectify container leaks promptly.</li> <li>Redesign of the storage and use process for GAC to mitigate spills.</li> <li>Train staff on the use of and transfer of GAC containers.</li> <li>Supply spill kits to mitigate the spread of spills and train staff to use spill kits.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the GAC containers away from drainage areas and boundaries near waterways.</li> <li>Arrange for the collection of used GAC by Drum Muster on a regular basis by an external contractor.</li> <li>Train staff on interim storage and disposal of GAC containers.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> <li>Management investigating the implementation of Bunded Storage Area.</li> </ul>	В	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	I	Inhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Fuel supply trucks (diesel)	May have an accident whilst entering the site and have fuel released to the environment	Surface water (Rain) ( in case of accidents) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	В	4	Moderate	<ul> <li>Restrict the quantity delivered to and stored on Site.</li> <li>Speed limits on Site for fuel trucks.</li> <li>Redesign fuel delivery and receipt process to mitigate spills.</li> <li>Train staff on fuel transfer process.</li> <li>Supply spill kits to mitigate the spread of spills.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up process.</li> <li>Isolate transfer process away from drainage areas and waterways.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> <li>Fuel tank bunded area.</li> </ul>	A	3	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	I	nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Liquid Petroleum Gas	May be accidently left open or mishandled for gas to be released	Air	On Site Workers Adjacent Neighbours Air	В	2	Low	<ul> <li>Restrict the quantity stored on Site.</li> <li>LPG Gas tanks installed by licensed contractor.</li> <li>Undertake regular inspections for leaks of storage tanks and pipes, report leaks to ELGAS promptly.</li> <li>Redesign of the storage and use process for gas tank to mitigate spills.</li> <li>Train staff on the use of and transfer of gas.</li> <li>Site Waste Management Policy.</li> <li>Train staff on emergency procedures.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	A	2	Low	1st – Gin Manager 2nd – EH&S Manager 3rd – Chief Operations Officer 4th – Chief Executive Officer

Potential	Description of	Potential Release	Potential Receptor	I	nhere	ent Risk	Pre-emptive / Management Actions or	Res	idual	Risk	Responsibility
Pollutant/Act ivity	Hazard	pathway (Media)	Pollution Risk	Likelihood	Consequence	Likelihood	Corrective Action Plan	Likelihood	Consequence	Risk	
Tyres	Property and items Fire	Air Surface water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	С	3	Moderate	<ul> <li>Recycle tyres for alternate use on Site if possible.</li> <li>Dispose of tyres at licensed waste facility or for collection by external contractor.</li> <li>Store tyres which are ready to be collected by external contractor in secure area.</li> <li>To minimise tyres on Site have the recycled tyres collected by external contractors on a regular basis.</li> <li>Inspect Site for tyres on a regular basis.</li> <li>Train staff on tyre recycling and disposal process.</li> <li>Do not store tyres near waterways.</li> <li>Continued Risk Assessments.</li> <li>Site Waste Management Policy.</li> <li>Environmental related training/certification for staff.</li> </ul>	A		Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential	Description of	Potential Release	Potential Receptor	I	nhere	nt Risk	Pre-emptive / Management Actions or	Res	idual	Risk	Responsibility
Pollutant/Act ivity	Hazard	pathway (Media)	Pollution Risk	Likelihood	Consequence	Likelihood	Corrective Action Plan	Likelihood	Consequence	Risk	
Non-chemical Containers	Property and items	Air Surface water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	C	2	Low	<ul> <li>Recycle Non-chemical Containers if possible.</li> <li>Dispose of Non-chemical Containers which are not recyclable in waste bins.</li> <li>Store Non-chemical Containers which are ready to be collected by recycling contractor in secure area.</li> <li>To minimise Non-chemical Containers and waste bins collected by external contractors on a regular basis.</li> <li>Inspect Site for Non-chemical Containers on a regular basis.</li> <li>Train staff on tyre recycling and disposal process.</li> <li>Continued Risk Assessments.</li> <li>Site Waste Management Policy.</li> <li>Environmental related training/certification for staff.</li> </ul>	A	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

	Description of	Potential Release	•	I	nhere	nt Risk	Pre-emptive / Management Actions or	r Residu		Risk	Responsibility
Pollutant/Act ivity	Hazard	pathway (Media)	Pollution Risk	Likelihood	Consequence	Likelihood	Corrective Action Plan	Likelihood	Consequence	Risk	
Waste Bins and General Waste	General rubbish blowing off-Site	Air Surface water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	С	2	Low	<ul> <li>Check waste bins for integrity on a regular basis.</li> <li>Train staff on use of waste bins - maintenance/what can be disposed in which waste bins.</li> <li>To minimise waste on Site have waste bins collected by external contractor for disposal on a regular basis.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	A	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

Potential Pollutant/Act	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	-	1here	nt Risk	Pre-emptive / Management Actions or Residual Risk Corrective Action Plan			Risk	Responsibility
ivity		patriway (meura)	i oliulon kisk	Likelihood	Consequence	Likelihood		Likelihood	Consequence	Risk	
Excess Cotton Lint Off-Cuts	Blow off-Site	Air Surface water Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	С	2	Low	<ul> <li>Monitor excess Lint Off-Cuts on Site.</li> <li>Collect excess Lint Off-Cuts by sweeping or retrieval process.</li> <li>Provide and maintain equipment to enable collection of excess Lint OffCuts.</li> <li>Train staff in collection and disposal of excess Lint Off-Cuts.</li> <li>Site Waste Management Policy.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	A	1	Low	$1^{st}$ – Gin Manager $2^{nd}$ – EH&S Manager $3^{rd}$ – Chief Operations Officer $4^{th}$ – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)		I	nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Residual Risk			Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Effluent removal trucks (possible onsite accident)	May have an accident leaving the surface facilities area (whilst still on Namoi Cotton property)	Surface water (Rain) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	В	2	Low	<ul> <li>Restrict the quantity stored on Site.</li> <li>Redesign sewage receipt process to mitigate spills.</li> <li>Train staff on sewage collection process.</li> <li>Supply spill kits to mitigate the spread of spills.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up process.</li> <li>Isolate transfer process away from drainage areas and waterways.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> <li>Sewage tank bunded area.</li> </ul>	A	1	Low	$1^{st}$ – Gin Manager $2^{nd}$ – EH&S Manager $3^{rd}$ – Chief Operations Officer $4^{th}$ – Chief Executive Officer

Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)	Potential Receptor Pollution Risk	I	nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Res	idual	Risk	Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Unleaded Petrol	May be spilt within the Site	Surface water (Rain) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	В	2	Low	<ul> <li>Restrict the quantity stored on Site.</li> <li>Undertake regular inspections for leaks of storage containers and rectify container leaks promptly.</li> <li>Redesign of the storage and use process for unleaded petrol to mitigate spills.</li> <li>Train staff on the use of and transfer of unleaded petrol containers.</li> <li>Supply spill kits to mitigate the spread of spills and train staff to use spill kits.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the unleaded petrol away from drainage areas and boundaries near waterways.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	A	1	Low	1 <sup>st</sup> – Gin Manager 2 <sup>nd</sup> – EH&S Manager 3 <sup>rd</sup> – Chief Operations Officer 4 <sup>th</sup> – Chief Executive Officer

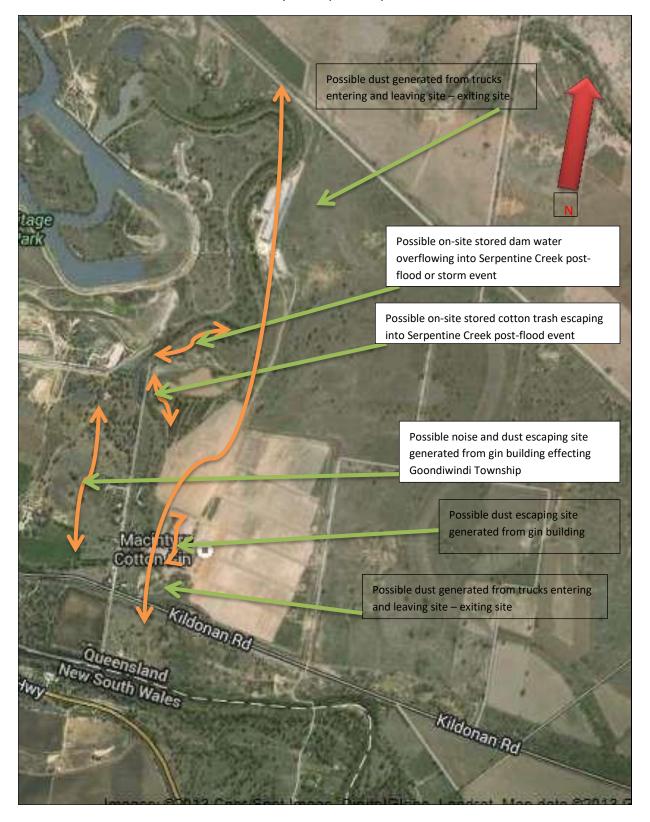
Potential Pollutant/	Description of Hazard	Potential Release pathway (Media)		I	nhere	nt Risk	Pre-emptive / Management Actions or Corrective Action Plan	Residual Risk			Responsibility
Activity				Likelihood	Consequence	Risk		Likelihood	Consequence	Risk	
Absorbents (spent oil spill material)	Incorrect disposal	Surface water (Rain) Soil	Soil On Site Workers Site Dam Adjacent Stock Route Adjacent Floodway Water Aquifer Public Waterway Adjacent Neighbours	В	1	Low	<ul> <li>Redesign disposal process for absorbents.</li> <li>Train staff on the disposal of absorbents.</li> <li>Site Waste Management Policy.</li> <li>Train staff on clean up procedures.</li> <li>Isolate the absorbents away from drainage areas and boundaries near waterways.</li> <li>Continued Risk Assessments.</li> <li>Environmental related training/certification for staff.</li> <li>PIRMP developed for the Site.</li> </ul>	A	1	Low	$1^{st}$ – Gin Manager $2^{nd}$ – EH&S Manager $3^{rd}$ – Chief Operations Officer $4^{th}$ – Chief Executive Officer

**APPENDIX 6** SITE PLANS - Macintyre site water discharge points



## **APPENDIX 6**

## Continued - Macintyre site possible pollution zones



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